EVOLVING TRENDS IN FOREIGN LANGUAGE EDUCATION

Past Lessons, Present Reflections and Future Directions

**Proceedings of the 10th Centre for Language Studies International Conference
– The 20th Anniversary Edition –
CLaSIC 2024**

**Shaw Foundation Alumni House (SFAH)
December 5–7, 2024**

Compiled and edited by:

Daniel K.-G. Chan, Jan L. Auracher, Sasiwimol Klayklueng, Masanori Nagami, Mihi Park, Omar Salawdeh, Jyh Wee Sew, Tltima Suthiwan, Izumi Walker, Haoshu Wang

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Welcome Message

For this special 10th edition of the Centre for Language Studies International Conference, also endearingly known in the field as the CLaSIC Conference, we are honoured to celebrate its 20th anniversary by welcoming 170 participants from 25 countries across the Asia-Pacific, Europe, the Middle East, and North America. This truly global representation highlights the collective dedication of educators, researchers, and practitioners to advancing foreign language education.

Over two and a half days, the conference featured more than 120 presentations under the broad theme **"Evolving Trends in Foreign Language Education: Past Lessons, Present Reflections, Future Directions."** This theme encourages us to reflect on the progress we've made, take stock of current practices, and look ahead to the innovations that will shape the future of our field.

Language education today is more dynamic and complex than ever. As we navigate these challenges, this conference provides an invaluable space to share ideas, collaborate, and explore solutions together. By revisiting lessons from the past, addressing present needs, and embracing the future with curiosity and creativity, we can continue to transform how languages are taught and learned.

This year's program is structured around eight key sub-themes, each designed to encourage deep discussions and meaningful exchanges. A major focus is on how emerging technologies—like artificial intelligence, virtual reality, and mobile learning tools—are reshaping the landscape of language education. These innovations bring new opportunities, but they also raise questions about accessibility, implementation, and effectiveness that we must address together. We will also explore innovative teaching methods, including the development of 21st-century skills, project-based learning, and the creation of new curricula and materials. These approaches challenge traditional methods and push us to design learning experiences that are relevant, engaging, and adaptable. In addition, we'll consider the role of cultural and linguistic diversity in shaping language education and explore how we can harness this diversity to enrich our teaching practices. Assessment and evaluation are another critical focus, with sessions examining the reliability of current methods and their impact on pedagogy and learning outcomes. Teacher education and professional development will also take centre stage, with opportunities to reflect on how our roles as educators are evolving and how we can support each other in this journey. Finally, the program will spotlight emerging research methodologies, offering fresh perspectives and insights that will guide the future of academic inquiry in our field.

For the first time, we are excited to introduce **CLaSIC ConNeCts** (short for Consult and Networking Conversation Sessions) with each of our distinguished keynote speakers. These informal sessions, designed to provide participants with opportunities to engage directly with keynote speakers in a relaxed and interactive setting, were inspired by an idea from Professor Sarah Mercer, who is herself one of our four keynote speakers. This initiative creates space for meaningful dialogue, offering participants the chance to ask questions, exchange ideas, and build connections.

We are deeply grateful to our keynote speakers, presenters, and all of you for your contributions to this conference. Your passion, expertise, and willingness to share make **CLaSIC** an inspiring and impactful event.

Yannick Appriou
Chairperson
CLaSIC 2024 Organising Committee
5 December 2024

Emerging Trends in Foreign Language Education: An Overview of the Proceedings

The conference theme, **"Emerging Trends in Foreign Language Education: Past Lessons, Present Reflections, Future Directions,"** has served as the guiding framework for organizing the proceeding papers, highlighting the connections between historical foundations, current challenges, and future innovations, while providing a coherent narrative that showcases the evolution of language education and its trajectory toward future advancements. Accordingly, the proceeding papers are organized into the following three overarching parts:

1. Learning from Past Lessons, Building on Foundations

This first of the three parts encompasses papers that reflect on historical practices and foundational theories in foreign language education. These studies provide essential insights into how past experiences and established pedagogical methods have shaped current educational landscapes. Together, they provide valuable insights into how foreign language education has evolved and offer guidance for future advancements.

(01) *Decoding lesson study: narratives from ALTs in Japan* investigates the implementation and effects of lesson study practices based on experiences from assistant language teachers (ALTs) in Japan. In this case, these insights serve as lessons for adapting educational methodologies to diverse cultural and institutional contexts globally.

(02) *Bridging knowledge in curriculum design: The role of explicit and tacit knowledge in implementing outcome-based education for English language lecturers* looks into the roles of explicit and tacit knowledge in shaping curriculum design within outcome-based education frameworks. In this case, the exploration of explicit and tacit knowledge serves as lessons for aligning educational strategies with learning outcomes and enhancing curriculum effectiveness.

(03) *Developing pre-service English language teaching skills through project work* examines the impact of project-based learning in the training of pre-service English language teachers, emphasizing the development of practical teaching competencies. In this case, the application of project-based learning serves as lessons for developing practical teaching skills and preparing educators for real-world classroom challenges.

(04) *Metacognitive strategy instruction for listening comprehension: a quasi-experimental study in Kampung Inggris Pare* assesses the effectiveness of metacognitive strategies to improve listening comprehension among English language learners in an intensive language program in Indonesia. In this case, the implementation of metacognitive strategies serves as lessons for enhancing language learners' self-regulation and active listening skills.

(05) *A three-year comparative analysis of anxieties on elementary school English education among university students in an elementary teacher training course* provides a longitudinal study on the anxieties faced by university students enrolled in an elementary teacher training program, specifically focusing on their concerns related to teaching English. In this case, the comparative analysis of teacher trainees' anxieties serves as lessons for improving teacher training programs to better equip educators for diverse educational environments.

(06) *Enhancing extensive reading practices in beginner-level Indonesian language classes: strategies, challenges, and motivation* explores extensive reading practices in beginner-level Indonesian language classes, discussing the challenges and strategies to effectively implement these practices. In this case, the strategies used to implement extensive reading serve as lessons for overcoming resource limitations and boosting learner motivation through culturally relevant content.

2. Engaging in Present Reflections, Addressing Current Challenges

This section examines the contemporary landscape of foreign language education, highlighting the challenges faced by educators and learners, as well as the innovative practices and technological integrations addressing these issues. The papers explore strategies for overcoming obstacles, fostering motivation and engagement, and pushing the boundaries of traditional teaching methodologies in diverse educational contexts.

(07) *Gamification as an approach to grammar in French language class (FLE)* addresses the challenge of student disengagement in grammar learning by implementing gamification techniques to make learning more interactive and enjoyable. It demonstrates how gamification can increase motivation and enhance comprehension in language classes.

(08) *Enhancing junior high students' motivation and achievement through multimedia-assisted English instruction* discusses the integration of multimedia tools to address challenges in motivating students and enhancing their language learning outcomes. It outlines how technology can cater to diverse learning styles and improve engagement and achievement.

(09) *Innovating Chinese language and culture education: a film-based course for Singapore's digital-era learners* presents a multimedia approach to teaching Chinese language and culture, tackling the challenge of making cultural education relevant and engaging to digital-era learners through the use of film and digital media.

(10) *Make them see from care-giving perspectives: visual image training in English language pedagogy for nursing students and other learners*, by integrating visual image training into language education, addresses the challenge of developing empathetic and culturally sensitive communication skills in healthcare settings.

(11) *Navigating challenges in teaching and learning Mandarin at a British university in Malaysia* examines the pedagogical and logistical difficulties of teaching Mandarin in a multicultural university context. It addresses the challenges of linguistic diversity and localized Mandarin dialects, proposing strategies to create a supportive learning environment that integrates cultural and linguistic variations effectively.

(12) *Instructional translanguaging patterns in Taiwan high school CLIL biology classes* tackles the challenge of implementing translanguaging in bilingual education settings, specifically in Content and Language Integrated Learning (CLIL). It reveals how teachers can use translanguaging to bridge the gaps in students' English proficiency, enhancing both language learning and content understanding.

(13) *Translanguaging, perception by the scale and by reflection from L3 Korean learners* explores the pedagogical challenges of using translanguaging strategies in multilingual classrooms. It examines how these strategies are perceived by Korean L3 learners, highlighting their effectiveness in enhancing language comprehension and acquisition.

(14) *Learning L2 reading strategies through cooperative English reading activities (CERA)*, focusing on cooperative learning strategies, addresses the challenge of developing reading skills in second language learners. It shows how collaborative reading activities can improve comprehension and foster active engagement among students.

(15) *Fostering students' feedback literacy through collaborative feedback training*, addressing the challenge of feedback utilization in language learning, highlights innovative feedback training techniques that improve students' ability to use feedback constructively for their language development.

(16) *Corrective feedback in face-to-face and synchronous computer-mediated communication settings* explores how technology can be harnessed to enhance the effectiveness of corrective feedback in both traditional and online language learning environments.

(17) A*n ecological perspective case study: the role of emotion in the identity construction of young learner English language teachers* focuses on the emotional challenges that novice teachers face, detailing how these affect their professional identity and development. It provides insights into emotional support strategies that can aid teachers in managing stress and developing resilient professional identities.

(18*) Enjoyed or Bored? Learners' Experiences of Flow and Anti-Flow in Material Tasks Engagement* investigates how learners experience flow and anti-flow during material task engagement in EFL

classrooms and identifies factors influencing these experiences.

(19) *Exploring factors impacting university language beginners' motivation for continued learning: Survey insights* addresses the motivational challenges faced by beginners in foreign language courses, analysing factors that influence their decision to continue learning.

(20) *Learner motivations for continuing a foreign language course: A comparison across language groups*, by comparing motivations across different language groups, this study identifies and addresses the diverse motivational needs of language learners.

(21) *Insights from student feedback into language learning: Implications for course design and pedagogy* uses student feedback to tackle the challenge of designing responsive and adaptive language courses that enhance learner engagement and satisfaction.

3. Charting Future Directions, Exploring Emerging Trends

This final part anticipates the evolution of foreign language education by integrating cutting-edge technological advancements, novel research methodologies, and critical sociocultural insights. Each paper presents groundbreaking approaches and findings that promise to redefine teaching and learning practices, propelling the field toward innovative futures.

(22) *Generative artificial intelligence in English foreign language education: a scoping review* maps the current use and impact of generative AI in language education, not only highlighting existing applications but also identifies under-explored areas ripe for investigation. It underscores the disruptive potential of AI, suggesting a trajectory for future educational technologies and their role in language instruction.

(23) *Unveiling the language of artificial intelligence: a corpus-based analysis* puts the spotlight on the linguistic characteristics of AI-generated language, providing a foundation for educators to understand and critically assess AI outputs. The insights gained from this analysis are vital for developing AI literacy among language educators and ensuring that AI tools are effectively leveraged to support educational goals.

(24) *Enhancing business Chinese writing with AI: a comparative analysis of independent and collaborative writing outcomes*]investigates how AI tools can be used to overcome challenges in teaching professional writing, offering insights into the benefits and limitations of AI-assisted language learning.

(25) *Examining ChatGPT models as L2 academic spoken English dialogue partners: a corpus linguistics approach* pioneers the evaluation of ChatGPT as an interactive tool for language learning, employing corpus linguistics to assess its proficiency in mimicking academic spoken English. The findings suggest potential enhancements in AI's role as a conversational agent, forecasting its integration into routine language practice and pedagogy.

(26) *Examination of the efficacy of an optimized eye movement training tool for efficient second language reading*, focusing on technological innovations, assesses an eye movement training tool designed to improve reading efficiency and comprehension in second language learners.

(27) *Exploring Korean passive sentence processing in Chinese L2 learners: an eye-tracking approach* advances the field of cognitive linguistics by applying eye-tracking technology to study how L2 learners process complex grammatical structures. The methodology and findings contribute to a nuanced understanding of cognitive processes in language learning, offering a template for future research in cognitive linguistics.

(28) *Parents' attitude towards teaching and learning Chinese as a heritage language in Japan* investigates the sociocultural dynamics of heritage language education, while shedding light on the pivotal role of family and community in language maintenance and transmission. By examining family dynamics and community support mechanisms, this paper provides insights into how sociocultural factors can shape the sustainability of heritage language learning in multicultural contexts.

4. Concluding Remarks

The categorization of papers according to these strands was by no means straightforward, owing to overlaps in thematic content and the multidisciplinary nature of the research. Each paper often touched upon elements that could easily align with multiple strands, presenting a challenge in definitively assigning them to one category over another. If anything, this complexity is a strong testimony to the dynamic and evolving field of foreign language education. It highlights how the discipline continually adapts to new educational paradigms, integrates diverse technological advancements, and responds to changing sociocultural contexts. This multifaceted approach not only enriches the academic discourse but also highlights the evolving trends that propel the field forward, ensuring that language education remains relevant and effective in an ever-changing global landscape.

In addition to the full papers of parallel sessions submitted for these proceedings, we have also included – at the start of the volume – the abstracts of all four insightful keynote lectures. These presentations provide foundational insights and expert perspectives, framing crucial subthemes of our conference and enriching our understanding of current trends, while also setting the stage for the detailed papers from the diverse parallel sessions that follow. The finalized versions of the keynote lectures themselves are planned to be published in due time, subject to the completion of review processes by the scientific committee and peer reviewers, as well as any subsequent revisions.

To readers of this volume, we hope you will enjoy exploring the diverse perspectives and innovative approaches presented in these proceedings, and that they inspire you to further engage with the cutting-edge developments and continually evolving trends within – and without (i.e. beyond) – the fascinating interdisciplinary field of foreign language education.

Daniel K.-G. Chan, PhD.
Abstracts & Program Committee Head
CLaSIC 2024
5 December 2024

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Keynote Lectures: A Summary Overview

The common thread among the four keynote lectures is **the intersection of innovation, teacher and learner empowerment, and cultural responsiveness in language education**. Each keynote addresses different dimensions of advancing language education by focusing on transformative practices and tools. They are all aligned with the conference theme as follows:

Keynote Lecture	Past Lessons	Present Reflections	Future Directions
Sustaining the Drive: Prioritizing Language Teacher Wellbeing to Ignite Learner Engagement (**Prof Sarah Mercer**)	Recognizes the historical neglect of teacher wellbeing in pedagogy.	Explores research linking teacher wellbeing with learner engagement. Identifies socio-contextual and personal factors influencing wellbeing.	Proposes strategies to prioritize teacher wellbeing as a foundation for effective and engaging language learning environments.
A Human-AI Collaborative Framework for Self-Directed Language Learning (**Prof Thomas Chiu**)	Builds on Self-Determination Theory and foundational concepts of self-regulated learning.	Examines current uses of AI tools (e.g., ChatGPT) in enhancing self-directed learning and learner engagement.	Introduces a collaborative human-AI framework to optimize self-regulated learning. Advocates co-designed tools like EDUGPT for future language education.
Integrating Intercultural Communication with Chinese as a Foreign Language Teaching through Films (**Prof Xiaoshi Li**)	Highlights the long-standing emphasis on cultural integration in language teaching. Recognizes film as a traditional tool for teaching culture.	Demonstrates how film-based courses currently foster intercultural communication and connect language with culture.	Proposes a model for integrating language, culture, and authentic content into diverse classrooms, focusing on intercultural competence.
Harnessing AI Tools for Developing English Language Teaching Materials (**Prof Jessie Barrot**)	Addresses traditional challenges in material development, such as cultural relevance and limited resources.	Showcases how generative AI tools are transforming ELT materials through innovation.	Recommends equipping teachers with AI literacy for ethical and effective use of AI in material development, balancing innovation with cultural and human nuances.

Keynote I
Abstract

Sustaining the Drive: Prioritizing Language Teacher Wellbeing to Ignite Learner Engagement

Sarah Mercer
University of Graz, Austria

Day 1, 9:30 AM
SFAH Auditorium

Abstract

It is widely acknowledged that the teacher is central to all that happens in the classroom, managing not only the ongoing human dynamics but ensuring that learning tasks are purposeful, effective, and engaging. Yet, amid this myriad of demands on teachers, very little attention is typically paid to the needs of the teachers themselves. However, as I will show, this is a fundamental mistake given that language teacher wellbeing is the catalyst for igniting learner engagement. The talk will begin by explaining what is meant by wellbeing and briefly reporting on research which reveals how it develops over time and what personal and socio-contextual factors affect it. Next, we will look at how learner engagement is fostered in language classrooms. Then we will make the explicit connections between language teacher wellbeing and learner engagement showing how they are two sides of the same coin. The talk will conclude with suggestions for practical pathways to support language teacher wellbeing. The core premise is that we must begin by caring for the teachers so that they can become the best version of themselves and foster an enriching and engaging experience for their learners. If we sustain the drive of the language teachers, they can inspire the drive for engagement among their learners.

Keywords: language teacher wellbeing, learner engagement, teacher needs, socio-contextual factors, practical support

Biodata

Sarah MERCER is Professor of Foreign Language Teaching at the University of Graz, Austria, where she is Head of ELT methodology. Her research interests include all aspects of the psychology surrounding the foreign language learning experience. She is the author, co-author and co-editor of several books in this area including, 'Exploring Psychology for Language Teachers' (IH Ben Warren Prize) and three ELTon Finalists ('Teacher Wellbeing', 'Engaging Language Learners in Contemporary Classrooms', and 'Psychology in Practice'). She has also published over 150 book chapters and journal articles. She has served as Principal Investigator on several funded research projects, has worked on the editorial board of various journals, was co-editor of the journal System for several years, is co-editor of Multilingual Matters' Psychology of Language Learning and Teaching book series, is currently president-elect of the International Association for the Psychology of Language Learning (IAPLL), is ambassador for IATEFL, and has served as a consultant on several international projects. In 2018, she was awarded the Robert C. Gardner Award for excellence in second language research by the International Association of Language and Social Psychology (IALSP).

Keynote II
Abstract

A Human-AI Collaborative Framework for Self-directed Language Learning

Thomas Chiu
The Chinese University of Hong Kong

Day 1, 2 PM
SFAH Auditorium

Abstract

Artificial intelligence (AI) applications, including ChatGPT and speech recognition, track student learning progress, give immediate feedback, and offer personalized learning content. They have the potential to enhance student engagement in self-regulated learning. However, students who lack strong language proficiency and self-regulated learning abilities may not actively engage in the learning process, resulting in a failure to improve their language proficiency, particularly among young learners. This implies that in K–12 education, self-regulated foreign language learning with AI requires teacher guidance. In this talk, the author presented a human-AI collaboration framework for self-regulated learning that consists of three relationships: student-AI, student-teachers, and teacher-AI. The relationships described the roles of students, teachers, and AI in self-regulated learning. Applying Self-Determination Theory, the author explores student engagement through self-regulated learning activities with ChatGPT and investigates their impact on L2 K–12 students' English learning using an intervention design, which showed significant improvements. They advocate for language teachers to co-design EDUGPT for foreign language education.

Keywords: artificial intelligence, self-regulated learning, ChatGPT, teacher guidance, self-determination theory.

Biodata

Thomas CHIU is an assistant professor of digital education at the Chinese University of Hong Kong, as well as the associate director of the Centre for University and School Partnership and the Centre for Learning Sciences and Technologies. He has published over 110 book chapters, conference articles, and journal papers across educational technology, psychology, and language education. His work has significantly contributed to understanding the integration of digital innovations in pedagogy and learning sciences. He was named among the top 2% most-cited scientists in education in both 2022 and 2023 by Stanford University, reflecting his global impact in the field. He currently serves as an associate editor for four internationally renowned SSCI journals (three Q1 and one Q2), where he provides editorial guidance for leading-edge research in educational technology and innovation. His research collaborations with local, regional, and international scholars have secured over USD 32 million in external grants (USD 6.2 million as PI/CCO-PI; USD 25.5 million as CO-I), enabling transformative projects in education. As an interdisciplinary researcher, he collaborates with language education experts worldwide, reshaping language education and research.

Keynote III
Abstract

Integrating Intercultural Communication with Chinese as a Foreign Language Teaching through Films

Xiaoshi Li
Michigan State University

Day 2, 9 AM
SFAH Auditorium

Abstract

There is a widespread agreement that the goal of foreign language education needs to move beyond linguistic level and incorporate culture so that learners become effective intercultural communicators and act appropriately in authentic target culture settings (Byram, 1997; 2008). Research has shown that film is one of the most effective tools to teach culture (Mallinger & Rossy, 2003) because it provides authentic representation of culture and language, appeals to students' interest, and encourages critical reflections. In addition, in recent decades, there has been a strong call for courses that connect language and content such as literature, culture, and film in foreign language classrooms (Coyle, Hood, & Marsh, 2010; Snow, Met, & Genesee, 1989). Building on these insights, this presentation introduces action research in a film course for Chinese learners at an American university, where intercultural communication is the main theme and films act as the unifying thread. It connects Chinese language, culture, and content areas – intercultural communication and film. Covering course rationale, film selection, material planning, assignment design, and student feedback, the presentation demonstrates a teaching practice applicable to other foreign language classrooms.

Keywords: intercultural communication, foreign language education, film as a teaching tool, Chinese language and culture, content-based language instruction.

Biodata

Xiaoshi LI is an Associate Professor of Chinese at Michigan State University, known for her expertise in sociolinguistics, Mandarin Chinese variation in first and second language contexts, Chinese language and culture, applied linguistics, and intercultural issues in second and foreign language teaching. Her pioneering research in applying the sociolinguistic variationist paradigm to second language Chinese has advanced understanding of linguistic variation and its role in language pedagogy. Her publication record includes an edited volume on second and heritage language variation, numerous articles in high-impact journals, and several book chapters. Her work bridges theoretical frameworks with practical applications, supported by competitive grants and fellowships that reflect her dedication to research excellence. With nearly three decades of teaching experience in the United States and China, she has a deep understanding of teaching Mandarin as a foreign language. She integrates research and practice to develop culturally responsive teaching methods, inspiring the next generation of scholars and practitioners in Chinese language education.

Keynote IV
Abstract

Harnessing AI Tools for Developing English Language Teaching Materials: Striking a Balance between Innovation and Ethical Use

Jessie Barrot
National University, Philippines

Day 3, 9 AM
SFAH Auditorium

Abstract

Developing high-quality ELT materials in ESL and EFL contexts presents significant challenges, such as ensuring cultural relevance, addressing diverse learner needs, and aligning assessments with standards, all while managing limited resources and time constraints. Generative AI offers a promising solution by streamlining development and enabling the creation of adaptable, inclusive materials. This presentation explores how AI tools like ChatGPT can refine learning objectives, support differentiated instruction, assist with brainstorming, source multimodal texts, generate sample images, refine assessments, and provide automated feedback. Supplementary tools such as StoryToolz and Grammarly assist in adjusting text complexity, refining assessments, and ensuring precise and clear language. These tools can help teachers save significant time while maintaining high-quality outputs. Despite its efficiency, generative AI faces challenges, including potential bias, inaccuracies, and a lack of human nuance. Human oversight remains crucial to ensure ethical practices and cultural relevance. The session concludes with reflections on these insights and recommendations for equipping teachers with AI literacy to balance technological innovation with ethical responsibility.

Keywords: generative AI, ELT materials development, cultural Relevance, differentiated Instruction, AI literacy.

Biodata

Jessie BARROT is Professor and Assistant Vice President for Research and Development at National University, Philippines. Internationally recognized for his contributions to linguistics and education, particularly in language teaching, assessment, and curriculum development, he was named one of the 2023 World's Top 2% Researchers by Stanford University-Elsevier. He has authored numerous publications in high-impact SSCI journals, significantly contributing to the field. His scholarly work covers topics such as academic writing, teacher education, and technology-enhanced learning. Jessie serves as a reviewer for nearly 100 SSCI/Scopus-indexed journals and is on the editorial boards of prestigious journals like RELC Journal, Reading & Writing Quarterly, and Assessing Writing. **Having** received multiple international awards, including the 2023 Liz Hamp-Lyons Best Paper Award, the TESOL Award for International Participation, the SEAMEO RELC Research Fellowship Award, and recognition as a semifinalist for the National Academy of Education/Spencer Postdoctoral Fellowship Award, **h**is global reputation has earned him invitations as a research fellow and visiting researcher at prominent universities worldwide, where he collaborates on innovative educational projects.

Proceedings Part 1

Learning from PAST LESSONS,
Building on Foundations

In Part 1, the papers focus on leveraging past and current pedagogical practices and theories to enhance future foreign language education. They provide lessons and insights for improving teaching methodologies, curriculum design, and teacher training, with shared themes including:

- **Reflective Pedagogical Practices**: Drawing on practical experiences to improve teaching approaches, such as lesson study reflections and project-based learning for pre-service teachers (*Marchesseau, Ohba*).

- **Curriculum Design and Knowledge Integration**: Highlighting the importance of combining explicit and tacit knowledge to develop outcome-based education and learner-focused curricula (*Pane et al.*).

- **Skill Development through Strategic Instruction**: Emphasizing metacognitive strategies and project-based approaches to enhance critical skills like listening comprehension and teaching competencies (*Rusmita, Ohba*).

- **Addressing Learner Anxieties and Motivation**: Exploring factors affecting learner engagement, such as classroom anxieties in English education and motivation in extensive reading practices (*Watanabe & Ohba, Lestari*).

- **Innovative Language Teaching Strategies**: Investigating strategies for fostering extensive reading and tackling challenges in beginner-level classes to enhance learner participation and outcomes (*Lestari*).

Together, these studies highlight how reflecting on practices and theories fosters culturally sensitive and learner-centred foreign language education.

1 - Decoding Lesson Study: Narratives from Japan

Gerard Marchesseau

gerard@naruto-u.ac.jp
Naruto University of Education

Abstract

Lesson Study (LS) has long been a key part of teacher development in Japan and is increasingly recognized worldwide for its structured, collaborative approach to improving teaching practices. However, perspectives on LS vary widely between Japanese teachers (JTs) and foreign Assistant Language Teachers (ALTs), who often participate as observers. This study compares these differing viewpoints through interviews with three JTs and three ALTs. The Japanese teachers spoke positively about LS, highlighting its ability to sharpen their teaching methods, promote professional growth, and create opportunities for student progress. They acknowledged the heavy workload LS requires but saw value in its "performative" nature, which pushes teachers and students to perform at their best. In contrast, the ALTs viewed LS more critically, describing it as overly rehearsed, unrealistic, and detached from the day-to-day realities of the classroom. Three key points stand out. First, the level of involvement matters. Teachers who are directly engaged in the full LS process—planning, rehearsing, and reflecting—tend to see its benefits, while those on the sidelines, like many ALTs, are more likely to see it as performative for the sake of appearances. Second, LS is changing. Japanese teachers noted a shift towards lessons that are more natural and representative of regular teaching, a perspective not reflected in the ALTs' static view of the process. Third, the role of attached schools—often seen as leaders in LS—is complicated. While they produce polished, impressive lessons, their selective student populations and demanding teacher workloads limit their relevance for regular public schools. This study highlights the need to understand LS within its cultural and professional context. It also suggests that involving ALTs more meaningfully in the LS process might help bridge the gap in perceptions. Finally, Japan could benefit from engaging with international research and evolving practices in LS to maintain its relevance at home and abroad.

Keywords: Lesson Study (LS, Teacher Development, Cultural Context, Performative Teaching, Attached Schools

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1.   Introduction

Lesson Study is a central component of professional development for teachers in Japan that has received increasing attention around the world over the past 20 years. International researchers have praised the practice, and Japan has sought to export LS to various regions through the Japan International Cooperation Agency and other organizations. This paper is a narrative inquiry, comparing and contrasting interview data from three Assistant Language Teachers (native-English speaking teachers who assist Japanese teachers in English language classrooms) and three Japanese teachers. The Japanese teachers view Lesson Study positively, while the native-English speaking teachers have a negative view, which also contradicts the literature. Three broad positions emerge from the narratives. First, the more that teachers feel personally invested in Lesson Study, the greater its potential impact. Second, lived experience reveals limitations to Lesson Study that many previous accounts in the literature have not captured. Finally, the international community has made significant contributions to Lesson Study, which Japan should consider integrating into practice and be aware of when promoting Lesson Study in other countries.

1.1   What is lesson study?

It is a common, formalized practice in Japan for teachers to bring their co-workers, supervisors within the school or board of education, and other interested members of the community to view their lessons with students. Individual teachers are not required to open their classes in this way on a yearly basis, but they will observe study lessons of their peers at least yearly, and they will probably

open one of their own classes once every several years. This is a central component of professional development for educators, known in English as "Lesson Study" (LS). LS is conducted at the school, municipal, regional and national levels. Less experienced teachers are often chosen to conduct the lesson, but senior teachers are not exempt from LS. Pre-service teachers also engage in LS as part of their teaching practicum.

Though it is practiced across a range of situations, there are some commonalities, first being that teachers work very hard, sometimes for weeks or months, preparing the lesson and drawing up an accurate plan which is usually given to participants. Immediately following the lesson, a reflection meeting is held. Usually, the teacher comments on the lesson, followed by the observers in turn. LS is often connected to a theme such as a goal across the curricula, or curriculum changes introduced at the national level. Detailed descriptions of LS can be found in Marchesseau (2024), Lewis et al. (2019), Lewis et al. (2009), and Stigler and Hiebert (1999). In the author's view, having been involved in education in Japan for around 30 years, LS is akin to subjecting your classroom teaching practice to peer review, where feedback is given in the form of the reflection meeting.

1.2   Previous literature

Since LS has gained traction internationally, patterns can be seen in the literature. Earlier studies have identified compatibility issues when exporting the uniquely Japanese initiative to other cultural settings. As LS gained traction around the world, successful models have been described in the literature. More recently, researchers have sought to explicitly measure teacher learning and further document the effectiveness of LS.

Fujii (2014) described attempts at LS in Uganda and Malawi as being unsuccessful due to cultural misconceptions of the practice. He suggested that the lessons themselves could not be considered a part of LS because the teacher prescribed a way to solve for the correct answers in a mathematics class, rather than adopting a more inquiry-based, student-centred approach. He then described the reflection session as being contentious because, when facing criticism, teachers had trouble separating their egos from their teaching practice and lesson design. He also criticized the teachers for revising and improving upon some of the activities for future use. LS requires a longer-term commitment to professional growth than what he observed in Uganda and Malawi.

I argued previously that many of his criticisms are unfair and unrealistic (Marchesseau, 2024), however, the importance of having a long-term outlook and not expecting immediate rewards has been echoed in other literature (Stigler & Hiebert, 1999). Ebaeguin and Stevens (2014) administered the Hoftede's Cultural Dimensions survey to teachers in the Philippines to explain their lacklustre enthusiasm for LS. Not having a long-term outlook and having an unrealistic expectation of immediate, measurable gains seems to stymie the effectiveness of LS in the Philippines. Lim-Ratnam et al. (2019) studied LS in Singapore and similarly found that having a long-term outlook was a serious challenge in a competitive academic culture where educators look for quick results in the form of increased standardized test scores. Another cultural challenge to the successful implementation of LS is that there is no cultural framework for LS in educational settings outside of Japan (Lewis, 2016). In Japan LS is systemic, from very local levels, through to the national level. Trying to build a practice of LS from the ground up, however, is challenging without this framework of support.

Despite the challenges, recent years have seen many successful models of LS. Takahashi and McDougal (2016), for example, studied LS in the Chicago area at thirty schools. Initial implementation was muted, and it faded away at all but five schools. LS found success though, when it was reframed as Collaborative Lesson Research (CLR), thus freeing itself from definitional constraints. (I argue that there is no singular, narrow construct of LS even in Japan, so a flexible approach is entirely appropriate.) Importantly, Takahashi and McDougal (2016) also found that teachers had a vested interest in LS when it was connected to new educational guidelines that were being introduced by the board of education. Drawing on this research, LS has also been successful in recent years in Europe (Bakker et al., 2022; Uffen et al., 2022; van den Boom-Muilenburg et al., 2022; Wothuis et al., 2020).

Interest in LS has been high in recent years. One vein of research has concerned teacher-learning from observing and participating in LS. Dunken (2023) used a grounded theory approach to analyze

teacher feedback when participating in LS. Echoing Takahashi and McDougal (2016), the benefits were greater when LS was connected to curriculum reform. Similarly, Uffen (2022) distinguished between teachers who reported high and low teaching learning in the Netherlands. Correlating this distinction to different variables, they found that LS led to more teacher learning when it was personally relevant and connected to what they wanted to learn at the onset. Still focusing on teacher learning, Vermunt et al. (2023) identified three learning patterns which they measured by a questionnaire that was tested through factor analysis. On the qualitative side, Kager et al. (2022) created a coding system to analyze qualitative discourse in the reflection meetings. It should be pointed out that the studies above do not only measure the efficacy of LS, they provide templates and techniques for further research. I am aware of very little such research in Japan. This is only a sample of the studies on LS in recent years. Lewis et al. (2019) provides extensive earlier references.

1.3   Precursor to this study

This research expands upon previous research summarized below. Marchesseau (2024) is a narrative inquiry, drawing on interview data from three Assistant Language Teachers (ALTs). ALTs are native-English speaking assistants to Japanese teachers (JTs) of English in elementary, junior high and senior high schools. Defined narrowly, "ALT" is the job title of assistant English teachers participating on the Japan Exchange and Teaching Program, but the term is now used more broadly to refer to all non-Japanese assistant English teachers. Typically, ALTs are young and are not qualified to be teachers in their own countries. Contracts are usually renewed annually, with a 5-year contractual limit. ALTs tend to finish their time in Japan after two or three years. More information can be found in McConnell (2000), Marchesseau (2006), and on the official website (JET Program, n.d.).

The three ALTs interviewed in Marchesseau (2024) had distinctly negative opinions of LS, contrasting the positive reviews in the literature. In their experience, LS lessons were over-prepared and scripted. They are not typical of what teachers usually do in class and cannot be realistically duplicated in day-to-day classes. Teachers often demonstrate a very well-rehearsed method or approach which may be in fashion, only to go back to their traditional way of teaching the next day. The reflection sessions also seem to follow a pre-determined form and occasionally seem akin to hazing, rather than constructive criticism. Generally, the process seems more performative than genuinely beneficial or authentic.

One of the ALTs worked at a university-attached elementary school, and the account of these schools contrasted the description of such schools in Lewis et al., (2016). University-attached schools (henceforth referred to as "attached schools") are technically part of the public school system, but they are administered by universities and require applicants to take entrance exams. Therefore, they are not representative of the larger population, and pedagogy at the attached schools might not be effective at other public schools. The teachers at these schools also do not seem to be chosen based on superior teaching ability. They are drawn from the larger population of public-school teachers, and they transfer in and out of the attached schools every several years. There seems to be a range of criteria affecting these transfers, but superior teaching ability does not seem to be a major factor. It is common practice for teachers to transfer from school to school every several years. Usually, teachers have no say in these transfers, but they do have the right to refuse transfer into the attached schools, in principle. Some teachers may view attached schools as prestigious, but most do not want to work there because they are required to work considerably longer hours. The conditions in the attached schools, and the role of the attached schools in the community is more complicated than indicated by Lewis (2016).

Marchesseau (2024) goes on to suggest that international research and practice of LS has progressed significantly in the last 20 years, and that Japan would be advised to stay current with these developments, least they lose relevance in an area to which they lay claim. One major limitation identified in Marchesseau (2024) is that the study relied on reports from ALTs. ALTs are not permanently employed by prefectural schoolboards, and they often come to Japan with limited linguistic and cultural knowledge. Moreover, they are often treated as guests in their schools and are not actively involved in decision making processes. A resulting sense of alienation may contribute to negative feelings about LS. Having been involved in English education in Japan for almost 30 years, I

am confident that the ALTs did raise important issues with regards to LS that were not seen in the literature, but a study such as this is incomplete without narratives from JTs. The purpose of this study is to provide a more balanced view of LS by comparing and contrasting the views of ALTs with those of JTs.

2. Methodology

This research relies on interview data to compare JT and ALT perceptions of LS. The preceding section outlines the results of the ALT interviews. In this section, the primary focus is on the Japanese participant data.

2.1 Participants

One ALT participant worked at an attached school. The other two worked at public schools, with one going on to work in higher education for the past 20 years. Purposive sampling was conducted to gather representative and comprehensive views. Further details can be found in Marchesseau (2024).

The three JTs were also collected with purposive sampling in mind. F-sensei, has worked at an attached junior high school for the past 10 years. She has been teaching for a total of 20 years, with previous experience at three different public junior high schools. I asked her why she was transferred to the attached school. She said that she had been chosen to study in the United States for one year. When she returned, her school principal suggested that she transfer to the attached school. Ordinarily, teachers can opt against transferring to the attached schools, but since she had been given the opportunity to study abroad, it was an offer that she could not refuse. F-sensei, was chosen as an informant because we have developed a close working relationship and I believed that she would give frank, honest answers. Getting unfiltered interview data is often a challenge in a highly contextualized society like Japan, and all informants (both ALTs and JTs) were chosen with this in mind. It was also important to have a participant from an attached school, since this was a theme in both the literature, and the ALT data. Her interview was conducted in English, though I gave her the option of speaking Japanese at any time.

The second participant, M-sensei, was an in-service elementary school teacher, currently doing post-graduate studies. Her experience of around 15 years has been entirely within the public school system at elementary schools. She was also chosen because I had gotten to know her well over the past year through her participation in classes and extra-curricular activities, including a study-tour to a foreign country. Very generally, I would describe her as a "typical" elementary school teacher. Her interview was conducted in Japanese and then translated by the author into English, with some consultation with the translation application, DeepL. Over their careers, both F-sensei and M-sensei have experienced LS lessons as observers, tens of times, and been chosen to conduct LS themselves close to ten times.

O-sensei, the third participant, has been a faculty member at a university for around 30 years. LS is not typically done at university, so he has never personally conducted a lesson, but he has observed around 30 LS lessons. Many of these have been for pre-service teachers, but he has ample experience with LS of all types. He was chosen because he is a personal friend, and therefore, I was confident that his answers would be honest. I also know him to be a bit of a contrarian. I thought that his narrative data may reveal aspects of LS which the others might not express. The names of the participants have been changed to preserve anonymity.

2.2 Interviews

All interviews were conducted with a casual, but systematic approach. Please consult Marchesseau (2024) for further details on the ALT data. JTs were initially asked to describe their experience with LS. They were then asked follow-up questions based on their answers. For example, F-sensei said that she felt LS improved both students' English ability and her ability as a teacher. The interviewer prompted more data, asking, "How does it improve teacher's ability?" The overall approach was to elicit as large an amount of qualitative data as possible, without leading the participants or revealing

any personal bias. However, it was important to gather data addressing several points to compare and contrast the ALT accounts and the literature. The amount of rehearsal prior to the LS study, and the similarity (or not) with their typical classes were areas that were addressed. Participants were also asked about LS at the attached schools, and the overall roll of the attached schools within the community. O-sensei and M-sensei had both observed LS at the attached schools, and F-sensei was a teacher there, as mentioned.

In the last 15 minutes of the interviews, participants were told that I had conducted similar interviews with ALTs, and that their impressions of LS were distinctly negative. I suggested that ALTs may have various biases. JTs were welcomed to provide further comment to contrast or balance the views of ALTs.

2.3   Analysis

The 45-minute interviews were recorded and transcribed for thematic analysis. While coding methods were considered, they often compress data. Given the small dataset, accurate summaries could be achieved without systematic coding, as it wasn't large enough to justify such methods. Researcher objectivity remains a concern in qualitative summaries, but with a manageable dataset, trust from the reader is reasonable. If objectivity is a concern, I can provide transcripts upon request.

3.   Results

Because the ALT results have already been discussed a length in Marchesseau (2024), the data was briefly summarized here, in section 1.3. More thorough summaries are provided for the Japanese teacher interviews in this section, with excerpts to illustrate the themes of the interviews. ALT and Japanese teacher data will be compared and contrasted in the discussion section.

3.1   F-sensei

F-sensei perceives LS to be very effective at improving both teaching ability and the English ability of the students. LS requires her to carefully consider her teaching plan and the presentation of her lesson in a way that she does not do in her day-to-day practice. Asked how LS improves teacher ability, she states:

> Because I have to check a lot of study plans and also think about the procedures – how to teach. And before the practice lesson, I do three or so practice lessons in other class. I practice the LS class in other classes before trying it in the LS class.

LS essentially puts the class under a microscope, revealing aspects in the student-teacher discourse that are not observed in normal circumstances. F-sensei makes it clear that she does not "want to do demo lessons so often" because "it takes time to prepare", but she speaks very positively of another senior teacher who often volunteers to do LS. She describes his interest in LS:

> This school's math teacher demonstrated 7 times – one teacher using another grade's students. He needs practice. He needs to check how students respond to his questions. He's a mature teacher. He loves LS. He is very active! He just kind of volunteered.

The teacher enjoyed doing LS so much that he requested to conduct these lessons for other classes outside of his own. The enthusiasm was evident in F-sensei's voice, but to be clear, this teacher is an anomaly.

The benefit for students seems to come from the productive pressure to perform that LS brings. F-sensei reported that she does student-centred, communicative activities in their regular classes, but students' motivation to communicate is always higher during LS, when there are international guests, or when classroom tasks have a specific goal which is connected to the real world. About LS, F-sensei says:

> I felt students enjoyed the speaking lesson. […] It's different from a normal lesson because if there are some observers,

other teachers will look at the students' activities and atmosphere. This schools' students can enjoy LS. Students' performance improves because they become more active. If there are no observers, students are not so active.

F-sensei also seemed to indicate that students from the attached school are particularly motivated to show off their communicative ability during LS, with the implication that public schools may not see the same effect.

I directly asked about the attached school's role as a community leader, to which F-sensei replied, "Kind of. One of the leader schools." However, when asked if many teachers seek inspiration from attached schools, she responded, "Some. Not many." For example, a recent nationally publicized LS attracted fewer than ten observers, with only two or three from outside the prefecture. This contrasts with Lewis' (2019) portrayal of attached schools.

The critical views that ALTs have of LS were not shared by F-sensei. If LS lessons are performative, they represent an ideal that teachers should strive for in their every-day practice. The problem is not that LS lessons are not representative of regular classes; it is that regular classes do not meet the standards of LS classes. She states:

> The biggest negative side is the difference from the normal lessons and LS. We should do that kind of lesson, LS style lesson, every time in the English lessons. However, many Japanese English teachers do grammar translation.

3.2   M-sensei

M-sensei's positive opinion of LS was similar to F-sensei's. When English was introduced in elementary school, many teachers were at a loss, and seeing what their peers were doing helped provide direction. It's a lot of work for teachers, and she does not typically volunteer to do LS, but it is a valuable form of professional development for both teachers and students. The arduous yet beneficial aspects of LS were highlighted throughout the interview. The excerpt below is a brief example:

> When we do LS, there's a lot of pressure. I wonder if I can do it. I feel anxious about how it's going to go. But there's a value in that challenge and it's connected to my professional development.

Students also benefit from LS. M-sensei says that they are often nervous about being watched, but their reactions are usually positive. Referring to LS in "Moral Studies" classes, she explains that often the LS lesson is the product of a succession of lessons. In the process leading up to the lesson, she has observed that, "you can see a big change in the children's emotions, eyes, hearts and ways of thinking." LS is also beneficial for observers. Particularly when there is curriculum reform, it can provide examples of teaching methods and approaches.

I wanted to address several issues raised in the ALT narratives. When asked about the reflection sessions, M-sensei felt that they were generally productive. Valerie, one of the three ALTs suggested that the reflection meetings can be unnecessarily critical, but M-sensei viewed them as primarily positive, stating:

> They're mostly positive but some of the teachers watching give me strict comments. It hasn't happened much, but I've never been told anything that strict. They don't say anything nasty. They usually give me advice.

The ALTs also implied that LS lessons might be rehearsed with students prior to the lesson. M-sensei was quick to deny this: "No, we're not allowed! There's no point in that case. It would be just a performance." However, like F-sensei, she practices the LS lesson with different students before delivering it in front of observers. This seems to be a common practice.

When asked if the attached schools were seen as leaders in the community, she responded that they were to an extent, but she also emphasized the difference between attached schools and regular public schools, which limits their relevance:

> Maybe, I think so [attached schools are leaders], but attached-schools are attached-schools. Public schools are public schools. They are separate. The students are different. The conditions are different. I think the tests are different too.

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M-sensei went on to describe a LS lesson that one of her former colleagues had given at an attached school. She was impressed by the extensive work that he had put into the lesson and said that it could not be realistically replicated in normal conditions, because of the sheer amount of preparation required. She made it clear that she would not want to work for the attached schools because of the heavier workload.

Another important theme that immerged in the interview was that LS has evolved over the years. While she flatly denied lessons being rehearsed with the same group of students, she said that this might have been done in the past. The general trend in recent years has been for LS to become more representative of normal lessons and more replicable under normal conditions:

> Before, I took a completely different approach to LS, but recently it's been changing, and teachers are showing lessons that other people can do too. Before, many lessons were not realistic, they couldn't be repeated in other conditions. But recently, lessons have become more natural. Otherwise, there's no point, right? If it's a lesson that no one else could do, then there's no point.

When the negative views of ALTs were raised, she suggested that this may stem from their lack of involvement in the process. She elaborates:

> Do they know the process leading up to the lesson? It depends on how much that person is involved, right? If we were all involved in that process together, I don't think you could say that. If you were just there as a guest for the final lesson, then maybe you would think that, but if you could clearly see what we're going to do here, then I don't think you could say that.

3.3   O-sensei

O-sensei's view stands in contrast with the other JTs. While he recognizes constructive examples of LS, he has no reluctance to criticize the practice. He describes how the performative, rehearsed aspect of LS limits it's efficacy:

> In a way, they're good. But sometimes I think it's nonsense because some teachers do the lesson before they let us see the class. They just want to show a better class. They do the same class once and then do it again. ...They do that to show the other teachers: 'We're doing this kind of thing – I'm a good teacher!'

However, similar to M-sensei, O-sensei has also observed that LS is evolving:

> But recently the situation is changing. Teachers don't prepare. They don't do the lesson before they show the class. Now, it's less rehearsed. ...That seems good. We should not do big preparation before class. If they prepare too much, that's not good for the kids. It's not good for us. We just want to see and learn what's going on. We want to see students' natural reaction.

He summed up the interview saying that "if it works, it's good, but the problem is the way it is practiced".

O-sensei's mixed review of LS was consistent across the interview. He suggests that the reflection meetings can be beneficial, but that observers often either lack critical insight, or they are excessively critical, as if to suggest their own superiority. About the reflection meetings he states:

> Sometimes it's nonsense. The teachers, the audience speak very well of the teacher. – "You're great!". But we don't need that.

When asked if teachers are sometimes too critical, he answers:

> Oh yes. Too critical. Everyone was quiet but one person was just complaining. I thought he wanted to show that he is a good teacher. That's not common. It happens more than once, but it's not common.

All participants were asked about the attached schools, and this is where O-sensei was most critical. One reason O-sensei was chosen as an informant was because of his anti-authoritarian tendencies. I knew of this bias. Purposive sampling was done precisely so that a somewhat alternative take on LS (and the attached schools) would be represented. O-sensei went to an attached school as a child and has visited or worked with several attached schools in his position as a university professor.

He chuckled as he describes how the students master how to impress adults. This plays into the performative aspects of LS. He describes the schools as having a uniform culture across Japan and fostering a sense of snobbish superiority among children and parents. From the teachers' perspective, some used to covet positions at attached schools, but as times have changed, public school teachers do not want to work at such schools because of the vastly increased workload. His view is summed up in the following excerpt:

> It's rotten! The feudalistic system and trying to make teachers into workaholics. And the students are no good. They're from good families, but they're very proud of themselves and their families. I've almost never seen a kid from an agricultural family. My father was a schoolteacher. Half of my classmates' parents were doctors, lawyers, teachers, public workers, like that. It's a kind of 'high society'. I don't think it's good. Some teachers told us to be proud of being part of [the attached school] That's crazy! That's not rock and roll!

4.   Discussion

Figure 1 summarizes the similarities and differences in perceptions about LS between ALTs and JTs. ALTs viewed LS as predominantly negative, while JTs had a positive view.

Figure 1. Perceptions of LS from ALTs and JTs
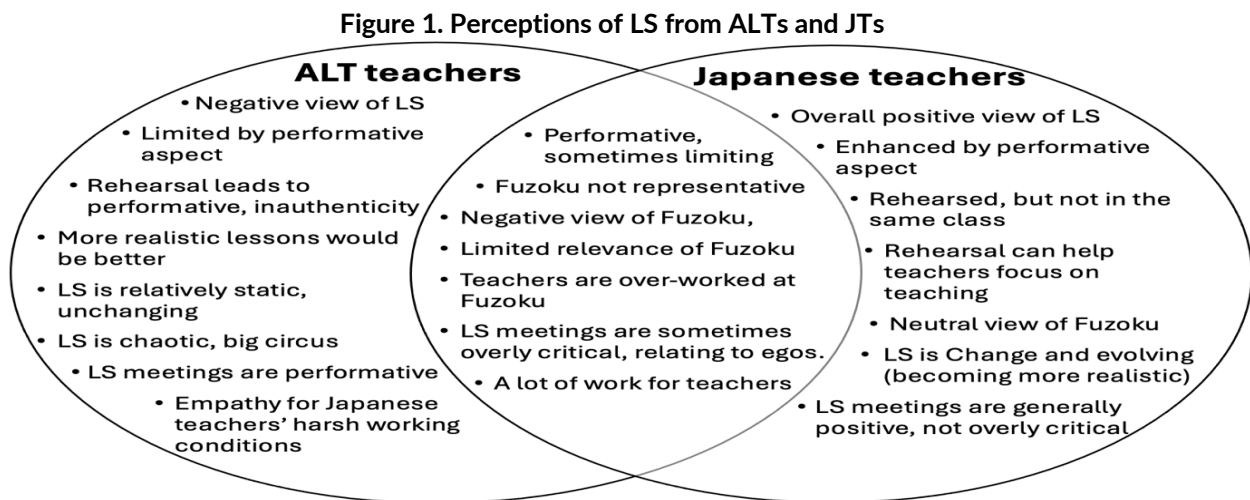
The two experienced public-school teachers viewed LS as an essential part of professional development, for teachers, while the university professor, who had never actually performed an LS lesson, and whose biases were previously noted, was more negative. ALTs, on the other hand, were consistently negative. They felt that both the lesson and the meeting afterwards emphasized form over content, describing the entire practice as performative. Clearly, ALTs viewed the performative aspect of LS negatively, but F-sensei, felt that the requirement to "perform" in front of guests put productive pressure on students and improved their English output. Thus, both groups recognize that LS is performative, but disagree on the effect.

Similarly, ALTs and JTs both report that LS is rehearsed, but they disagree on the effect and extent of rehearsal. According to JTs, rehearsing the lesson with other classes prior to the LS lesson allows teachers to hone their teaching approach and lesson content, enhancing the beneficial effects of LS. ALTs, however, seem to believe that the lesson is rehearsed simply to ensure that it runs smoothly and matches formal expectations. ALTs imply that the lesson might be rehearsed with the same group of students, prior to the LS lesson. JTs responded that this is not true, though it may have been done in the past. There is universal agreement that LS requires a great deal of work from those directly involved. While JTs recognize it as beneficial, they are reluctant to volunteer for LS, and ALTs expressed their sympathy for their Japanese counterparts.

All three JTs have observed that LS has been changing over the years. The lessons have been becoming more representative of what teachers usually do in class. Slowly, the formal aspects of LS have been loosened. The ALTs presented a more static view of LS. This might be explained by the JTs' more extensive experience with LS over many years. This is an important point that was not well-addressed in Marchesseau (2024).

The interviews indicate that direct involvement affects the perception of LS. The most positive views came from the two teachers with extensive direct experience with LS. The ALTs' experience was generally limited to the lesson itself and the reflection meeting. The entire process of LS can last weeks or months, and ALTs were not typically involved in the planning or other parts of LS. Lewis et al. (2019) suggested that the Self-Determination Theory (STD) of motivation may explain perceptions of LS. According to SDT, motivation is driven by a sense of autonomy, relatedness and competence (Sansone & Harachiewicz, 2000). As assistants with limited-term contracts, ALTs often feel a lack of relatedness and autonomy (Hiratsuka, 2022; Ohtani, 2010; Marchesseau, 2006; McConnell, 2000), and this may affect their perceptions of LS and other aspects of their job. As M-sensei said, when she learned of the negative ALT accounts, "That's just because they're not involved, right!?". Relatedly, the literature also shows that LS has been the most successful when it has been relevant to teachers' situation. ALTs, even when they participate in the lesson itself, maintain a distance from LS and do not seem to benefit in the same way that JTs do. If ALTs are more directly involved in the process, they too might see the benefits and their perceptions might change. However, ALTs often work at several schools, so their position precipitates a lack of continuity, which may make deeper involvement in practices like LS impractical.

Another theme in this research was the attached schools. They are sometimes touted as leaders in the community, but the perception of these schools is mixed. The ALTs were free with their criticism of attached schools, especially Valerie, who worked at one of these schools. The JTs were more nuanced in their opinion, but amalgamating the interviews, there are at least two factors which limit the role of attached schools as leaders in the community. Firstly, students are not representative of the larger population. They are admitted to attached schools based on results of a competitive entrance exam. This contributes to a sense of elitism, and a distinct culture within the schools. This is keenly felt by those who are deeply involved in the attached schools, including the author, and it is clearly expressed in the interviews. These schools are different from normal public schools. Generalizability is weak. Secondly, while we found no evidence that teachers at the attached schools have superior ability, they are required to work far longer hours than teachers at regular schools. The amount of effort that they put into LS is exorbitant and not realistic for other teachers. The narratives make this clear, and I have seen it firsthand over the years that I have been involved in Japanese education.

5.   Conclusion

This study compared perceptions of LS from ALTs and JTs. Initial results from ALTs present a negative view. The researcher also has previous experience as an ALT. Prior to an adequate survey of the research and discussions with JTs, my view was consistent with that of other ALTs. Studies on LS, however, show that there is much interest in the practice, and that it has been successful in various settings around the world. The literature is persuasive. Moreover, interviewing JTs provides a more complete picture, and shows that the practice benefits teachers by requiring them to focus in fine detail on their teaching. The benefit to students and the other participants was discussed in less detail, but probably depends on the situation and purpose of LS. When a new curriculum is introduced, for example, seeing what other teachers are doing and sharing ideas helps move pedagogy forward.

Two of the conclusions by Marchesseau (2024) are supported and maintained in this study. First, practice and research on LS has progressed a great deal around the world, arguably more so than in Japan. The JTs in this study indicate that LS has been evolving, with the lessons become more representative as formalities have eased. However, researchers abroad have gone further to propose specific templates and tools for conducting and researching LS. In Japan, LS may be able to draw influence from these advances, and Japanese educators promoting LS abroad should be well acquainted with the literature. Ridged approaches like that implied in Fujii (2014) are not relevant in other regions, and they may not be representative of LS practiced in Japan at present. Second, the attached schools are not representative of regular public schools, and public-school teachers are well-aware of this. While the teachers at attached schools do not seem to possess superior skills, their workload is considerably higher and probably unsustainable. The students are also not representative of the population, since there are stringent entrance requirements. Visitors from abroad may be

impressed when visiting attached schools, but spending time in regular public schools provides a much more realistic picture of education in Japan.

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2 - Bridging Knowledge in Curriculum Design: The Role of Explicit and Tacit Knowledge in Implementing Outcome-based Education for English Language Lecturers

Isli Iriani Indiah Pane
islipane@unimed.ac.id
Universitas Negeri Medan, Indonesia

Nina Afria Damayanti
ninaafria@unimed.ac.id
Universitas Negeri Medan, Indonesia

Hesti Fibriasari
hesti@unimed.ac.id
Universitas Negeri Medan, Indonesia

Wawan Gunawan
wagoen@upi.edu
Universitas Pendidikan Indonesia, Indonesia

Abstract

English language lecturers' explicit and tacit knowledge is deeply embedded in their cognitive systems, shaping how they plan, implement, and adapt the Outcome-Based Education (OBE) curriculum within their courses. However, research in English Language Teaching (ELT) has paid limited attention to how these two types of knowledge influence teaching practices, particularly in the context of OBE. This study explores how lecturers utilize both explicit and tacit knowledge in the implementation of the Merdeka curriculum, adopting a qualitative research approach. Data were collected through focus group discussions, document analysis, field observations, and semi-structured interviews with 22 English language lecturers. The thematic analysis follows Braun & Clarke's six-step framework, ensuring triangulation of multiple data sources to provide robust conclusions. The findings reveal seven features of explicit knowledge and four features of tacit knowledge, illustrating how these forms of knowledge contribute to curriculum implementation. Tacit knowledge enables lecturers to adapt their teaching to meet diverse student needs, integrate curriculum elements effectively, and solve problems in real-time. These insights highlight the importance of senior lecturers' tacit knowledge in aligning Program Learning Outcomes (PLO) with graduate profiles, a challenge often encountered by less experienced lecturers. The study offers practical recommendations for Foreign Language Teaching (FLT), emphasizing the need for continuous lecturer development, particularly in cultivating tacit knowledge through mentoring and experience sharing. Additionally, collaboration with industry stakeholders is recommended to ensure that tasks and assessments align with the competencies required by the job market, helping bridge the gap between academic training and professional expectations.

Keywords: outcome-based education (OBE), explicit knowledge, tacit knowledge, curriculum design, English language lecturers

1. Introduction

The adoption of Outcome-Based Education (OBE) has transformed educational systems globally, prioritizing the achievement of specific, measurable outcomes over traditional content-focused approaches. This framework, which focuses on defining what students should know, understand, and

be able to demonstrate by the end of a course or program, has gained traction in Indonesia as part of broader efforts to enhance educational quality and align with international standards (Shariff & Saad, 2010; Sunra et al., 2024). In Indonesian English Language Teaching (ELT), implementing OBE presents unique challenges due to the country's linguistic diversity, variations in resource availability, and the need to balance standardized educational goals with flexible, adaptive teaching methods suited to diverse student needs (Agustiana et al., 2023; Madkur et al., 2024; Roi et al., 2021). As a multilingual nation with over 700 indigenous languages, Indonesia's ELT classrooms often include students from varied linguistic and cultural backgrounds, requiring lecturers to adapt their approaches while maintaining alignment with OBE's structured outcomes (Mufanti et al., 2024; Roi et al., 2021).

Explicit knowledge, the formalized, documented knowledge related to curriculum design, lesson planning, assessment rubrics, and instructional materials, is essential in ensuring consistency and coherence within OBE's outcome-focused framework (Astorga-Vargas et al., 2017; Gamble, 2020; Olomolaiye & Egbu, 2005; Smith, 2001; Stevens et al., 2010). For Indonesian English language lecturers, explicit knowledge serves as a foundation for designing and delivering structured lessons that meet specific competencies in language proficiency, comprehension, and communication skills. Through explicit knowledge, lecturers can create curriculum components that align with Program Learning Outcomes (PLOs) and Course Learning Outcomes (CLOs), ultimately contributing to broader Program Educational Objectives (PEOs). However, while explicit knowledge provides a structured approach essential to meeting OBE standards (Spady, 1994), it may not always account for the adaptive needs of students in Indonesia's diverse classrooms, where socioeconomic disparities and access to educational resources vary widely (Hutahaean et al., 2024). Tacit knowledge, on the other hand, is the intuitive, experience-based insight that lecturers develop over time, allowing them to respond flexibly to the dynamic needs of students. Tacit knowledge enables lecturers to make real-time adjustments, such as shifting from a structured lesson plan to a more interactive activity when students appear disengaged. In Indonesia, this adaptability is particularly important in ELT, as students may come to class with different levels of English exposure and proficiency, often influenced by their primary language, regional culture, and access to English learning resources (Agustiana et al., 2023; Hong & Abdullah, 2020; Islami & Senom, 2024). Tacit knowledge is thus critical for addressing gaps in student engagement, confidence, and comprehension, allowing lecturers to create an inclusive learning environment that supports diverse student needs. However, unlike explicit knowledge, tacit knowledge is inherently personal, built through accumulated experience, and can be challenging for early-career lecturers who lack the intuitive, situational awareness to make adaptive decisions effectively (Anastasiou, 2019; Astorga-Vargas et al., 2017; Gamble, 2020; Murumba et al., 2020; Olomolaiye & Egbu, 2005; Stevens et al., 2010).

Despite the importance of tacit knowledge in fostering responsive, student-centered instruction, research on OBE in Indonesian ELT has largely emphasized explicit aspects, such as curriculum design and assessment frameworks. Prior studies (Ann Ortega & Ortega-Dela Cruz, 2016; Deli et al., 2024; Khan Milon et al., 2024; Mahbubul Syeed et al., 2022; Mufanti et al., 2024; Rahayu et al., 2021; Setyowati, 2023) have examined the alignment of curriculum components with OBE's structured outcomes but have given limited attention to how tacit knowledge supports adaptive teaching. This gap is significant in Indonesia, where less experienced lecturers, particularly those working in under-resourced regions, may struggle to balance rigid OBE requirements with the flexibility needed to engage diverse learners. Addressing this gap is crucial, as Indonesian lecturers require support not only in curriculum structuring but also in developing the adaptive skills necessary to meet the dynamic, real-time needs of students in ELT classrooms. This study aims to address this research gap by examining how Indonesian English language lecturers across different experience levels, senior, mid-career, and early-career, utilize both explicit and tacit knowledge to implement OBE effectively. By investigating how each group balances structured, outcome-oriented teaching with adaptive strategies, this study seeks to provide a nuanced understanding of the developmental needs of lecturers at various career stages. Furthermore, this study explores how tacit knowledge is cultivated over time and whether mentorship or professional development initiatives can accelerate its development, particularly for early-career lecturers working in diverse and resource-variable contexts within Indonesia.

2. Methodology

2.1 Research approach

This study adopts a qualitative exploratory research design to investigate how English language lecturers utilize explicit and tacit knowledge in implementing the Outcome-Based Education (OBE) curriculum. The qualitative approach was chosen to gain in-depth insights into the lecturers' experiences, perceptions, and practices, as this aligns with the exploratory nature of the research (Creswell, 2013). Outcome-Based Education, following (Spady, 1994) framework, requires educators to focus on clear learning outcomes while adapting teaching strategies to ensure that all students meet these outcomes. This makes it essential to understand the dual role of explicit knowledge (formalized knowledge such as lesson plans, rubrics, and syllabi) and tacit knowledge (experience-based, intuitive knowledge that guides real-time adaptations in the classroom) in successful OBE implementation.

2.2 Participants

The participants, 22 English language lecturers from Universitas Negeri Medan, were selected through purposive sampling to ensure diverse representation across different levels of teaching experience, which is crucial for examining the varying degrees of explicit and tacit knowledge. The categorization into three groups namely senior, mid-career, and early-career lecturers, is based on Benner (1982) Novice to Expert Model, which posits that experience fosters the development of tacit knowledge. Senior lecturers, having accumulated extensive teaching experience and participated in multiple curriculum reforms, demonstrate high levels of tacit knowledge, particularly in adapting to real-time classroom dynamics. Mid-career lecturers are positioned at an intersection, where they blend structured, explicit knowledge with growing tacit insights. Early-career lecturers primarily depend on explicit knowledge provided through formal training, as they have had limited exposure to the experiential learning needed to build tacit knowledge. This stratification provides an analytical lens for understanding how teaching experience influences the balance between explicit and tacit knowledge, enhancing our ability to draw nuanced insights into the OBE curriculum's implementation.

2.3 Data collection method

The data collection took place over a period of four months from June to September 2024 at Universitas Negeri Medan, providing ample opportunity to capture comprehensive insights into the lecturers' practices and interactions. To explore how English language lecturers utilize explicit and tacit knowledge in implementing the Outcome-Based Education (OBE) curriculum, this study employed four primary data collection methods: focus group discussions (FGDs), semi-structured interviews, document analysis, and classroom observations. Each method was carefully chosen to align with the study's objectives of uncovering both the formal, structured knowledge (explicit) and the intuitive, experience-based knowledge (tacit) used by lecturers in the OBE context.

2.3.1 Focus group discussions (FGDs)

FGDs were conducted with groups of 6 to 8 lecturers, focusing on eliciting shared perspectives on explicit knowledge, such as how lecturers design lesson plans, align assessments with learning outcomes, and structure teaching strategies within the OBE framework. The structured nature of FGDs aligns with capturing explicit knowledge, as it allows lecturers to articulate formal, documented practices. This method supports a collective understanding of how lecturers systematically plan and implement curriculum components, providing a basis for understanding how explicit knowledge drives structured teaching practices.

2.3.2   Semi-structured interviews

To delve into the more personal, experience-based aspects of knowledge application, semi-structured interviews were conducted with 9 lecturers (3 from each experience group). This method is particularly suited to exploring tacit knowledge, as it enables lecturers to reflect on in-the-moment decision-making, adaptations to student needs, and the nuanced adjustments that are not typically documented. By offering open-ended questions and allowing lecturers to narrate personal teaching experiences, these interviews capture the unspoken, intuitive aspects of their practice. This approach is especially relevant for understanding how senior and mid-career lecturers apply tacit knowledge in adapting to classroom dynamics.

2.3.3   Document analysis

Document analysis of lesson plans, syllabi, assessment rubrics, and course materials provides insights into explicit knowledge by examining how formalized content and structured guidelines are designed to meet OBE objectives. This method allows for an objective review of explicit knowledge artifacts, offering a window into how lecturers intentionally structure courses to align with program learning outcomes (PLOs) and other institutional goals. This analysis is central to understanding how explicit knowledge manifests in formal curriculum design and the planning of measurable outcomes.

2.3.4   Classroom observations

Classroom observations were conducted across two to three teaching sessions per lecturer to capture the enactment of tacit knowledge in real-time. Observing lecturers in their natural teaching environment allows for an exploration of intuitive adjustments, spontaneous adaptations, and real-time problem-solving—elements indicative of tacit knowledge. This method is essential for understanding how lecturers respond to immediate classroom needs and integrate experiential insights with structured lesson plans. Observations focused on how lecturers adapt their methods based on student reactions, underscoring the role of tacit knowledge in navigating the fluid dynamics of language teaching.

2.4   Data analysis

Thematic analysis, guided by (Braun & Clarke, 2006) six-step framework, was employed to systematically identify and analyse patterns within the data. By coding for themes that distinguish explicit from tacit knowledge, this analysis clarifies the ways lecturers apply both knowledge types in practice, providing an integrated understanding of how each contributes to the successful implementation of OBE.

2.5   Triangulation

Triangulation across FGDs, semi-structured interviews, document analysis, and classroom observations strengthens the study's credibility by corroborating insights across different data sources. FGDs and document analysis primarily capture explicit knowledge, reflecting the structured, documented practices of curriculum design. Semi-structured interviews and classroom observations, on the other hand, illuminate tacit knowledge, capturing the experiential insights that drive real-time teaching adaptations. This methodological triangulation ensures a balanced analysis, revealing the dynamic interaction between explicit and tacit knowledge in the context of OBE curriculum implementation.

3.   Results and discussion

3.1   Results

This section presents the findings of the study, focusing on the application of explicit and tacit knowledge among English language lecturers with varying levels of experience in implementing the Outcome-Based Education (OBE) curriculum. The findings reveal distinct patterns in how senior, mid-career, and early-career lecturers utilize these types of knowledge, influencing their teaching strategies, adaptability, and alignment with OBE objectives. By examining each theme in depth, the analysis illustrates how experience shapes the ability to balance structured, formalized approaches with intuitive, adaptive practices, ultimately impacting student engagement and curriculum alignment.

3.1.1 *Explicit knowledge in curriculum design and assessment*

The findings show that explicit knowledge plays a critical role across all levels of experience, providing a structured framework for curriculum design, lesson planning, and assessment alignment within the OBE system. Senior lecturers (over 20 years of experience) exhibit a sophisticated understanding of how to link Course Learning Outcomes (CLOs) and Program Learning Outcomes (PLOs) with broader Program Educational Objectives (PEOs). Their experience allows them to embed these outcomes seamlessly into their lesson plans, creating a clear pathway for achieving educational goals. For example, Senior Lecturer A emphasized the importance of these alignments:

> "The PLOs guide everything. Each CLO must contribute to the larger goals, so my lessons are built around measurable outcomes."

This reflects an in-depth understanding that aligns with OBE principles, as senior lecturers design their courses to ensure each activity contributes to specific, measurable student outcomes.

Mid-career lecturers (10-20 years of experience) also demonstrate proficiency in using explicit knowledge, particularly through constructive alignment—linking learning outcomes, instructional methods, and assessment criteria. During focus group discussions, Mid-Career Lecturer B shared that rubrics are essential tools in helping students understand course expectations, stating,

> "Without aligning CLOs, teaching methods, and assessments, students won't understand what's expected of them. Every task has to connect back to the outcomes, or students don't see the bigger picture."

This highlights how mid-career lecturers use explicit frameworks to create a cohesive learning environment, ensuring that each instructional strategy directly supports the intended learning outcomes. Document analysis of mid-career lecturers' lesson plans and rubrics confirms this focus, showing detailed assessments directly aligned with CLOs, demonstrating a clear, structured approach to fulfilling OBE requirements. In contrast, early-career lecturers (less than 10 years of experience) rely heavily on pre-designed templates and structured guidelines, indicating a limited capacity for customization due to their reliance on explicit knowledge. Early-Career Lecturer C, in an interview, noted,

> "I follow the lesson plans exactly as they're laid out. Since I'm still new, it helps to have clear guidelines, especially with OBE requirements, because there's less room for error."

This reliance on structured templates reflects their developmental stage in teaching, where explicit knowledge forms the core of their practice. They use rubrics and lesson plans strictly as provided, with limited adaptation, underscoring a dependence on formalized structures as they build their teaching confidence.

3.1.2 Tacit knowledge in adaptive teaching

The theme of tacit knowledge, the intuitive, experience-based ability to adapt in real time, is particularly pronounced among senior and mid-career lecturers, though it varies in application across experience levels. Senior lecturers, with their years of teaching experience, are adept at making immediate adjustments in their teaching approach based on student engagement and classroom dynamics. Classroom observations revealed instances where Senior Lecturer D quickly shifted from

a planned group discussion to a case study format upon noticing disengagement among students. In an interview, she explained this shift:

> "Over the years, you just know when something isn't working. I could tell they weren't engaging, so I switched to something that would get them thinking more critically. You can't always stick to the plan."

This adaptability reflects a deep, internalized understanding of student needs, honed over decades, and demonstrates how tacit knowledge empowers senior lecturers to modify their teaching dynamically without compromising on learning outcomes.

Mid-career lecturers also exhibit tacit knowledge, though it is often applied in the integration of curriculum components rather than in entirely altering lesson formats. For instance, Mid-Career Lecturer E, observed during a lesson, skillfully combined speaking and writing skills in an argumentative essay session to address multiple CLOs simultaneously. In focus groups, this lecturer reflected on the necessity of integrating skills:

> "You can't teach skills in isolation. The curriculum is designed to integrate competencies, so even in a writing lesson, I make sure students are also practicing speaking and collaboration. These are equally important in the workplace."

This ability to integrate competencies on the fly reflects tacit knowledge that emerges with experience, allowing mid-career lecturers to enrich the curriculum spontaneously.

On the other hand, early-career lecturers show limited reliance on tacit knowledge, often adhering strictly to pre-planned lessons without deviation. This cautious approach is due to their relatively limited teaching experience and a need for more structure. Early-Career Lecturer F explained,

> "I stick to the lesson plan because it's what I'm comfortable with. I haven't yet developed the confidence to make changes on the fly, so I follow what's provided."

This dependence on structured plans suggests that tacit knowledge develops gradually through practical teaching experience and exposure to varied classroom situations.

3.1.3 Integration of tacit and explicit knowledge

One of the key findings is the ability of senior lecturers to effectively combine explicit lesson plans with tacit adjustments, allowing them to respond to student needs dynamically while maintaining alignment with OBE goals. For example, Senior Lecturer G modified a case study activity based on real-time student feedback, transforming a discussion format to better engage students. She explained,

> "The PLOs are always my starting point, but how I get students to meet those outcomes can change from class to class. It's about knowing when to stick to the plan and when to make adjustments based on what's happening in real-time."

This combination of structured, explicit knowledge and flexible, tacit insights enables senior lecturers to create a learning environment that is both goal-oriented and responsive, enhancing student engagement without losing sight of OBE objectives.

Mid-career lecturers are also beginning to integrate tacit and explicit knowledge, balancing structured teaching with an increasing openness to adapt based on classroom feedback. Mid-Career Lecturer H discussed this balance, saying,

> "I still plan my lessons carefully, but I've learned that sometimes you need to adapt. For instance, if a lesson isn't resonating, I'll introduce a hands-on activity that connects with what they already know."

This emerging integration among mid-career lecturers shows their transition from relying heavily on explicit frameworks to incorporating intuitive adjustments, providing a more holistic teaching approach that can better address diverse student needs. For early-career lecturers, integrating tacit knowledge with explicit frameworks remains challenging due to their reliance on formal guidance. They recognize the need for flexibility but often lack the confidence or experience to implement

changes in the moment. Early-Career Lecturer I commented,

> "I can see how more experienced colleagues change things as they go, but I'm still learning how to do that myself. Right now, I prefer to stick to what's in the lesson plan because I'm still figuring things out."

This perspective illustrates the developmental stage of early-career lecturers, who may benefit from mentorship and professional development to help them gradually integrate tacit insights into their teaching practices.

3.1.4   Continuous professional development and mentorship needs

A critical theme that emerged is the need for ongoing professional development and mentorship, especially among early-career lecturers who rely heavily on explicit knowledge. Many of these lecturers expressed challenges in adapting to student needs due to a lack of tacit knowledge, which comes primarily from experience. Early-Career Lecturer J noted,

> "I can see how more experienced colleagues change things as they go, but I'm still learning how to do that."

This reliance on structured plans reflects a developmental stage where additional support, such as mentoring programs, could provide exposure to adaptive teaching strategies used by senior colleagues. Both mid-career and senior lecturers highlighted the importance of mentorship and observation as essential mechanisms for cultivating tacit knowledge among less experienced colleagues. Senior Lecturer K stated,

> "Tacit knowledge develops with time, but it could be accelerated with the right support system. Mentoring new lecturers helps them see how to adapt based on the classroom situation."

This finding suggests that structured mentorship could bridge the knowledge gap, equipping early-career lecturers with the tools and confidence to integrate tacit knowledge more effectively.

3.1.5   Challenges and constraints in balancing explicit and tacit knowledge

Lecturers across all levels encounter challenges in balancing explicit and tacit knowledge, particularly due to institutional constraints. Senior lecturers expressed that while their experience allows them to adapt lessons, institutional guidelines, assessment requirements, and time limitations sometimes restrict their flexibility. Senior Lecturer L explained,

> "Sometimes we know what works, but the constraints in assessments and time restrict how much we can deviate from plans."

This challenge highlights a structural limitation within OBE, where strict adherence to measurable outcomes can sometimes conflict with the adaptive needs of a dynamic classroom. Mid-career lecturers face a similar balancing act, trying to align their growing tacit knowledge with institutional demands for structured teaching practices. They expressed a need for greater flexibility within the OBE framework to accommodate adaptive strategies that might benefit student engagement without compromising on outcomes.

3.1.6   Impact of tacit knowledge on student engagement and learning outcomes

Finally, the findings underscore the positive impact of tacit knowledge on student engagement and learning outcomes, especially when lecturers adapt their methods to fit the real-time needs of students. Senior lecturers use tacit knowledge to identify signs of disengagement quickly, implementing strategies that reinvigorate classroom dynamics. Mid-Career Lecturer M observed,

> "When I adapt based on their responses, students seem to engage more actively."

This responsiveness enhances student interaction, helping to create an environment conducive to

achieving OBE outcomes. In contrast, early-career lecturers, who rely more on explicit knowledge, find it challenging to adapt quickly, which may impact their ability to fully engage students. Early-Career Lecturer N shared,

> "I try to keep students involved, but without knowing how to adjust my methods, it's hard to keep them engaged if they start losing interest."

These findings illustrate the crucial interplay between explicit and tacit knowledge across different experience levels, highlighting both the strengths and challenges lecturers face in implementing the OBE curriculum. By understanding how knowledge application varies among senior, mid-career, and early-career lecturers, this study underscores the importance of structured support systems, such as mentorship and professional development, in enhancing adaptive teaching practices, ultimately contributing to more dynamic and responsive OBE-aligned learning environments.

3.2   Discussion

The findings of this study highlight the critical role of both explicit and tacit knowledge in effectively implementing the OBE curriculum, with distinct patterns observed across different levels of teaching experience. Explicit knowledge, as demonstrated through structured lesson planning, rubrics, and curriculum alignment, provides a foundational framework that ensures consistency and constructive alignment within OBE. This aligns with Biggs (1996) constructive alignment theory, which emphasizes that teaching activities, assessments, and learning outcomes should be interconnected to achieve educational goals. Both senior and mid-career lecturers in this study demonstrate proficiency in applying explicit knowledge to create structured, outcome-focused teaching strategies. However, early-career lecturers, who rely heavily on explicit guidance, show a limited capacity to adapt their approaches, indicating a need for further support in developing flexibility within OBE frameworks. On the other hand, tacit knowledge, the ability to adapt and respond to real-time classroom dynamics, emerged as particularly valuable for engaging students and addressing immediate needs, especially among senior and mid-career lecturers. This finding is consistent with Eraut (1985) theory of professional knowledge, which underscores the importance of intuition and experience in navigating complex, dynamic classroom environments. Tacit knowledge enables lecturers to make in-the-moment adjustments, enhancing student engagement and ensuring that learning outcomes remain relevant to the diverse needs of students. In contrast, early-career lecturers, who lack extensive teaching experience, find it challenging to adapt quickly, often adhering to pre-planned structures that may limit student engagement. This aligns with Benner (1982) Novice to Expert Model, which suggests that novice professionals typically depend on structured guidance, while experienced professionals develop intuition-based knowledge over time.

The integration of explicit and tacit knowledge observed among senior lecturers illustrates Nonaka (1994) theory of knowledge conversion, which highlights the dynamic interplay between formalized knowledge and experiential insights in professional practices. Senior lecturers demonstrate an ability to blend explicit lesson plans with real-time adaptations, which allows them to meet institutional OBE requirements while remaining responsive to student needs. Mid-career lecturers also show emerging skills in balancing these two knowledge types, suggesting a developmental trajectory in which tacit knowledge increasingly complements explicit structures. This balanced integration is essential in OBE environments where adaptability is required to address student engagement without deviating from measurable outcomes.

Continuous professional development and mentorship are essential for fostering tacit knowledge among early-career lecturers. This study indicates that early-career lecturers struggle to make adaptive adjustments due to limited experience, reflecting a reliance on explicit knowledge alone. Pérez-Jorge et al. (2021) research suggests that structured mentorship programs can be instrumental in bridging this gap, allowing novice lecturers to learn adaptive strategies from observing more expereinced colleagues. By implementing mentorship and observational opportunities, institutions can support early-career lecturers in developing the confidence and intuitive decision-making skills necessary for responsive teaching within an OBE framework. However, the study also reveals challenges and constraints in balancing explicit and tacit knowledge, particularly due to institutional

requirements that often emphasize structured, measurable outcomes. Senior lecturers reported that while they value adaptive teaching, institutional assessment standards and time constraints sometimes restrict flexibility. This challenge reflects a broader tension within OBE, as institutional expectations for measurable outcomes may limit the degree to which lecturers can apply tacit knowledge effectively. Beatty (2019) argue that such structural limitations can reduce an educator's ability to adapt based on classroom dynamics, impacting the flexibility required for responsive teaching.

Finally, the study underscores the impact of tacit knowledge on student engagement and learning outcomes, particularly among experienced lecturers. Lecturers who integrate tacit knowledge into their teaching report higher levels of student engagement and participation, as adaptive teaching fosters a more interactive learning environment. This finding supports Biggs (1996) notion that constructive alignment is not only about structured outcomes but also about creating a learning environment that dynamically meets student needs. Early-career lecturers, due to their limited tacit knowledge, may struggle to engage students fully, highlighting the importance of experience and adaptive capacity in achieving OBE goals. In summary, these findings suggest that a balanced integration of explicit and tacit knowledge is essential for successful OBE implementation. To support this balance, institutions should consider providing structured mentorship and professional development, particularly for early-career lecturers, to cultivate adaptive teaching skills. Additionally, institutional flexibility in assessment standards could allow lecturers to apply tacit knowledge more effectively, ensuring that OBE outcomes are achieved in a responsive and student-centered manner.

4. Conclusion

This study examines how English language lecturers integrate explicit and tacit knowledge in implementing the Outcome-Based Education (OBE) curriculum, focusing on adaptability, alignment of learning outcomes, and student preparation for academic and professional success. Senior lecturers, leveraging well-developed tacit knowledge, excel at real-time adjustments to address diverse student needs while maintaining alignment with Program Learning Outcomes (PLOs) and Program Educational Objectives (PEOs). Tacit knowledge enables flexibility in integrating curriculum elements, accommodating varied learning styles and abilities. In contrast, early-career lecturers rely heavily on explicit knowledge, such as structured lesson plans and rubrics, and face challenges in making adaptive decisions, highlighting the need for professional development and mentorship to build tacit knowledge.

The study underscores the importance of aligning language education with industry needs to equip students with practical communication skills alongside academic outcomes. Continuous lecturer development, industry collaboration, and balancing tacit and explicit knowledge are critical for effective OBE implementation in Foreign Language Teaching (FLT) and English Language Teaching (ELT) programs.

Limitations of this study include the sample size of 22 English language lecturers, which may not fully represent the diversity of teaching experiences across different institutions or regions. Additionally, the focus on English language lecturers may limit the generalizability of findings to other disciplines within OBE implementation. Identifying and measuring tacit knowledge also poses inherent challenges due to its implicit nature, as interpretations were based on classroom observations and self-reported lecturer accounts, potentially introducing subjectivity.

Future research is recommended to address these limitations and deepen understanding of tacit and explicit knowledge in OBE contexts. Comparative studies across different regions or institutions could offer insights into how explicit and tacit knowledge are integrated in diverse educational settings. Quantitative approaches to assess the impact of tacit and explicit knowledge on student learning outcomes would further clarify their effectiveness in OBE. Developing structured frameworks for assessing tacit knowledge could provide a more objective analysis, and longitudinal studies tracking tacit knowledge development in early-career lecturers, particularly through mentorship programs, would offer valuable insights into the progression and impact of adaptive teaching skills. These recommendations would contribute to a more comprehensive understanding

of the complementary roles of tacit and explicit knowledge in OBE curriculum implementation, ultimately improving teaching and learning outcomes in language education and beyond.

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3 - Developing Pre-service English Language Teaching Skills through Project Work

Hiromasa Ohba
hohba@juen.ac.jp
Joetsu University of Education, Japan

Abstract

In Japanese schools, project-based learning (PBL) is currently being encouraged in all subjects including English language to develop students' cognitive and noncognitive skills. However, teachers themselves lack both the requisite knowledge and experience with PBL and require guidance and clarity on how to implement it. Therefore, this study aimed to conduct an exploratory investigation by exposing trainees enrolled in the English teacher training program to inquiry-based PBL, in order to understand their experience of such learning and how it affects their ability to develop teaching materials and methods. This study conducted a PBL training consisting of 15 classes for 30 students of an English teacher training program in a university. The participants worked in teams of four or five to identify and discuss solutions to the challenges encountered while teaching English to secondary school students. They were then required to develop teaching materials and methods, present their ideas for microteaching, and finally perform microteaching. A qualitative analysis was performed on data from reflections after each class and from a post-course open-ended questionnaire. The results indicated that exposure to PBL helped participants learn how to be proactive and motivated in engaging secondary school students in English learning. They encountered new ideas and perspectives in cooperative learning and developed confidence in their teaching skills. Several participants reported that the experience helped them identify areas of improvement. Thus, the findings of this study indicate that incorporating PBL into English teacher training programs significantly enriches the English teaching ability and confidence of future teachers of English.

Keywords: project-based learning, teacher training, English language education, active learning, microteaching

1.   Introduction

In recent years, global society has undergone significant changes, including the rise of artificial intelligence (AI), globalization, and digitization (also known as education DX). These advancements have transformed information accessibility. In Society 5.0, the ability to independently, autonomously, and collaboratively integrate newly acquired knowledge with existing understanding to create something new is crucial. Two key competencies stand out: scholarly ability (knowledge, skills, attitude, and creative thinking) and basic skills for working adults (problem-solving, forward thinking, and teamwork). Universities are promoting "Active Learning" to help students acquire these skills.

In this Age of Uncertainty, where rapid changes are constant, societal needs for skills and qualities are expected to evolve. Traditional methods of delivering theoretical knowledge and emphasizing academic performance are insufficient for preparing children for the real world. Globally, education is shifting towards fostering individual and societal well-being alongside knowledge dissemination. Education 2030, an OECD initiative, envisions education that develops competencies such as agency, value creation, conflict resolution, and responsible action. These are nurtured through the "Anticipation, Action, and Reflection (AAR) cycle." By 2030 or 2040, mastery of such competencies will likely be the norm, but children will struggle to develop them if educators lack the requisite qualifications, including scholarly ability and fundamental skills.

Curriculum guidelines emphasize learning through "acquisition, use, and exploration" to achieve "independent, interactive, and deep learning." This approach requires applying knowledge to discover and explore issues and create meaning. Project-based learning (PBL) is a practical way to deepen

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learning through knowledge application. Experiencing PBL before implementing it for students can enhance teachers' qualifications (Martinez, 2022). In Japan, PBL is being encouraged across all subjects, including English, to develop cognitive and noncognitive skills. However, many teachers lack the necessary knowledge and experience with PBL, leading to concerns about its implementation.

In English education in Japan, foreign language activities became mandatory in grades 3 and 4 (35 hours/year), and foreign languages became formal subjects in grades 5 and 6 (70 hours/year) starting in 2020. Junior high schools must now coordinate more closely with primary schools. The 2021 Courses of Study introduced major textbook changes, with greater focus on speaking, writing, and "independent, interactive, and deep learning." Challenges remain, such as developing audio-focused learning from primary schools into junior high curricula. While empirical research supports PBL in foreign language learning (Petersen & Nassaji, 2016; Stoller, 2006, 2012), there is a lack of studies on using PBL to develop in-service English teaching skills.

Thus, this study aims to conduct an exploratory investigation of how university undergraduate students in the English teacher training program respond to a PBL training. As these teacher-training students are not familiar with active-learning lessons, it is important that they experience PBL themselves to develop the ability to design lessons so that junior high school students learning English as a foreign language can benefit from independent, interactive, and deep learning. The research questions are as follows:

(1) Does the PBL module improve the ability of students in the English teacher training program to develop teaching materials and methods?

(2) Does the PBL module cultivate team work and collaboration abilities in students in the English teacher training program?

(3) What are the main challenges encountered by the students in the English teacher training program in the microteaching sessions?

2. Background

The course work used in this practical study is based on PBL, which is regarded as a near-future type of learning and is becoming a common practice in Europe and the USA. PBL refers to a series of learning activities aimed at setting objectives, planning and reflecting on the process in order to reach a goal (Bell, 2010; Donnelly & Fitzmaurice, 2005; Thomas, 2000). According to Thomas (2000), "PBL is a model that organizes learning around projects, and projects are complex tasks, based on challenging questions or problems, that involve students in design, problem-solving, decision making, or investigative activities; give students the opportunity to work relatively and autonomously over extended periods of time; and culminate in realistic products or presentations" (p. 1). Therefore, PBL is a pedagogical approach that engages students in complex problem-solving and decision-making tasks. It is characterized by students working autonomously on a project over an extended period, with the objective of producing a tangible outcome. PBL is often used in subjects where students are required to apply theoretical knowledge in a practical context.

Team activities are a standard component of PBL. Kim (2000) presented a core theory for organizational success which states that enhancing the quality of relationships is a crucial initial step in improving the quality of results. As the quality of relationships improves, there is a corresponding deepening of mutual understanding and respect. Through collective deliberation, the quality of thinking is enhanced, thereby facilitating instinctive action and, in turn, the quality of actions. Ultimately, this process culminates in the attainment of superior outcomes, the reinforcement of trust, and the improvement of relationships. Consequently, the pursuit of optimal results hinges on the cultivation of robust relationships within the team. It is also imperative to ascertain the group's objective.

Tuckman (1965) and Tuckman and Jensen (1977) propose the following five steps as team building (team evolution). It is important to be aware of where the group is currently at. **(1) Forming:** The team has recently been formed, and the members are not yet fully acquainted with one another. Consequently, the team is yet to establish its objectives. **(2) Storming:** There is a discrepancy in opinion regarding the team's purpose. Furthermore, there are differing opinions regarding human relationships, roles, and the responsibilities of each individual, leading to conflicts. **(3) Norming:** A

code of conduct is established, delineating the purpose and procedure of the team. Additionally, each member's role is defined, and the relationships within the team are stable. **(4) Performing:** A sense of cohesion and unity is established within the team, and through the collective power of the team the objective is attained.**(5) Adjourning:** Upon the fulfillment of the project's objectives, the mutual relationship between members (team relationship) reaches its conclusion.

In light of the aforementioned factors conducive to PBL, Ohba (2020) explored PBL's potential in fostering independent, autonomous, and cooperative learning among students enrolled in a teacher training program at the university level. The study focused on the course subject "Teaching English as a Foreign Language at Secondary School," which encompassed English teaching methodology. According to the overarching theme of "Developing materials that will stimulate interest among junior high school students and encourage them to engage with the English language," the participants were tasked with developing teaching materials and presenting and evaluating them using their own rubrics. The objective was to cultivate their qualifications and abilities as prospective educators. The participants investigated the subject of English education at the junior high school level and developed instructional materials that leveraged the full potential of information and communications technology (ICT). To assess the impact of this course on the participants' personal growth, their reflections, responses to a questionnaire, and learning motivation logs were carefully analyzed.

A considerable proportion of the participants lacked prior experience of learning through PBL, which initially presented a significant challenge. However, as evidenced by their learning log, there was a notable increase in motivation to learn, accompanied by a positive shift in attitude towards project involvement. This was characterized by proactive, autonomous, and cooperative engagement. In Ohba's (2020) study, the teaching materials were developed independently of the authorized textbooks used in junior high schools. In this study, however, participants will create teaching materials based on the authorized textbooks and conduct microteaching.

3. Method

3.1 Participants

The participants of this study were 30 third-year undergraduate students majoring in School Education at National University of Teacher Education in Japan. All the participants were pursuing a junior high school teaching certificate in English. They had acquired the fundamental principles of English language teaching and learning during their second year in the course "Fundamentals of Secondary English Language Methodology." They demonstrated a keen interest in and motivation for learning English and English education. I obtained the necessary permissions to use the participants' reflections, questionnaire responses, and classroom teaching materials in our presentations at academic conferences.

3.2 How the classes were taught

This study was conducted as part of the regular university course taught by the author once a week for a period of 15 weeks, with each session lasting for 90 minutes. The course subject was "Teaching English as a Foreign Language at Secondary School," which encompassed advanced English teaching methodology. In the initial session of this course, the participants were provided with guidance on the value instruction (explanation of the significance and intention of implementation) of the PBL-type class, the setting of tasks, and the evaluation method. They were also introduced to the structure and content of certified English textbooks for junior high schools, as well as the objectives and methodologies of teaching English at junior high schools, through lectures delivered by the author.

Subsequently, the participants were engaged in PBL; that is, they began conducting autonomous learning activities. This included identifying issues, setting goals, creating and adjusting learning plans, creating teaching materials, building consensus, presenting results (as microteaching), and self-evaluation. The participants were divided into teams of four or five to identify and discuss solutions to the challenges of teaching English to secondary school students. This was an active learning class,

in which the students were expected to engage in a mutual learning format with teamwork as the main component. They were then required to develop teaching materials and methods over the course of 10 classes. In classes 11 to 15, the participants presented their ideas for microteaching.

In preparation for the microteaching sessions, each team discussed how to organize and develop the microteaching content and which issues or problems may arise during the class. Teachers assumed the role of advisors, providing support to each team. Consequently, active participation in the class was essential. During the microteaching sessions (held during classes 11–15), all students assumed the role of a teacher, and the class was conducted in English (with a maximum duration of 25 minutes). To facilitate peer and self-assessment, students were provided with a rubric (Table 1) for use in the microteaching.

Table 1 - Rubric for use in the microteaching

Evaluation Points	Ideas	Connections	Extensions
Integrity	Design an actual junior high school English class and conduct microteaching that meets the minimum requirements.	Work in a group to design an actual junior high school English class and conduct microteaching based on original teaching materials.	Work in a group to design an actual junior high school English class, and conduct microteaching that can be used immediately in the classroom.
Attitude	All members participate actively in group activities.	All members actively participate in group activities.	All members actively participate in group activities and endeavor to create a good mock class.
Materials	Produce English teaching materials that align with the content of English textbooks for junior high school students.	Prepare English language teaching materials that align with the content of junior high school English textbooks, and that show ingenuity in many areas.	Create English language materials that align with the content of junior high school English textbooks and that excite and inspire junior high school students.
Micro-teaching	Microteaching is clearly explained.	Microteaching takes into account the needs of the audience.	Microteaching is developed in a creative way.

3.3 Data collection and analysis

A qualitative analysis was conducted on the data gathered from the reflections (written in Japanese) completed after each class and the open-ended questionnaire administered at the conclusion of the course.

4. Results and discussion

All teams produced materials of considerable interest and engagement, based on the content of the interactive lectures delivered at the beginning of the course. In presenting and discussing the results, I will focus only on the responses to the open-ended questionnaire administered at the end of the course.

Table 2 - Responses to the open-ended item "Please describe what you did, learned, understood, noticed, and felt during the team activities leading up to the creation of the teaching materials."

Participant	Participant's description (translated and underlined by the author)
A	In creating the teaching materials, the team was divided into two groups: one to create an introduction to the class and the other to create an oral introduction. The team then discussed and refined the finished product. What I learned from the team activities leading up to the creation of the teaching materials was that discussions among several people can generate a lot of ideas. I think I was able to broaden my perspective and deepen my thinking by hearing new opinions and ideas that would have been difficult for me to come up with on my own.
B	When thinking about the teaching materials, I found it difficult to connect the introduction to the "think" section. As I created the teaching materials, I learned that the introduction should not only attract the student's interest, but also connect to the next lesson. As I thought about it, I sometimes got a little

	off-track and lost track of what points to focus on, so I learned the importance of thinking about the details of the content after first considering what kind of figure to aim for and what the goal is. In addition, we were able to proceed while confirming how the textbooks should be handled in the process of creating teaching materials. By doing so, we were able to understand that it is useful to introduce the contents of the textbook and then deal with the contents of "think," as in this microteaching, so that students can acquire English that they can actually use in their daily lives, rather than just doing the textbook contents in the order in which they appear in the textbook.
C	In the team activities, we worked on the teaching plan and came up with ideas for the flow of the class. During the team activities, I realized that it is important for everyone to understand the overall flow of the class and to create the class together, rather than each person creating his/her own part. I also understood the importance of rehearsals. By rehearsing and going to class, I was able to conduct the class calmly and notice details such as time allocation, so I realized the importance of rehearsals once again.
D	As we worked together as a team, we came up with many ideas on how to use this teaching material, and I thought we were able to approach the class in a way that would allow students to participate using the whiteboard. In addition, while there were many opinions and ideas when considering the transition from the topic of the unit to the relevant page, I felt that it was difficult to unify the direction of the class because the opinions were not very cohesive. I thought it was difficult to proceed while fully incorporating the opinions of everyone in the team. However, by working as a team, we were able to discuss points that needed to be improved and points that could be done better, and we were able to look at the project from multiple perspectives.

Table 2 illustrates the responses to the open-ended item by participants who provided low (Participant A and Participant B) and high (Participant C and Participant D) self-evaluations of their microteaching as post-course reflections. The item was as follows: "Please describe what you did, learned, understood, noticed, and felt during the team activities leading up to the creation of the teaching materials."

In the process of creating the teaching materials, Participant A was dividing the work among the team members, and later discussing and compiling the materials as a whole. Although the team members shared many ideas while creating the teaching materials, it was difficult to make major changes to the materials once they had been created. Participant A felt that the overall quality of the teaching materials was not very high. In fact, self-evaluation of the teaching materials by Participant A was the lowest. As for Participant B, the team may not have been able to share a satisfactory level of understanding of the textbook and the goals of the class until the end. As a result, the team's attitude was good, but the final microteaching integrity was low.

What Participants C and D have in common is that, even when they encountered difficulties in creating the textbooks and microteaching content, they always shared their opinions and worked as a team to make improvements, which resulted in the creation of satisfactory and well-rounded teaching materials and microteaching. In addition, I believe the well-rehearsed preparation created a sense of team unity and helped them perform at a high level. It seems that the quality of relationships within the team is the key to successful outcomes (Kim, 2000). However, the process of improving the quality of relationships does not seem to take place immediately as described by Participant D (Tuckman, 1965; Tuckman & Jensen, 1977).

Table 3 - Responses to the open-ended item "Please describe in detail what you did (as a certain role), learned, understood, noticed, and felt during the presentation (microteaching)."

Participant	Participant's description (translated and underlined by the author)
A	In the microteaching, I was in charge of the oral introduction portion. The key point was how to convey the textbook content in an enjoyable and easy-to-understand manner. In creating the class, I found it difficult to explain new vocabulary and emphasize new expressions. I thought that by using PowerPoint and illustrations and making it as easy as possible for students to understand, they would be more actively engaged in the class. I also thought that reading out all the answers on the whiteboard was time-consuming and difficult at first, but by doing it in groups, the number of times the answers are read out could be reduced and, more importantly, students could have time to discuss with each other, which would be a good opportunity for communication and useful in any class. This is considered to be useful in any class. However, this time, since the class was created through group discussions, a lot of time was needed for refinement. When I actually stand in front of students and give a class, I don't think I will be able to spend as much time as I did this time, no matter how carefully I prepare for the class. I would like to keep an eye on what kind of things attract students in their daily lives and what kind of content they

	are interested in, and while doing research to create good classes, I would like to devise ways to shorten the time required for class preparation as much as possible.
B	I was in charge of the content of "think 1" part of the textbook in microteaching. Since several people were going to conduct the microteaching, I added a few things to the contents of the textbook and conducted a role-play. In the role play, I felt it was important to play the role of a character so that the students could easily understand what was being said, and to repeat the important parts so that the students would notice them. In addition, there were times when I could not remember English expressions at a moment's notice, so I felt that I need to be exposed to English on a daily basis. Moreover, when I actually become a teacher, it is possible that I will not have time to learn English to the extent as I did this time. I feel it will be necessary to think about the process of the class to continue learning, and to have the ability to move forward on the spot in class while looking at the slides.
C	In microteaching, I taught the introductory part as the main teacher. I was in charge of explaining about the world-famous Japanese manga, and I tried to make the class student-centered so that students could think well and present their ideas. I found that writing on the whiteboard rather than raising hands was a lower hurdle to speaking up, and students actively participated in class. In hindsight, I think we should have created more opportunities for students to speak English.
D	In the microteaching, each team member was in charge of a certain part of the class, such as enlivening the class, and I was in charge of summarizing the topic at the end of the class. I had a script for what to say in English beforehand, but I wish I had learned classroom English to see how the students reacted to what I said. If I was more proficient in classroom English, I would have been able to use it more during the group discussions. During group discussions and retellings, I wanted to react in English to what the students were saying, but I didn't know how to convey my reactions in a way that the students would understand, so I had to pause and use Japanese. Furthermore, when I was looking at other members who were teaching the same part of the textbook, I thought it would be better if I could not only read out from the whiteboard but also give reactions to the students' opinions. I don't think it is necessary to react every time the whiteboard is read out, but it would have been better to show reactions from time to time so that it would not become a task of just reading out loud. I felt this way especially since there were many occasions when the whiteboard was used. Furthermore, when conducting the retelling activity, I forgot to instruct the participants that they could just project the screen and refer to the projected slides. I thought it would have been better to give detailed instructions carefully. There were several other occasions when the whiteboard was read out loud, but I thought it would have been better to wait until the students were quiet before reading out loud because there was so much noise around the room that the teacher's voice seemed to be muffled by the students' voices. I thought that more thought should have been given to what kind of consideration would be necessary for each activity during the planning stage of the class. In this microteaching, there were many group activities. Therefore, I felt that I should have thought about the details of the lesson, imagining the considerations and learning styles before and after the group activities. I should have thought during the planning stage about how I would respond when something different from what I had envisioned or planned happened. Finally, I thought that this microteaching was something that could be done by one person. Because we were teaching as a team like the other teams, we should have included things that could not be done by one person alone.

Table 3 illustrates the responses to the open-ended item by students who provided low (Participant A and Participant B) and high (Participant C and Participant D) self-evaluations of their microteaching as post-course reflections. The item was as follows: "Please describe in detail what you did (as a certain role), learned, understood, noticed, and felt during the presentation (microteaching)."

With regard to microteaching, Participant A considered the activities to be beneficial; however, following the group preparation and subsequent mock teaching, they experienced a sense of unease about undertaking the task independently. Participant B recognized that microteaching with a team facilitated student learning by incorporating original components. However, they also acknowledged that their limited English proficiency had a detrimental impact on students' learning outcomes. This led them to recognize the importance of improving English speaking skills.

Participant C may have been deemed a particularly suitable candidate due to their evident confidence and satisfaction derived from assuming the role of primary instructor in microteaching. Participant D reflected on the experience, noting that she or he had not responded as satisfactorily to the English language and instructional methods as she or he would have liked. The microteaching exercise was evaluated as highly effective, however, the team's inability to optimize the potential of the group was identified as a concern.

5. Conclusion

The results of this study indicate that PBL engagement helped student teachers learn how to be proactive and motivated in engaging secondary school students in English learning. They gained ideas from cooperative learning through PBL and felt confident in their teaching skills. However, there are some differences and transformations in attitudes and learning among students.

The present study was only able to analyse a limited range of qualitative data. It was not feasible to examine intra-participant transformations and the variations among participants in their reflections following each class. A more comprehensive qualitative analysis of the data obtained in this study, incorporating the new data from the interview, will be required in future research.

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4 - Metacognitive Strategy Instruction for Listening Comprehension: A Quasi-experimental Study in Kampung Inggris Pare, Indonesia

Nur Rahma Yuli Rusmita
nur.rahma.yuli-2023@fib.unair.ac.id
Airlangga University, Indonesia

Abstract

This quasi-experimental study investigated the effects of metacognitive strategy instruction on listening comprehension skills of 60 EFL learners enrolled in a TOEFL preparation program. The participants at a language institution in Kampung Inggris Pare, Indonesia's largest English learning area offering an intensive English immersion-based approach, were divided into experimental and control groups. The participants in the experimental group received a ten-session intervention program based on the Metacognitive Pedagogical Cycle. In contrast, the control group received conventional listening instruction following the syllabus provided by the institution. The data were collected through a standardized listening comprehension test from the TOEFL ITP® (Test of English as a Foreign Language – Institutional Testing Program) in both groups before and after the intervention program. The statistical analysis of the test scores shows that the results did not reveal a significant difference between the listening scores from the pre-and post-tests of the experimental group. However, the experimental group's mean scores in listening outperformed the control group, demonstrating a significant improvement after the treatment. These findings suggest potential benefits of metacognitive strategy instruction, though further research with larger sample sizes and extended interventions is recommended.

Keywords: metacognition, metacognitive strategy instruction, listening strategies, TOEFL

1. Introduction

Kampung Inggris, or English Village, located in the Pare Subdistrict of Kediri Regency, East Java, is Indonesia's largest immersion-based English language learning center. Established in 1977 with a single course, *Kampung Inggris Pare* (KIP) had since expanded to encompass over a hundred English courses attracting students from across Indonesia (Mubarok et al., 2020). KIP was initiated by Kalend Osen, founder of the Basic English Course (BEC) and its success inspired the establishment of numerous courses in that area, originating from the graduates of the BEC program. Facilitated by English-speaking locals and students provides an ideal setting for learning and practicing English. This rapid growth of KIP reflects Indonesia's increasing demand for English proficiency, driven by English's vital role in global communications and academic advancement. Many students attend KIP not only to enhance their English skills but also to prepare for proficiency tests such as the Test of English as a Foreign Language (TOEFL) widely recognized as a benchmark for academic and professional qualification in Indonesia.

TOEFL preparation courses at KIP are a commonly selected option for students intending to prepare for tests such as graduation requirements, scholarship applications, job interviews, or other institution-specific assessments. In addition to its relatively low cost, the availability of official testing facilities is also widespread throughout the country. However, of the three skills taught—listening, structure, and reading—listening skills receive less attention. Several English courses, such as the Mahesa Institute, offer programs that focus more on grammar or structure. As an authorized test center for TOEFL ITP at KIP, this institute offers 150-minute structure sessions, while the other sections receive only 90 minutes each (*Mahesa Institute*, 2023). As a result, students receive

insufficient listening practice, leaving them disadvantaged in this crucial skill area. Since early 2024, average TOEFL ITP® listening scores from the Mahesa Institute have remained among the lowest, with CEFR (Common European Framework of Reference for Languages) ratings indicating a B1 level in listening, whereas some students attained B2 levels in other sections.

The listening section is often neglected in language practice and syllabi over extended periods (Field, 2008; Goh & Vandergrift, 2021; Luo & Gao, 2012). However, listening comprehension is widely regarded as a complex process, relying on both linguistic competencies—such as phonetics, syntax, semantics, pragmatics, and discourse analysis—and strategic or non-linguistic knowledge, including world knowledge (Buck, 2001; Vandergrift & Baker, 2015). To address these challenges, some students adopt self-regulated learning strategies, with one promising approach being metacognitive strategy instruction (MSI). MSI empowers learners to control their learning process, foster self-regulation, and improve listening comprehension (Kobayashi, 2018). Research has shown that MSI activates learners' thinking and enhances performance, particularly among those who struggle with listening (Anderson, 2022).

Prior studies have highlighted the benefits of MSI for less-skilled listeners (Bozorgian, 2012; Vandergrift & Tafaghodtari, 2010), emphasizing its potential to enhance listening comprehension across proficiency levels. Additionally, MSI encourages teachers to reconsider their listening instruction methods and helps learners address the complexities of listening, improving both their performance and understanding (Goh, 2008; Vandergrift, 2004).

While numerous studies support the efficacy of MSI (Bozorgian, 2012, 2014; Maftoon & Fakhri Alamdari, 2020; Becker, 2020; Pei & Suwanthep, 2021; Robillos & Bustos, 2022; Singh et al., 2022), others have reported no statistically significant improvements (Liu, 2020; Rahimi & Maral, 2013). Despite this, these studies still noted higher mean scores post-intervention, suggesting potential benefits of MSI. Variability in results may be influenced by factors such as the duration of the intervention and the types of listening tasks used (Bozorgian, 2014; Liu, 2020; Robillos & Bustos, 2022).

This study distinguishes itself from previous research in several key ways. First, it focuses on intermediate English as a Foreign Language (EFL) learners who are native Indonesian speakers, unlike studies targeting learners of Chinese (Liu, 2020), French (Becker, 2020), Persian (Bozorgian, 2012; Maftoon & Fakhri Alamdari, 2020), or Thai (Robillos & Bustos, 2022). Second, it employs the TOEFL ITP® listening test for assessment, providing findings directly applicable to students preparing for this widely recognized standardized exam. This contrasts with earlier studies that used alternative materials such as IELTS listening tests (Bozorgian, 2012), video-based tests (Robillos & Bustos, 2022), or proprietary assessment packages (Maftoon & Fakhri Alamdari, 2020).

Additionally, this study's intervention spans 10 sessions, longer than the 4- or 8-session durations reported in some previous studies (Robillos & Bustos, 2022; Bozorgian, 2012). These unique features aim to provide deeper insights into MSI's effectiveness, particularly in the context of TOEFL preparation for Indonesian EFL learners.

Study Design and Objectives

To achieve more consistent and reliable findings and address gaps in the existing literature on MSI efficacy, this study investigates the effectiveness of metacognitive strategies in enhancing listening comprehension skills. A quasi-experimental design will be employed, with participants assigned to either an experimental group receiving MSI-integrated instruction or a control group following traditional listening instruction. Data will be collected through pre- and post-test listening comprehension assessments from a quantitative perspective.

The findings are expected to contribute to a better understanding of MSI's impact on TOEFL listening preparation and offer valuable insights for English language instructors, particularly in intensive learning environments such as KIP. Additionally, the study may guide the development of effective TOEFL preparation strategies that incorporate MSI to improve students' listening skills and exam performance.

To address the objectives of this study, the following research questions will be explored: (RQ1) Is there any significant difference in listening comprehension scores between EFL learners in a control group and those receiving metacognitive strategy instruction (MSI) in the experimental group?

(RQ2) Does metacognitive strategy instruction (MSI) help EFL learners improve listening comprehension? Concerning the first research question, the following hypotheses were formed:

H_0: There will be no significant difference in listening comprehension scores between EFL learners in a control group and those receiving metacognitive strategy instruction (MSI) in the experimental group.

H_1: There will be no significant difference in listening comprehension scores between EFL learners in a control group and those receiving metacognitive strategy instruction (MSI in the experimental group.

2. Literature Review

2.1 Metacognition

Introduced by (Flavell, 1976), metacognition involves the conscious utilization of cognitive strategies to achieve learning objectives by encompassing three key stages: activating a person's knowledge of cognitive processes related to the learning task, monitoring, and regulating these processes. In other words, metacognition involves conscious utilization of the metacognitive ability to select, plan, evaluate, and revise cognitive aims, strategies, and goals. According to Flavell (1979), by giving systematic instruction to learners, metacognitive strategy is beneficial in increasing metacognitive knowledge and metacognitive skills. Furthermore, Wenden (1987) implemented the concept of metacognition for the first time in second-language learning and teaching, introducing the taxonomy of metacognitive language and skills which significantly influenced the research on second-language learning. Goh & Vandergrift (2021) defined metacognition as an ability to reflect and assess one's cognitive processes, encompassing the way information is processed and managed for different purposes. Building upon Flavell's (1979) conceptualization of metacognition, they further developed a metacognitive framework for second language learners, emphasizing three fundamental components: *metacognitive experience*, *metacognitive knowledge*, and *metacognitive strategies*, which also represent the essential elements of metacognitive awareness.

Metacognitive experience refers to the self-reflective thoughts and emotions an individual experiences as they engage in and perform a primary task and includes an awareness of one's cognitive processes. For example, in the context of listening, metacognitive experience may occur when a learner is aware of their inability to identify a particular word but can draw on a previous experience in which they overcame a similar difficulty (Goh & Vandergrift, 2021). *Metacognitive knowledge* is comprised of three key components: The first is person knowledge, which involves self-awareness of one's learning characteristics, strengths, and beliefs regarding what leads to success or challenges. The second is task knowledge, which is an understanding of the goals, structures, and requirements of specific tasks. These tasks can include discourse, grammatical features, and phonological aspects of connected speech. The third is strategy knowledge, which refers to learners' understanding of which strategies can effectively address the learning objectives. This enables learners to select and adapt the most appropriate methods for achieving their goals. The third component of metacognition is strategy use, or *metacognitive strategies*, which refers to individuals' ability to apply specific, effective strategies to enhance learning efficiency, enjoyment, self-regulation, and adaptability based on strategic knowledge and awareness of when and how to apply particular strategies. Among these, metacognitive experience is an automatic reaction, whereas metacognitive knowledge and strategy use can be taught and developed.

2.2 Metacognitive Strategy Instruction (MSI) in Listening

Goh & Vandergrift (2021) defined metacognitive strategy instruction as pedagogical procedures designed to enhance learners' awareness of their listening processes. This is achieved by expanding learners' metacognitive knowledge about their listening capabilities, the intrinsic characteristics and challenges of listening tasks, and various strategies to improve listening. Moreover, learners become more proficient in utilizing the following processes as a result of metacognitive instruction: planning

for the activity, monitoring comprehension, solving comprehension problems, and evaluating the approach and outcomes (see **Table 1**).

Table 1 - L2 Listening Instruction through metacognitive processes (Goh & Vandergrift, 2021)

Metacognitive strategy	Instruction (for learners)
1). Planning for the activity	● Activate prior knowledge related to the topic and any cultural insights that might support understanding
	● Examine the text genre and remember possible structures or organization of information
	● Predict specific vocabulary or ideas that are likely to appear in the listening material
	● Anticipate the listening input based on the existing knowledge and relevant contextual information
	● Prepare optimal listening circumstances by focusing attention and minimizing distraction
2). Monitoring comprehension	● Continuously evaluate understanding
	● Compare understanding with real-world knowledge and verify coherence within the internal consistency
	● Confirm predictions and acknowledge that it is unnecessary to comprehend each word
	● Evaluate the learners' level of understanding
	● Monitor learners' progress in understanding targeted information and important details
	● Determine the effectiveness of the approach to text comprehension
3). Solving comprehension problems	● Adjust the strategies by implementing more suitable strategies as needed
	● Making inferences by deducing the meaning of unclear parts by using context from understood sections
	● Ask questions or seek additional context if the situation allows
4). Evaluating the approach and outcomes	● Reflect on challenges by identifying difficulties encountered during listening and analyze the reasons for these difficulties to improve future listening strategies
	● Verify understanding with transcripts to confirm accuracy
	● Evaluate the effectiveness of inferences and other strategies used.

Goh & Vandergrift (2021) suggest that individuals employ different methods of listening comprehension, which are influenced by factors such as information gathering and preparedness. Metacognitive knowledge about second language (L2) listening and prior knowledge also play a role. Listeners may revise their plans and utilize problem-solving strategies to overcome difficulties and monitor comprehension when they realize their predictions are incorrect. As the difficulty increases, they may revert to their original plan. The extent to which this process occurs automatically or with conscious control depends on the listener's proficiency level. Proficient listeners navigate this process naturally, while those with lower proficiency levels need to apply more focus and awareness.

The metacognitive pedagogical sequence, developed by (Vandergrift, 2004, 2007) and further refined by (Vandergrift & Goh, 2012) is aimed at helping learners become self-regulating listeners by increasing their awareness of the listening process. The approach focuses on providing learners with knowledge about themselves as listeners, the complexities of L2 listening related to task demands, and effective listening strategies. The goal is to improve listening comprehension and promote success in L2 listening. The Metacognitive process in active listening and comprehension is structured towards stages. First, planning or predictions involves learners predicting content based on contextual clues, and setting expectations for focused listening. Second, in the verification and first-planning stage, learners listen and evaluate initial predictions, collaborating with peers to refine their approach. The third stage, the second verification and comprehension activity, has learners compare predictions with the second listening engaging in activity slide text and construction or deeper understanding. In final verification, learners listen again, sometimes with a transcript, to confirm understanding focusing on monitoring and problem-solving. Finally, reflection and goal setting involve evaluating comprehension and setting future goals, fostering continuous improvement in listening skills.

2.3 Previous Research on Metacognitive Instruction

Research on MSI for listening comprehension has predominantly been in higher educational settings. The duration of the interventions ranged from 15 to 50 hours or longer, spanning from one week to 10 weeks, and varied across several instructional approaches. The studies conducted by Milliner & Dimoski (2021) implemented a combination of bottom-up and top-down strategies for Japanese university EFL learners, using textbooks and diaries over 50 instructional hours. Zeng & Goh (2018) focused on college students in China, introducing a self-regulated learning portfolio (SRLP) that involved listening to journals and monitoring forms. Liu (2020) employed a metacognitive learning cycle for students of an intensive language program in the United States, using training modules for 6 weeks. In a task-sequence or metacognitive process-based approach, Rezai et al. (2023) conducted metacognitive instruction in Iran through 16 one-hour sessions twice weekly, though specific material was not disclosed. Madarbakus-Ring (2024) introduced TED Talk-based listening lessons and journal assessment sessions in New Zealand, focusing on journal assignments and paper-based lessons over five 75-minute sessions. Other interventions included metacognitive strategy training in Oman, Vellanki et al. (2022), which used coursebooks and online platforms such as *Moodle* and *Book-widgets*. Similarly, Singh et al. (2022) conducted a 4-week training program for secondary students in Malaysia, with instruction on metacognitive, lesson plans, and listening modules. (Becker, 2020) employed an assessment checklist to guide metacognitive strategy. Pei & Suwanthep (2021) utilizing listening websites, online listening practice, and task resources for 39 low-proficiency Chinese university EFL students.

Various tools to evaluate listening comprehension after metacognitive strategy intervention were utilized in various research. Language proficiency test was the evaluation tool utilized by mostly quantitative studies with interventions or experimental designs. The most frequently administered test was the International English Language Testing Service (IELTS) (Madarbakus-Ring, 2024; Mary et al., 2021; Vellanki et al., 2022), the Test of English for International Communication (TOEIC®) (Milliner & Dimoski, 2021), Oxford Quick Placement Test (OQPT) (Wang & Treffers-daller, 2017; Pešić, 2022), and self-developed listening test (Becker, 2020; Chon & Shin, 2019; Singh et al., 2022). Notably, some self-developed listening tests were utilized by institutions such as universities in a specific country such as the Malaysian University English Test (MUET) Listening test and L2 listening proficiency test developed by Seoul-Dongbu District Office of Education. The test was mostly employed before and after the intervention program or added in the middle of the intervention.

The implementation of MSI for listening comprehension in EFL learners has sparked mixed reactions, with both advocates and critics. Research reveals several benefits of implementing metacognitive strategy instruction (MSI) for listening comprehension in EFL learners, significantly enhancing their performance and self-regulatory abilities. Through structured strategies such as planning, predicting monitoring, and evaluating, MSI encourages learners to actively manage their listening processes, supporting personalized learning needs, and self-awareness in listening skills (Bozorgian et al., 2022; Wang & Treffers-daller, 2017). MSI also encourages learners to engage more deeply with listening tasks by exploring individualized approaches, which can reduce anxiety and increase confidence (Bozorgian et al., 2022; Liu, 2020). Additionally, MSI has shown the instructional potential to develop automaticity in the L2 listening process, as seen with L2 of French learners (Becker, 2020), and provides specific advantages for lower proficiency EFL learners, enhancing their listening comprehension and fostering confidence and control for doing listening tasks (Milliner & Dimoski, 2021). In addition to benefiting learners, MSI is crucial in scaffolding listening instruction and effectively addressing teaching challenges, especially in remote learning contexts (Vellanki et al., 2022). However, some learners perceive MSI as excessively time-consuming especially if their focus is narrowly on intensive listening for exams (Zeng & Goh, 2018). This perception is often based on the structure and reflective of activities involved in MSI which may not align well with learners who prioritize immediate results over skilled development. Additionally, MSI may not be universally effective across all foreign language classrooms as its benefits depend on individual differences, including learning styles age, and proficiency levels (Cross, 2011)

3. Methodology

The researcher employs a quantitative approach because it is well-suited for conducting research that aims to utilize data into numbers, figures, and graphs and process it using statistical procedures to establish the difference or relationship between variables (Rasinger, 2013). Furthermore, the quantitative study enables researchers to reach beyond basic hypothesis testing, precise measurement and analysis of data, and gain a deeper understanding between variables (Plonsky, 2015). Given that this paper tests the significant effect of metacognitive strategy instruction on the TOEFL listening performance between two groups, a quasi-experimental research design is appropriate for this study. Quasi-experimental research design aims to determine if changes in one variable directly cause changes in another (Rogers & Révész, 2019). In this case, research was conducted in two different classes; the control group class and the experimental group or group with intervention. The key difference between these groups was found in the variable being manipulated; explicit metacognitive strategy instruction.

3.1 Participants of the Study

Sixty participants, aged 18-24, were recruited from the TOEFL preparation classes conducted from March to April 2024 in one of the English courses in *Kampung Inggris Pare* (KIP). The selected course is Mahesa Institute Pare, the authorized test center for TOEFL ITP appointed by the Indonesian International Education Foundation (IIEF, 2024). The participants were all native Indonesian speakers, and primarily consisted of university students. The students were selected from the same language institute to ensure homogeneity within the sample. The participants were randomly divided into 2 groups, the first group is the experimental group (*N=30*), and the other group is the control group (*N=30*). The limited number of samples was chosen due to some considerations. Firstly, the research had a limited time, approximately 6 months, making conducting longitudinal interventions impractical. Secondly, the regulations of the selected institutions allowed small-scale classes with at least 5 students and not more than 20 students in each class. Additionally, this small-scale study aimed to maintain that each participant in the experimental class received sufficient treatment. Furthermore, this study might also serve as a pilot study, providing initial research findings and developing the methodology for application in future studies on a larger scale.

Importantly, both groups were taught by the same instructor who held a bachelor's degree in English education, had over 5 years of teaching experience, and demonstrated a high level of English proficiency, with the ITP TOEFL exceeding 600. The instructor received specific training on metacognitive instruction to be employed in the experimental group.

3.2 Instruments

The present study used the TOEFL ITP practice test, a standardized listening test published by ETS (Educational Testing Service), to measure listening performance. Two tests employed for pre-test and post-test were designed to be equaled in terms of difficulty and each consisted of 50 points divided into 30 short dialogues and the rest 20 questions for longer conversations and long talks. The participants indicated their comprehension by answering multiple-choice questions with four answer options. The items examined the ability to identify the main ideas and details of academic and non-academic texts, make inferences based on speaker intonation, comprehend idiomatic language, and understand the discourse functions of a text (Educational Testing Service, 2023). Correct items were totaled to represent listening performance and one point was assigned for each correctly answered item.

3.3 Procedure

The researcher invited an English language institute, along with the learners, to participate in this study. Following institutional regulations and participants' consent, the potential teacher was contacted first and asked for collaboration in giving explicit material on metacognitive strategies to

the experimental class. The same instructor taught the experimental and control groups to maintain consistency. After reaching the same perceptions about these strategies, agreements were made regarding the application of the strategies and when the best time to deliver them to students. To avoid bias, the researcher was not involved in the class activities.

Both the experimental and control groups adopted the regular course program, following the course syllabus prepared by the institutions. The syllabus of the institutions was designed for 20 meetings, mainly focused on practices and discussions. The teacher presented the materials for a couple of minutes, continued the sessions with listening activities, and ended the sessions with corrections and discussions. The first five meetings focused on listening to Part A (listening for short dialogue), followed by Part B (extended conversations), and Part C (talks) in the next five meetings.

Following the stages of pedagogical cycles suggested by (Goh & Vandergrift, 2021), the experimental group underwent an intervention program consisting of 10 sessions. The explicit instructions were delivered after the formal class for 30-45 minutes per session. The pedagogical cycle utilized in this study incorporated five different stages, each emphasizing metacognitive intervention and engaging learners in applying metacognitive strategies actively. The cycle consisted of: 1) planning/predicting, 2) first verification, 3) second verification, 4) final verification, and 5) reflection (see **Table 2**). These stages represented sub-strategies of three main strategies; planning, monitoring, and evaluation (Goh & Vandergrift, 2021). Learners initially practiced applying all five stages in the first week with guidance from the instructor. By week two, they began independently applying the stages outside the class and participated in daily self-monitoring under the instructor's supervision. The plans for the metacognitive strategy intervention program are presented in **Appendix 1.**

Table 2 - Stages in Listening Instruction through metacognitive processes (Vandergrift & Goh, 2012)

Pedagogical Stages	Metacognitive Processes
Pre-listening: Planning/predicting stage	
1. After learners have been informed of the topic and text type, they anticipate the kinds of information and possible words they may hear.	1. Planning and directed attention
First listen: First verification stage	
2. Learners verify their initial hypotheses, adjust them as required, and note any new information understood.	2. Selective attention, monitoring, and evaluation
3. Learners compare their understanding and notes with peers, modify as required, establish what still needs resolution, and decide on the important details that still require special attention.	3. Monitoring, evaluation, planning, and selective attention
Second listen: Second verification stage	
4. Learners verify points of earlier disagreement, correct errors, and note additional details they understand.	4. Selective attention, monitoring, evaluation, and problem solving
5. Class discussion in which all members contribute to reconstructing the main points and crucial details of the text, interspersed with reflections on how learners arrived at the meaning of certain words.	5. Monitoring, evaluation, and problem solving
Third listen: Final verification stage	
6. Learners listen specifically for the information revealed in the class discussion that they were previously unable to understand.	6. Selective attention, monitoring, and problem solving
Reflection stage	
7. Based on the earlier discussion of strategies used to compensate for what was not understood, learners set goals for the next listening activity.	7. Evaluation and planning

3.4 Data analysis

The data analysis was conducted using Statistical Packages for the Social Sciences (SPSS) version 22.0. Descriptive statistics were first employed to summarize the pre-test and post-test scores of both the control and the experimental groups, presenting a general overview of the listening comprehension results. To ensure the appropriateness of parametric tests, the normality of the data was assessed using both the Kolmogorov-Smirnov test and Shapiro-Wilk tests, confirming that the data distribution fulfilled the necessary assumptions. Levene's test was then performed to verify the homogeneity of variances between the groups. An independent samples t-test was conducted to compare the post-test scores of the control and experimental groups, examining the effect of

metacognitive strategy instruction (MSI). To further evaluate the improvement of listening comprehension within the experimental group, a paired sample t-test was conducted to determine whether there was a significant improvement in listening comprehension after the intervention. Effect sizes, calculated using Cohen's *d*, provided additional insight into the practical significance of the findings, emphasizing the overall impact of MSI on listening comprehension.

3.5   Results

Before answering the first research question of whether metacognitive strategy instruction significantly affects the learners' listening comprehension score, this study covers the descriptive statistics and conducts normality tests as the initial steps. The results of the normality test will determine whether parametric or non-parametric tests are more appropriate for further analysis. **Table 3** reveals that on the pre-test, the control group had an observed mean score of *M* = 432.67 (*SD* = 44.716), while the experimental group, which received MSI, had a slightly higher mean score of *M* = 458.00 (*SD* = 53.330). on the post-test, the control group's mean score increased to *M* = 469.00 (*SD* = 44.361) while the experimental group's mean score improved further to *M* = 487.00 (*SD* = 53.637). The experimental group demonstrated a higher mean score on post-test scores after the intervention compared to the control group. The results highlight the potential positive effect of MSI, though further inferential analysis is needed to determine the significant statistical difference.

Table 4 presents the results of the normality tests for both the control and experimental groups through the Kolmogorov-Smirnov and Shapiro-Wilk tests. For the control group, the Kolmogorov-Smirnov test results are as follows; the pre-test statistics (*S* = .139, *p* = .141) and post-test statistics (*S* = .134, *p* = .177). Both *p*-values are greater than 0.05 (*p<0.05*), indicating that the data distribution from the control group is normal. Similarly, for the experimental group, the Kolmogorov-Smirnov test delivers the pre-test statistics test (*S* = .141, *p* = .133) and post-test statistics (*S* = .155, *p* = .200). Yet once more, the *p*-values surpass the significance level of 0.05, suggesting that the distribution of scores for both tests is normal. In addition, the results of the Shapiro-Wilk test also show that both the experimental and control groups distribute a normal distribution of data. The experimental pre-test (*S* = .961, *p* = .323), and experimental post-test (*S* = .970, *p* = .536) demonstrate *p*-values greater than 0.05. Moreover, the control group reveals pre-test (*S* = .943, *p* = .106) and post-test (*S* = .957, *p* = .261) which also confirm the normality of the data. Therefore, this satisfies the requirement for doing further parametric analyses.

Table 5 presents Levene's test results, which specifically examine the assumption of equal variances between the control and experimental groups. The results (*p> 0.05*) indicate that the variances between these two groups are homogenous.

Table 6 presents the results of the independent sample test conducted to verify that the pre-test scores between the control and the experimental groups were equivalent before the intervention. The test results show that Sig. (2-tailed) = 0.051, which is slightly greater than the significance level of 0.05. This indicates that there was no statistically significant difference between the pre-test scores of the control and the experimental group. Therefore, it can be concluded that both groups had statistically similar levels of listening comprehension before the intervention began.

Table 7 presents the results of an independent samples t-test conducted to compare the post-test scores between the control and experimental groups. The significance value (Sig. 2-tailed = 0.162) is greater than the conventional alpha level of 0.05, indicating that the difference between the post-test scores of the control group and the experimental group is not statistically significant. The results answer the first research question that the learners who received MSI did not show a significantly higher improvement in listening comprehension compared to those in the control group.

To assess the impact of the intervention within the experimental group, a paired samples t-test was conducted to compare pre-test and post-test scores. Results (Sig. 2-tailed value = 0.001), presented in **Table 8**, revealed that the control group exhibited a statistically significant difference between their pre-test and post-test scores (*p* < .05). While the intervention did not show a significant difference in score changes between the experimental and control groups, the participants in the experimental group demonstrated a significant improvement in their listening scores from pre-test to post-test.

Table 3 - Descriptive statistics: Analysis of pre-test and post-test

	N	Mean	Std. Deviation
Pre-test (Control group)	30	432.67	44.716
Post-test (Control group)	30	469.00	44.361
Pre-test (Experimental group)	30	458.00	53.330
Post-test (Experimental group)	30	487.00	53.637
Valid N (listwise)	30		

Table 4 - Test of normality for listening comprehension test

Group	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pre-test (Control group)	.139	30	.141	.943	30	.106
Post-test (Control group)	.134	30	.177	.957	30	.261
Pre-test (Experimental group)	.141	30	.133	.961	30	.323
Post-test (Experimental group)	.115	30	.200[*]	.970	30	.536

Table 5 - Test of Homogeneity of variances between control and experimental groups

	Sign.
Pre-Test (Control group)	0.454
Pre-Test (Experimental group)	0.510

Table 6 - Equality of variance of pre-test scores between the control and the experimental groups

Levene's Test for Equality of Variances		t-test for Equality of Means						
F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
.570	.454	-1.994	58	.051	-25.333	12.707	-50.768	.102
		-1.994	56.289	.051	-25.333	12.707	-50.785	.118

Table 7 - Difference between post-test scores of the control and experimental groups

Levene's Test for Equality of Variances		t-test for Equality of Means						
F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
.440	.510	-1.416	58	.162	-18.000	12.708	-43.438	7.438
		-1.416	56.028	.162	-18.000	12.708	-43.457	7.457

Table 8 - Difference between pre-test and post-test scores after the intervention.

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Control group (pre- and post-test)	-29.000	41.219	7.525	-44.391	-13.609	-3.854	29	.001

4. Conclusions

The present study was conducted to investigate the potential of metacognitive strategy instruction (MSI) to enhance listening performance among ESL learners in *Kampung Inggris Pare* (KIP)

by comparing the performance of a control group and an experimental group. The initial results of the pre-test show that the groups statistically demonstrated a similar level of listening comprehension before the intervention. The equivalence was confirmed by the independent t-test value (p = 0.051) which is greater than 0.05. Focusing on the first research question as to whether metacognitive strategy instruction through a structured pedagogical cycle (Goh & Vandergrift, 2021) consists of planning, verification, and reflection demonstrated a greater mean score in the experimental group compared to the post-test score in the control group. However, the independent t-test indicated that the difference in post-test scores was not statistically significant (p = 0.162). Therefore, the intervention of MSI did not result in a significantly greater improvement in listening comprehension for the experimental group compared to the control group.

A paired sample t-test conducted to assess the effect of the intervention within the experimental group showed that metacognitive strategy instruction (MSI) can help EFL learners improve listening comprehension (Sig. 2-tailed value = 0.001). These findings were in line with the previous studies (Liu, 2020; Rahimi & Maral, 2013). These studies also did not show any significant improvement after participating in MSI, but the higher mean scores observed in the experimental groups indicate a potential positive change that should be explored further. Furthermore, the effectiveness of metacognitive strategy instruction relied on several key factors, including active instructor involvement throughout the intervention and sufficient time given in the intervention program (Bozorgian, Fallahpour, et al., 2022; Liu, 2020).

The limitations of the study were the small number of participants as well as the limited time given in the intervention sessions. Since the research study is being conducted at a language institution, it was quite challenging to find a large group of EFL students with diverse levels of English proficiency to participate in this study on metacognitive strategy instruction in listening. Additionally, the researcher was unable to extend the duration of the intervention program due to the institution's regulations. As a result, future research directions are required to include larger samples, learners with varied proficiency levels, and multiple educational settings.

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Appendix: Metacognitive intervention in the experimental class

Meetings	Regular classroom's course	Course of Metacognitive Instruction
1	Listen to confusing sounds	There was no direct metacognitive instruction given at this meeting, but the instructor introduced the concept of metacognition in a video downloaded from the YouTube channel*. After watching the video, question and answer sessions were opened. Then, the students were given a task to think about their self-learning on listening they might have done before. *https://www.youtube.com/watch?v=elZFL4FLVLE
2	Idiomatic expressions	The students were guided to do metacognitive exercises following the pedagogical cycle. The instructor encouraged setting a plan for self-learning based on what students had proposed. At this stage, the instructors gave a series of Listening for short conversations audio with transcripts to do outside the class and it will be evaluated every meeting.
3	Functional expressions ([Dis]agreement, Suggestion, invitation, assumption)	Focused on monitoring, evaluation, and problem-solving of metacognitive processes. Guided students to predict vocabulary and topics before listening. Facilitated class discussion to share strategies and findings. Suggested additional listening practice at home with a focus on understanding conversations and situations.
4	Inference	Students evaluated their performance and strategies after completing the exercises. This reflective practice led them to propose a unique learning strategy; instead of immediately finding the right answer to the multiple-choice questions, they only focused on understanding the context of the conversations and repeatedly played the audio when they did not get the conversation topic. They all agreed to explore this strategy more.
5	Special verbs (causative verbs and 'used to')	The instructor asked the students to write down the problems they got when applying this kind of strategy. Some of the students claimed that this strategy could make their understanding better and some still had problems understanding the conversations and needed to replay the audio more than twice. Some students also gave up after replaying more than three times and finally decided to see the audio transcription. At this stage, the instructor asked them to write down the unfamiliar vocabularies or vocabularies that were hard to listen.
6	Extended conversations: 'Cross country skiing' and 'spelunking'	The instructor introduced a new topic following the formal classroom setting syllabus which already reached listening Part B or extended conversation. The topic given was about 'Thanksgiving Day'. Before playing the audio of a longer conversation sample to the students, they were asked to brainstorm and predict what they would listen to. After the first listening, the instructor asked them to check the information they had predicted and add any new information they knew.
7	Extended conversations: 'Swallow bird' and 'campus self-tour'	The instructor brought up a new topic that was introduced as 'kayaking'. When the instructor asked the students to predict what they would listen to, most of the students were unfamiliar with this topic. After the first listening, students were encouraged to activate their prior knowledge by thinking about the new words and making some guesses based on context. After the second listening, they shared their understanding with their peers, allowing the instructor to monitor progress and provide support.
8	Talk: 'New use of bacteria' and 'Dormitory cafeteria'	Presenting a new topic of listening to a long talk, the instructor employed the same steps; asked the students to make predictions and after the first listening, they had to think over the new words they had listened to, made some guesses, and used all the hints to understand the meaning of the concept in the context given. The topic given in this meeting was 'orbital debris'
9	Talk: 'Nocturnal animal' and 'The ecology of coral reefs'	Examining the concept of monitoring, the students listened to the topic of 'aircraft'. The instructor asked the students to make predictions, and after the first listening, they had to think over the new words they had listened to, make some guesses, and use all the hints to understand the meaning of the concept in the context given. After the second listening, the students were asked to write down the unfamiliar/new words they had just learned.
10	Weekly test	The instructor explained three sub-categories: performance evaluation, strategy evaluation, and problem identification. After doing listening tasks for 8 meetings, students had to concentrate on the last stage of the pedagogical cycle, namely the reflection stage. The instructor emphasized what the students had achieved this far and how this evaluation practice could enhance their listening skills by highlighting and solving their problems.

5 - A Three-Year Comparative Study on Anxiety Related to Teaching English Among Pre-Service Elementary School Teachers in Japan

Masatoshi Watanabe
masatosi@juen.ac.jp
Joetsu University of Education, Japan

Hiromasa Ohba
hohba@juen.ac.jp
Joetsu University of Education, Japan

Abstract

This three-year study investigated whether anxiety associated with teaching English is a phenomenon unique to Japanese university students enrolled in training programs for elementary education. Watanabe and Ohba (2022) found that Japanese university students enrolled in an elementary teacher training program experienced significant anxiety regarding the use of English in classrooms, autonomous teaching, and assessment. To determine if these findings were unique to the students included in the study, a survey was conducted with students taking the same course over the next two years. In 2023, student concerns included their "own English proficiency," "teaching methods using information and communication technology (ICT) equipment." In 2024, student concerns included the design and implementation of classes that encourage elementary students to use English in class activities; the implementation of activities that highlight differences in English pronunciation. The results were analyzed and compared with the concerns of in-service teachers. The study revealed that pre-class anxiety among students related to teaching English in elementary schools significantly declined from 2021 to 2024, but the post-class anxiety remained largely unchanged. This finding aligns with the idea that students now have greater access to information regarding teacher education in Japan and may be less anxious about their chosen career path. The study also revealed similar trends in instructors' English proficiency and their concerns about teaching English classes and instruction. Many teachers in Japan report a lack of time for focusing on their English instruction, which suggests that instructors should focus on improving students' English instruction while they are in college.

Keywords: anxiety, English language teaching, teacher training, elementary education, self-evaluation

1.   Introduction

In Japan, English courses for elementary school students were fully implemented in 2020. Foreign language activities begin in grades 3–4 and foreign language becomes a separate subject in grades 5-6. Grades 3–4 focus on the three areas of "listening," "speaking [exchange]," and "speaking [presentation]," and the two areas of "reading" and "writing" are added in the senior high school grades. The new curriculum requires teachers to have greater skill in both the English language and teaching, as well as greater skill for teaching English at the elementary level. Therefore, students who aspire to become elementary school teachers must steadily acquire skills not only in the basic English language but also in teaching, as well as the ability to conduct language-focused activities. Therefore, it is essential for future curriculum reviews to examine how student anxiety about teaching English in elementary school is impacted by taking university teacher training courses.

The purpose of this study was to clarify how anxiety about acquiring the knowledge and skills to teach English changed over three years (2021, 2023, and 2024) among students in a training course for elementary teachers. Participants in the course were third-year university students in the required

training course, "Methods of Teaching English at Elementary School," which utilized unique content and methods of instruction. The following two research questions were posed:

(1) Over a three-year period, is there a significant change in the anxiety among university students related to the knowledge and skills necessary for teaching English in elementary schools?

(2) Are there differences between the concerns of university students learning teaching methods for English instruction in elementary schools and those of pre-service teachers?

2.   Overview of Previous Studies

Two previous studies used the Japanese Portfolio for Student Teachers of Languages (J-POSTL) Elementary to measure students' growth after taking a class on elementary school teaching methods. The J-POSTL (JACET SIG on English Language Education, 2021) Elementary is a tool for self-evaluation that allows pre-service elementary school students receiving training in elementary school teaching methods to reflect on their English-language competencies and teaching abilities. In the first study, Kashimoto (2019) examined 94 self-evaluation statements within seven areas (educational environment, teaching methods, sources of teaching materials, lesson planning, lesson practice, independent learning, and evaluation) of the J-POSTL Elementary. Participants were 14 second-year university students majoring in English education who were taking the course entitled "Research on Elementary School English Teaching." The class content was "Let's Try!" and "We Can!" songs, chants, picture books, and related material, as well as research on teaching materials; background knowledge for developing teaching materials; and teaching practice in mock classes. The mean scores for many survey items increased from the beginning to the end of the class, suggesting that students' self-assessment of their teaching ability had increased.

In the second study, Yoneda (2021) used the J-POSTL Elementary to evaluate the growth experienced by 12 students enrolled in a teaching course for 1.5 years. The 150 most frequently occurring words and co-occurrence network indicated that students' reflections focused on teaching practices. In addition, the use of portfolios was positively related to growth. Similarly, students' knowledge of teaching skills and instructional methods increased based on in-class discussions, and they gained awareness of the importance of educational practice and learning support for improving their teaching skills.

Shirado (2021) provided 15 lessons from "Elementary English Language Teaching Methods" to 140 second-year students and investigated their self-evaluation of knowledge, skills, and English operational ability. Positive evaluations were responses of "able" or "somewhat able." The item with the lowest mean self-evaluation at the beginning of the class was "I can prepare lesson plans" (M=1.31), to which 0% of the students responded affirmatively. The item with the next lowest mean was "I understand the main ideas, structure, and characteristics of the main teaching materials" (M=1.52), to which 3.6% of the students responded affirmatively. Regarding English skills, self-evaluations of listening and reading skills were high, whereas self-evaluations of speaking skills were low. In particular, the percentage of reading skill evaluations that were positive was greater than 50% at the CEFR B1 level. In contrast, 16.7% of the students gave a positive self-evaluation of their speaking ability at the CEFR B1 level.

In summary, this overview of previous research suggests that students were anxious about their English-speaking ability and lesson planning before taking classes on methods for teaching English in elementary school such as "Methods of Teaching English at Elementary Schools." However, the students realized after the class that their knowledge of teaching methods had expanded. Specifically, students had increased their knowledge of teaching techniques and lesson design for English instruction in elementary schools from in-class discussions. They had also learned that mock-class experience and teaching practice are important for their own development as teachers.

Pre-service teachers also demonstrated concerns about teaching English in elementary schools. The following studies included descriptions of specialized teachers; however, we omit them in this paper and refer only to descriptions of homeroom teachers and others. Oikawa (2017) investigated the relationship between teachers' background factors and their level of anxiety about teaching English using a questionnaire administered to 45 elementary school teachers. The results indicated that elementary teachers had the highest levels of anxiety regarding English proficiency. However,

the level of anxiety decreased with years of teaching experience for both English activities and English class preparation and implementation. Furthermore, the level of anxiety was highest for teachers with fewer years of English teaching experience and those who had not obtained a junior high school teacher's license in a foreign language.

Tateno and Ohba (2022) interviewed five elementary school teachers to examine their levels of anxiety related to foreign languages. Classroom teachers were most anxious about how to deal with children who needed special support. Furthermore, they mentioned that they had little time to spend on English classes or evaluations. Ohba (2022) conducted a survey on the attitudes of foreign language teachers toward foreign language instruction in elementary school using the J-POSTL questionnaire and freewriting. The items were scored on a 5-point scale. In the quantitative survey, the two items with the lowest average scores were "Child Autonomy" (M=2.87) and "Grammar" (M=2.90)). The next lowest scores were for "Language in the Classroom" (M=3.06), "Writing Activities" (M=3.10) and "Assessment" (M=3.13). From the qualitative survey, the categories identified were "Instructor's English Proficiency," "Classroom," "Instructional Methods," "Listening and Speaking," "Assessment," and "Japanese Translation."

3. Method

3.1 Survey Participants

The survey participants were third-year students (80 students in 2021, 36 students in 2023, and 137 students in 2024) who took the course "Teaching English in Elementary School" taught by the authors at University A. None of the students had previously received any specialized instruction for teaching English in elementary schools. The participants had one week of observed practice providing elementary education during the seventh week of the 15-week course, and a three-week elementary teaching practicum after the course. Overall, the students had a relatively high level of awareness about the teaching methods of each subject. In addition, students gave their consent for participation in this study after being informed that the data from this survey would be presented in aggregate without individual names at academic conferences or in articles.

3.2 Lesson Content

Table 1 shows the topics for sessions 1–11 and the mock classes for sessions 12–15, which were nearly identical all three years. The first 11 sessions focus on basic knowledge for teaching English in elementary schools using materials prepared by the authors and others. The contents focused on the following aspects of elementary school foreign language activities and courses: (1) their current status, (2) the university's course of study, (3) classroom design, (4) their assessment, (5) information and communication technology (ICT), (6) cooperative learning, (7) facilitation, and (8) classroom practice in grades 3 through 6.

3.3 Survey Items

A total of 63 items within 24 categories, including those related to the teaching of the four skills, were selected from the "Portfolio of Elementary School English Teachers" (JACET SIG on English Language Education, 2021) as survey items for the self-evaluation questionnaire (see Appendix).

3.4 Data Collection and Analytic Methods

Questionnaires for self-assessment were administered in the first class in early April 2021, 2023, and 2024 and in the last class in late July 2021, 2023, and 2024. The respondents were asked to answer each item using a 5-point scale from "yes" to "no." The response time was approximately 10 minutes. For each category, we calculated the mean value at the beginning and end of the class. A t-test was used to analyze the differences in the pre- and post-class means for all categories.

4.   Results and Discussion

Table 2 shows the confidence levels of the surveyed students within the 24 categories of elementary English language instruction at the beginning and end of 2021, 2023, and 2024. The pre- and post-class results were compared by category and year using a t-test for the means. A significant increase was found in all categories at the p < .01 level.

In 2021, all category means were less than 2.40, with a grand mean of 2.00 at the beginning of the class. A total of 13 categories had mean values below 2.00, indicating that survey participants were particularly anxious about these categories. However, the mean value for all categories rose to 3.87 by the end of the class, suggesting that students' confidence levels significantly improved.

In 2023, all category means were less than 2.99, with a grand mean of 2.50 at the beginning of the class. A total of 12 categories had mean values below 2.50, indicating similar initial anxiety levels among survey respondents. By the end of the class, the mean value for all categories had increased to 4.17, reflecting enhanced confidence throughout the course.

In 2024, all category means were less than 3.34, with a grand mean of 2.96 at the beginning of the class. A total of 15 categories had mean values below 3.00, suggesting notable anxiety levels at the outset. By the end of the class, the mean values for all categories had increased to 3.75 or higher. These results show that confidence levels rose consistently across all categories during the course.

The grand mean for the categories at the beginning of the class increased across the three years, from 2.00 in 2021 to 2.96 in 2024, an improvement of approximately 1.00. In contrast, the post-class grand means increased only slightly, from 3.87 in 2021 to 4.03 in 2024. This finding highlights the significance of the changes in pre-class mean values. When foreign language activities and foreign language as a subject were first introduced in elementary schools in 2021, students had limited access to relevant information. This lack of clarity contributed to their initial anxiety about teaching programs in Japan. Four years later, students had ready access to information on elementary school English language instruction via the Internet, which likely explains the nearly 1-point improvement in the pre-class grand means.

Next, an analysis was conducted to identify the categories associated with the course content, as described in Table 1, and the growth in these categories from pre- to post-class. Items with only one component question—"1 Curriculum," "7 Listening Activities," "9 Grammar," "17 Content," "18 Interaction with Children," "21 Children's Autonomy," "23 International Understanding (Culture)," and "24 Analysis of Error Responses"—were excluded from this analysis. The following four categories may have been influenced by the small talk conducted as a group activity at the beginning of each class: "3 Role of the Language Teacher," "4 Talking Activity [Exchange]," "5 Talking Activity [Presentation]," and "20 Language in the Classroom."

For Categories 3, 4, and 5, the average growth rates for 2021, 2023, and 2024 were 1.81, 1.50, and 1.07, respectively, which were slightly lower than or equal to the overall average growth rates across all 24 categories of 1.87, 1.67, and 1.07, respectively. From the instructor's perspective, small talk activities likely raised students' awareness and facilitated reflection and feedback by encouraging them to think of "questions" related to classroom interactions.

The category "20 Language in the Classroom" consisted of three questions: Q56 "Can teach English subject matter and methods of learning in English using visual clues, gestures, demonstrations, etc.," Q57 "Can develop lessons using English, but can effectively use Japanese when necessary," and Q58 "Can design class activities so that students will want to use English." The average growth rates for this category in 2021, 2023, and 2024 were 2.00, 1.80, and 1.17, respectively, which are higher than the overall average growth rates of 1.87, 1.67, and 1.07, respectively. These items likely reflect the development of English language skills through the small talk conducted in class.

Table 1 - Contents of the "Teaching English in Elementary School" course for sessions 1 to 15

Sessions 1 to 11	Content	Faculty Engagement	Student Activities
Before Class	Preliminary Preparations	Distribute the materials to the students via Google Classroom. Ask students to think of a "question."	Students will read the material and think of a "question" that will be discussed among students.
During Class	Goal Setting	Hand out the reflection sheet and instruct the students to set the goals of the class.	Students set their own achievement goals for the class and complete the reflection sheet.
	Small Talk	Give instructions for paired small talk. Present the topic of the talk.	In pairs, participants have a conversation about the theme presented: (1) 2-minute talk in Japanese, (2) 2-minute talk in English on the same topic in a different pair.
	Explanation	Provide brief explanations of the study contents.	Students listen to the explanations and check that they understand their meaning.
	Discussion	In four-person groups, the instructors directed a discussion on the content of the study based on the "question." Desk-to-desk guidance was provided and questions from students were addressed.	Based on each student's "question," students deepen their thinking by exchanging opinions with each other.
	Reflection	The instructors ask each participant to fill in his/her own reflection sheet, comparing it with the goals described on the reflection sheet.	Students write down what they noticed, felt, learned, etc., through the discussions on the reflection sheet.

Table 2 - Pre- and post-class changes in the self-assessment of 24 categories from the "Portfolio of Elementary School English Teachers" (JACET Kyoiku Mondai Kenkyukai, 2021) in 2021, 2023 and 2024.

Category	2021 Pre	2021 Post	2021 Growth	2023 Pre	2023 Post	2023 Growth	2024 Pre	2024 Post	2024 Growth
1. Educational Goals	2.25	4.04	**1.79**	2.94	4.50	**1.54**	3.26	4.23	**0.97**
2. Goals and Needs	2.29	4.04	**1.79**	2.99	4.38	**1.38**	3.34	4.28	**0.94**
3. Role of the Language Teacher	2.32	4.15	**1.82**	2.99	4.37	**1.38**	3.19	4.27	**1.08**
4. Speaking Activities (Interaction)	2.30	4.03	**1.73**	2.75	4.32	**1.57**	3.13	4.22	**1.09**
5. Speaking (Presentation)	2.07	3.94	**1.87**	2.53	4.08	**1.55**	2.99	4.04	**1.05**
6. Writing	1.98	3.75	**1.77**	2.29	3.93	**1.64**	2.74	3.89	**1.15**
7. Listening Activities	1.99	3.63	**1.64**	2.28	3.95	**1.67**	2.73	3.84	**1.11**
8. Reading Activities	2.01	3.65	**1.64**	2.53	3.86	**1.33**	2.95	3.84	**0.89**
9. Grammar	1.79	3.55	**1.76**	2.22	3.98	**1.76**	2.70	3.82	**1.12**
10. Vocabulary	1.99	3.85	**1.86**	2.32	4.28	**1.96**	2.78	4.02	**1.24**
11. Culture	2.08	3.79	**1.71**	2.54	4.31	**1.76**	3.16	4.03	**0.87**
12. Teaching Resources	1.91	3.87	**1.96**	2.21	4.00	**1.79**	2.71	3.94	**1.23**
13. Setting Classroom Objectives	1.90	3.94	**2.04**	2.44	4.16	**1.72**	2.95	4.06	**1.11**
14. Content	2.14	4.00	**1.86**	2.67	4.40	**1.73**	3.16	4.15	**0.99**
15. Lesson Development	2.10	4.13	**2.03**	2.69	4.39	**1.70**	3.18	4.21	**1.03**

Students were instructed to read the self-made materials distributed to them via Google Classroom and to think of "questions." This instruction highlights six categories: "12 Teaching Materials," "13 Setting Class Objectives," "14 Class Content," "15 Class Development," "16 Using Class Proposals," and "19 Class Management." For these six categories, we believe that students were able to enhance their knowledge and skills and deepen their thinking by reading materials before class, generating questions, providing explanations in class, and discussing them with classmates. The mean growth rates for 2021, 2023, and 2024 were 1.97, 1.69, and 1.08, respectively, which were slightly higher than the overall mean growth rates of 1.87, 1.67, and 1.07, respectively.

As previously discussed, Oikawa (2017) reported that the level of anxiety for elementary school teachers was highest with respect to English proficiency. Similarly, the results of Ohba's (2022) survey using the J-POSTL showed that "language in the classroom" (M=3.06) was the third most significant concern. From the qualitative survey, "instructors' English proficiency," "classes," and "teaching methods" were extracted as the top categories. Together with the results from the current study, these findings suggest that even after becoming in-service teachers, the English proficiency of elementary school teachers and teaching matters remain top concerns among elementary teachers.

Despite their concern regarding English language proficiency, many elementary school teachers lack the time to spend on improving their English teaching. Tateno and Ohba (2022) found that classroom teachers were concerned about dealing with children with special needs; consequently, they had little time to spend on English teaching and evaluation. As noted by Oikawa (2017), although the level of anxiety about English activities and the level of anxiety related to English class preparation and implementation may decrease with years of teaching experience, the level of anxiety was higher for teachers with fewer years of English teaching experience and those had not obtained a junior high school teaching certificate for a foreign language. The results of the Aeon (2019) survey indicate that once they become in-service teachers, teachers lack sufficient time for self-study to improve their English skills: 89% of respondents reported having less than one hour per day, and even per week, 43% reported having 1-3 hours per week, while 14% reported having 4 hours or more per week. These findings highlight the busyness of Japan's educational system and the difficulty of continuing training after entering the teaching profession. If this is the case, it is necessary to improve English language and teaching skills while teachers are in college.

5. Conclusion

Regarding research question (1), the results of the three-year comparison showed that the average growth in four categories—"3 Role of the language teacher," "4 Speaking activity [exchange]," "5 Speaking activity [presentation]," and "20 Language in the classroom" —may have been affected by the small talk activity conducted at the beginning of each class as a group activity. This conclusion was based on the greater than average growth reported in all four categories for the students taking the elementary English teaching method course. Students were also instructed to read the self-made materials distributed to them via Google Classroom and to think of "questions" for the class; therefore, the average growth rate in 6 categories—"12 Teaching materials," "13 Setting class objectives," "14 Class content," "15 Class development," "16 Use of lesson plans," and "19 Class management" —was slightly higher than the overall average growth rate in each of the three years.

Regarding research question (2), whether there are distinctive differences between the concerns of university students and in-service teachers, it was found that there are similar trends in instructors' English proficiency and their concerns about teaching English classes and instruction. Once a teacher enters the field of education, there is insufficient time for self-improvement. Therefore, it is necessary for students to improve their English language and teaching skills in the required course "Teaching English in Elementary Schools" during their school years. Based on the current results, future improvements are warranted in class content.

Finally, the limitations of this paper are presented. Although the paper was able to quantitatively show university students' anxiety about teaching elementary school English, it was not able to look at it qualitatively. Future research should investigate this issue qualitatively and compare it to the concerns held by in-service teachers.

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Appendix

Material: Questionnaires on teaching English in elementary schools (Excerpts from "Portfolio of Elementary School English Teachers (J-POSTL Elementary)")

1 Curriculum	Q1. Understand the contents described in the Courses of Study.
2. Goals and Needs	Q2. Consider children's motivations for learning English.
	Q3. Can consider the intellectual interests of the child.
	Q4. Understand the significance of learning English.
	Q5. Can consider achievement goals based on learning guidelines and children's needs.
3. Role of the Language Teacher	Q6. The plan-do-check-reflect procedure allows me to recognize issues related to the students and the class.
	Q7. Can critically assess my teaching based on student feedback and learning outcomes, and change it to fit the situation.
	Q8. Can accept feedback from peers and class observers and reflect it in his/her teaching.
	Q9. Can gather information related to teaching and learning.
	Q10. Am able to observe colleagues' classes and provide constructive feedback on points for improvement.
4. Speaking Activities/Interaction	Q11. Can create a cooperative atmosphere and set up specific language use situations in order to actively involve children in speaking activities.
	Q12. Can set up activities to exchange greetings with acquaintances and new acquaintances, to give directions and requests to others, and to accept or refuse them.
	Q13. Can set up activities to develop the ability to communicate their feelings and opinions about familiar and simple matters related to daily life.
	Q14. Can create activities to develop the ability to answer questions about themselves and to ask about others in short exchanges.
	Q15. Can set up activities to develop the ability to communicate with others through effective use of non-verbal communication such as facial expressions, gestures, and gestures.
	Q16. Can set up activities to develop the ability to confirm what the other person says and to listen back to what the other person says.
5. Speaking Activities/Presentations	Q17. Can set up activities to develop the ability to organize what they want to tell listeners about their likes/dislikes, hobbies, strengths, etc., and then introduce them using basic words, phrases, and expressions.
	Q18. Can set up activities to develop the ability to talk about things around them and their daily lives using basic words and expressions.
	Q19. Can create activities to develop the ability to use basic words and expressions to talk about their own feelings and thoughts about their community, school life, friends and acquaintances, etc.
	Q20. Can set up a variety of activities to make students aware of differences in intensity, rhythm, intonation, etc.
6. Writing Activities	Q21. Can set up a variety of activities to motivate students to transcribe and write letters, words, phrases, and expressions.
	Q22. Can provide a variety of activities to encourage students to transcribe and write familiar English words and phrases.
7. Listening Activities	Q23. Before children listen to English, I can teach them to use their experience and relevant knowledge of the topic of the material to predict the content.
8. Reading Activities	Q24. In reading picture books and other reading activities (activities accompanied by audio and using English picture books), can set up activities that will interest children in the content and characters.
	Q25. Can set up activities to develop the ability to identify letters of the alphabet and pronounce their readings appropriately.

9. Grammar	Q26. Can recognize that grammar supports communication, and I am able to present situations in which grammar is used and relate them to language activities to make children aware of them.
10. Vocabulary	Q27. Can set up language activities that enable the use of familiar vocabulary in context.
	Q28. Can give examples of vocabulary to enable children to express themselves appropriately.
11. Culture	Q29. Create activities that stimulate interest in their own culture and other cultures through the study of English.
	Q30. Can set up activities that encourage and deepen children's cultural awareness.
12. Teaching Materials	Q31. Can select materials appropriate for children's age, interests, and English ability.
	Q32. Can select appropriate expressions and language activities from textbooks and other materials appropriate to the student's English ability.
	Q33. Can select materials from non-textbook sources (picture books, encyclopedias, illustrated books, works of literature, newspapers, websites, etc.) that meet the needs of the students.
	Q34. Can design appropriate teaching materials and activities for individual students.
	Q35. Can devise appropriate ICT materials and activities for children.
13. Setting of Class Objectives	Q36. Can set learning objectives in line with the contents of the Courses of Study, taking into consideration children's needs, interests, and concerns.
	Q37. Can set learning objectives for each unit and class in line with the annual teaching plan.
	Q38. Can set goals to motivate students
	Q39. Can devise objectives that enable students to reflect on their own learning.
14. Class Content	Q40. Can set up activities that motivate pupils and arouse their interest and curiosity.
	Q41. Can set up activities that make use of pupils' knowledge they have learned so far.
	Q42. Can reflect pupils' reactions and opinions in class.
15. Class Development	Q43. Can select a classroom format (simultaneous, individual, pair, group) and design a class in accordance with learning objectives.
	Q44. Can plan activities that encourage pupils to interact with each other.
	Q45. Can plan activities that encourage pupils to give presentations.
	Q46. Can design lessons that take into consideration the situations, methods, and timing of English use.
16. Use of Lesson Plans	Q47. Can start a lesson in a way that captures the pupils' interest and attention.
	Q48. Can flexibly adjust the form of learning according to the situation, such as individual, pair, group, and whole class activities.
	Q49. Can conduct lessons flexibly based on lesson plans, and to respond to pupils' interests as the lesson progresses.
	Q50: Can allocate appropriate time and types of class activities, taking into consideration the pupils' ability to concentrate.
17. Contents	Q51. Can relate the content of the lesson to the experiences, knowledge, familiar events, culture, etc. that the pupils have.
18. Interaction with Pupils	Q52. Can support the child-centered activities and interactions among pupils.
19. Class Management	Q53. Can devise forms of activities such as individual study, pair activities, group activities, whole class, etc.
	Q54. Can prepare flashcards, charts, pictures, etc., and to use audiovisual aids.
	Q55. Can make effective use of educational equipment such as ICT.
20. Language in the Classroom	Q56. Can teach content and methods of learning English subject matter in English using visual clues, gestures, demonstrations, etc.
	Q57. Can effectively use Japanese when necessary, while using English in the classroom.
	Q58. Can design and teach in a way that encourages pupils to use English in class activities.
21. Autonomy of Pupils	Q59. Can set up a variety of activities that help the pupils to reflect on their own knowledge and abilities.
22. Assessment	Q60. Can devise in-class activities that allow for observation and assessment of children's participation and activities in class.
	Q61. Can assess grades in a reliable and transparent manner.
23. International Understanding (Culture)	Q62. Can assess the child's motivation, interest, and attitude regarding different cultures
24. Error Analysis	Q63. Can analyze the pupil's errors and provide appropriate feedback.

6 - Enhancing Extensive Reading in Beginner-level Indonesian Classes: Strategies, Challenges and Motivation

Sri Budi Lestari
tari0828@apu.ac.jp
Ritsumeikan Asia Pacific University, Japan

Abstract
This study explores the integration of extensive reading (ER) into beginner-level foreign language classes, focusing on Indonesian learners at Ritsumeikan Asia Pacific University (APU), Japan. Positive student feedback and achievement of learning targets demonstrate the feasibility of using children's books and other resources to address the shortage of graded materials for Indonesian learners. Findings suggest that ER enhances engagement, supports vocabulary acquisition, and fosters autonomous learning. This report offers a framework for implementing ER in similar contexts, particularly for languages with limited learning materials.

Keywords: Indonesian as a foreign language, beginner-level language learning, picture books, student feedback, extensive Reading,

1. Introduction

Extensive Reading (ER) is a widely recognized approach in language education, valued for providing meaningful input, fostering vocabulary acquisition, and supporting reading fluency and autonomous learning. While its application is well-established in English language teaching, its use in teaching Indonesian as a Foreign Language (BIPA) remains limited, especially for beginner learners facing a shortage of graded materials.

This paper addresses this gap by exploring strategies for implementing ER in beginner-level BIPA classes, identifying challenges, and offering actionable recommendations for educators. It examines how ER can enhance learner motivation, vocabulary acquisition, and autonomous learning. The structure includes a literature review on ER and its relevance for beginners, a methodology section outlining ER implementation, analysis of student feedback, and practical recommendations for BIPA programs.

1.1 About Extensive Reading (ER)

Extensive Reading (ER) emphasizes meaning-focused input, identified as one of the "four strands" critical for a well-balanced language course (Nation & Waring, 2020). By encouraging learners to read widely at their own pace, ER fosters natural language acquisition, fluency, and engagement. It also addresses a common imbalance in language programs, where learners often focus heavily on output-based activities while lacking sufficient opportunities for meaningful input (Renandya, 2013).

According to Day and Bamford (1998), an effective ER program should adhere to ten key principles, which are designed to ensure learners engage with reading materials that are enjoyable, accessible, and conducive to language acquisition.
1. Materials should be easy to read.
2. A wide variety of topics should be available.
3. Learners should have the freedom to choose what they read.
4. Reading as much as possible should be encouraged.

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5. The focus should be on enjoyment, information, and general understanding.
6. Reading should be its own reward.
7. The goal is to promote fast and fluent reading.
8. Individual and silent reading should be supported.
9. Teachers should provide guidance throughout the process.
10. Teachers should also serve as role models to inspire students.

These principles, as outlined by Day and Bamford, emphasize the importance of creating a learner-centred and enjoyable reading environment, which supports both linguistic and motivational development.

1.2   The Implementation of ER in Indonesian as foreign language class

Despite a growing interest in Extensive Reading (ER), as seen in its widespread adoption in English language teaching and increasing attention among educators of other Asian languages such as Japanese and Chinese, there is a scarcity of reports on its implementation in Indonesian as a Foreign Language classes. This study seeks to address this gap by exploring how ER can be incorporated into BIPA (Bahasa Indonesia untuk Penutur Asing) programs, particularly at the beginner level, and by drawing insights from relevant studies discussed in Section 2. The following research questions serve as a guide to this study:

1. How can ER be effectively integrated into beginner-level Indonesian language classes?
2. What challenges arise in implementing ER for beginner learners of Indonesian?
3. What are the benefits of ER for beginner learners, particularly in terms of vocabulary acquisition, motivation, and autonomous learning?

By bridging the gap in research on ER in BIPA programs, this study aims to provide practical strategies and insights for enhancing the teaching of Indonesian as a foreign language. It highlights the potential of ER to support meaningful input, improve learner motivation, and encourage autonomous learning, while addressing the specific needs and challenges faced by beginner-level students.

2.   Literature review

Extensive Reading (ER) has gained recognition as an effective approach in foreign language education, promoting learner engagement, vocabulary acquisition, and comprehension skills. Despite its widespread application in major languages, the implementation of ER in less commonly taught languages, such as Indonesian, remains underexplored. This section reviews existing literature on ER, focusing on its application in Asian language contexts and specifically in BIPA (Bahasa Indonesia untuk Penutur Asing) programs. Subsection 2.1 examines ER implementation in other Asian languages, while subsection 2.2 addresses studies related to ER in Indonesian language teaching.

2.1   Reports of ER in Asian languages

Hitosugi and Day (2004) is one of the key studies demonstrating how ER can be incorporated into beginner-level foreign language courses, particularly for less commonly taught languages such as Asian languages. At the time, there was a scarcity of language learner literature for students learning Japanese as a foreign language. To address this, Hitosugi and Day utilized 266 children's books written for native Japanese speakers. These books were categorized into six levels of difficulty based on criteria such as the kanji characters used, the presence of furigana (pronunciation glosses), sentence length, and the amount of visual aids provided.

2.2 Study on ER in BIPA class

Isnaini et al. (2021) explored ER in the context of a BIPA class, highlighting the need for interculturally based materials and presenting a model text used in an Indonesian language institute. While the report offers recommendations and examples of learning models, including extensive reading, it does not detail the implementation or outcomes of an ER program.

At Ritsumeikan Asia Pacific University (APU), Japan, the author of the current study implemented ER in BIPA classes with detailed methodologies. Lestari (2024) describes the integration of ER through in-class and outside-class activities, structured around key principles such as reading easy materials, avoiding dictionaries, and fostering autonomous learning. The activities utilized a mix of online platforms like "Room to Read" and "Let's Read," printed children's books, and storybooks developed specifically for BIPA students. Challenges, such as mismatches in difficulty levels and the scarcity of Indonesian Graded Readers, were addressed by carefully curating materials and adjusting activities to learners' proficiency levels. Additionally, the study highlights the importance of meaningful input and student engagement through activities like book talks, read-aloud sessions, and guided reading records. Feedback from students demonstrated positive outcomes, including increased vocabulary acquisition, improved comprehension, and heightened motivation. Lestari (*op. cit.*) emphasized the urgent need to develop culturally relevant graded readers to better support language acquisition and provides a framework for effectively implementing ER in BIPA programs.

3. Aims of this study

Indonesian, or Bahasa Indonesia, holds minor status in Japan and is primarily taught at the beginner level. This study aims to address the unique challenges faced by beginner learners, who often rely heavily on textbooks that may not expose them to vocabulary commonly used in real-life situations. By integrating Extensive Reading (ER) into beginner-level Indonesian language classes, the study seeks to provide learners with authentic input to enhance their motivation and foster autonomous learning.

Given the lack of graded reading materials designed specifically for second-language learners of Indonesian, this study utilizes children's books written for native speakers as a key resource. Through its findings, the study aims to offer insights into the development and use of resources for implementing ER in BIPA classes, explore strategies for providing students with access to ER, such as through curated catalogues, present formats for recording learners' reading progress, and analyse feedback on the effectiveness of ER activities for students with limited language proficiency.

4. Implementation method

4.1 Overview of The BIPA class in this study

The ER program or activity was conducted in Malay/Indonesian classes in Ritsumeikan Asia Pacific University (APU), Japan. This course basically only teaches Indonesian but the differences and similarities between Indonesian and Malay are also given in the class as general information. Below are the list of classes and how each level correlates to BIPA level's standard.

Table 1 - Malay/Indonesian Classes in APU

Class Name	Credit	CFER or BIPA Target
Malay/Indonesian I	4	A1 (BIPA 1)
Malay/Indonesian II	4	A2 (BIPA 2-3)
Malay/Indonesian III	4	A2 - B1 (BIPA 3-4)
Malay/Indonesian IV	2	B1 (BIPA 4-5)

Note. These are classes based on 2017 curricula. From 2023 curricula, Malay Indonesian III is divided into 2 credit classes (Malay/Indonesian III A and Malay/Indonesian III B), and Malay Indonesian IV is changed to Global Language Learning Malay/Indonesian.

4.2   Preparations

4.2.1   Collecting the books resources

Since Indonesian Graded Readers are not available, the author uses children's books. These books are written for native Indonesian speakers. Although they are created with age levels for children in mind (Levelled Readers), because the target audience is native speakers, the texts are essentially not simplified or controlled. However, children's books are also recommended and even considered to play an important role for languages that still lack Graded Readers. (Nation & Waring, 2020, p. 33; Day, R. & Bamford, 1998, p. 98).

Below are some lists of books that are used in ER activity in APU. The books that can be read online (Table 3) are those accessible through the Room to Read and Let's Read websites. These two sites have been discussed in Lestari (2024) in terms of book levels, themes, genres, and so on. The majority of printed books are books published by Litara Foundation, a partner organization of Room to Read and Let's Read as well, working to provide free books for children.

Table 2 - Printed Books list used in ER program/activity in APU

Category	Number of Titles
Bianglala Anak Nusantara Series Books (Litara Foundation)	33
Litara Foundation Big Book Series (Inovasi untuk Anak Sekolah)	17
Animal Series (Seri Hewan dan Makanannya, ect)	11
Fabel Nusantara Series	5
Translation of Children Book from other's languages	11
Graded Readers created at APU	8
Others	42
Total	94

Printed books on Table 2 include books of author's own collection and the rest are books bought by budgets from university or internal grant aid. The list of the titles from Graded Readers created in APU is shown in Lestari (2023, p. 44).

Table 3 - Online Materials used in ER program/activity in APU

Sources	Number of Titles
Room to Read (A1 level)	24
Room to Read (A2 level)	86
Let's Read (Level 0)	5
Let's Read (Level 1)	55
Let's Read (Level 2)	202

The author only recommends students to read books on those sites up to level 2 (A2). The reason is that level 3 and above use vocabulary that is beyond the scope of classroom content, and the length of text per page is generally long. Even for A1 and A2 leveled books, caution is needed when selecting and recommending them to students. For this reason, the author lists books that are considered easy and includes them in a list (Lestari, 2024, p. 102-103).

Books on Let's Read tend to have lengthy texts and challenging vocabulary. The advantage of Let's Read is that almost all of its books can be downloaded for academic purposes or to promote literacy among younger generations. The author examines vocabulary, grammar structures, and expressions in the texts and selects several books suitable for learners at APU, both at beginner levels (levels 1 and 2) and intermediate levels (levels 3 and 4). A total of 19 books were selected (Level 0: 5 books, Level 1: 7 books, Level 2: 6 books, and Level 3: 1 book). The list of books, along with the PDF texts downloaded from Let's Read, is stored in Google Drive and the link is shared with students during the ER activity.

4.2.2 Making catalogues

In this session, three book catalogues created by the author will be presented. These catalogues are still in the draft stage or are ideas for the future

First, with the help of a research assistant, the author created data on all books (except books created in APU) in Table 2, which includes book titles, subject categories, number of sentences per page, and number of words per page for all books. A summary of this data is a catalogue listing book titles, with each book having data on its total pages, total words, and total sentences. This detailed book catalogue with word counts and difficulty levels is distributed to students in the ER Spring 2024 class.

Second, unlike the catalogue above, the author also created a reading list using a template from the online learning tool Padlet. This reading list provides online reading materials from Room to Read, Let's Read and APU books. The books are categorized by level, according to the estimated skill level of the students at APU. The advantage of Padlet is that we can easily add links and basic information is displayed; for some resources, the book cover is also displayed. This Padlet catalogue will continue to be updated. The Padlet link is shown below.

https://padlet.com/sribudilestari/book-list-for-indonesian-beginner-level-apu-afgrdc8mzuz944b0
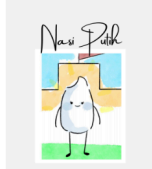
Figure 1 – Screenshot of the reading list categorised by proficiency levels and created using Padlet
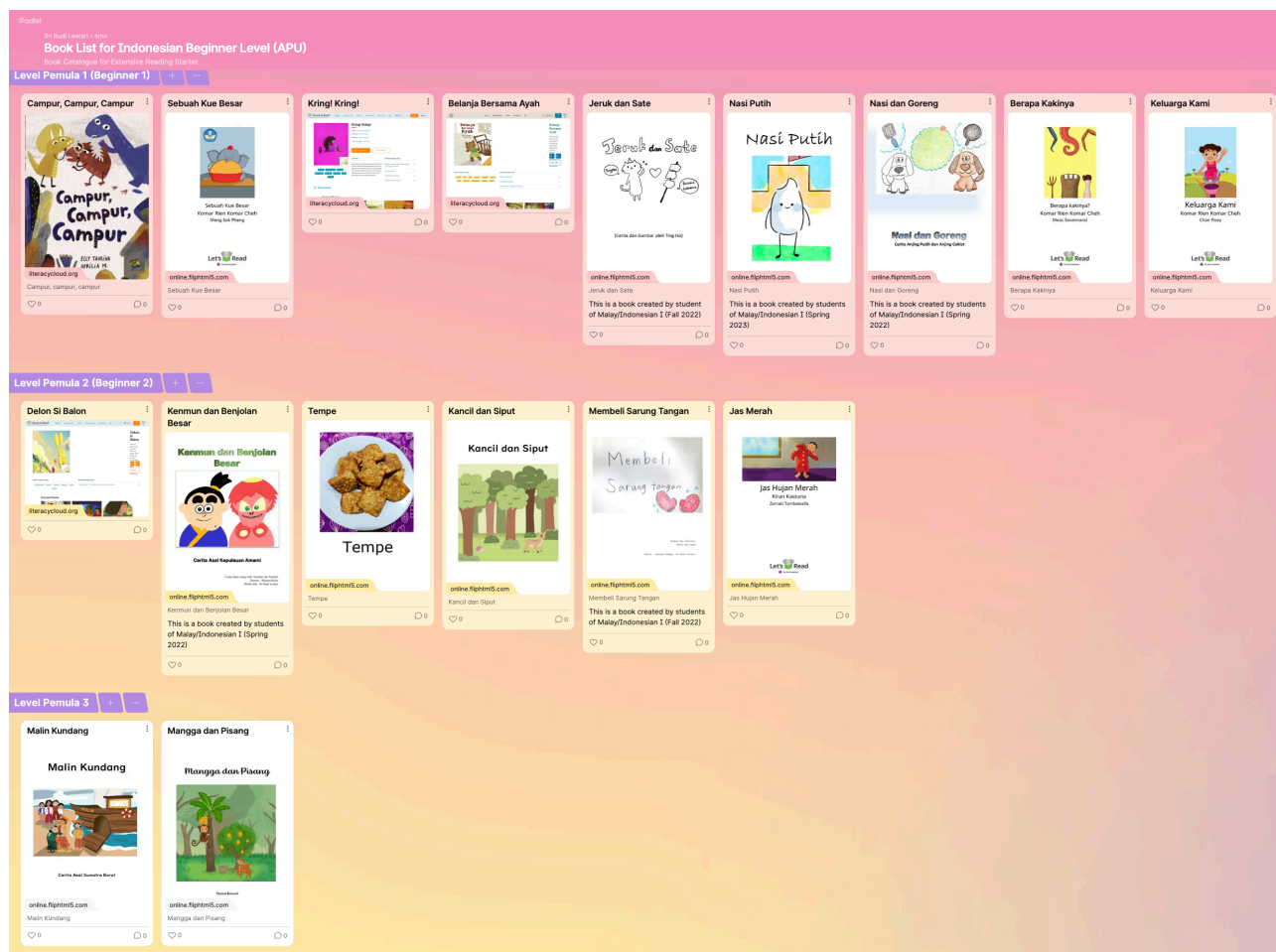
The third catalogue is a catalogue containing several book titles, reader reviews and borrowing links. The books in this catalogue are those that have been read by other learners in other ER-related activities. This catalogue is stored in Google Drive, and the link is shared with the students. Now there are only 5 books in the catalogue, but this will continue to be updated. The link is shown below.
 https://docs.google.com/spreadsheets/d/1ON74W1SqBhbVu8ikvvY-G5GgeWNW_8YmJ7k2KNNCe7Y/edit?usp=sharing

Figure 2– Screenshot of the catalogue with reviews by other learners and location links/QR codes

	Judul	Cover	Review by Students	Source	Link or QR Code
1	Belanja Bersama Ayah		"The content in this book is easy to understand for a beginner like me. The story was okay, and there are also mini-games in the book for the reader as well." 「文字が少し多くなるが新しい単語に触れられるのでとても面白い。」 "It was hilarious to see the little cat looking for her father call out for other animals even though it is obvious that they are not her father."	Room to read	Belanja Bersama Ayah
2	Kring! Kring!		「思わず笑顔になってしまうのと、絵が可愛くて面白かったです。単語がわからないのは、あったけれど絵を見たら内容はわかりました。また、授業で習った大きい、小さいといった形容詞も使われてて、それがわかったので良かったです！」 "It's a really fun book to read. The vocabulary are not that difficult, almost all of them we have learnt it in the class. This book is good for starter who want to understand Indonesian language." "This book is good for learning adjectives"	Room to read	Kring! Kring!
3	Campur, Campur, Campur		"It's a fun way to learn about mixing colours in Indonesian. Buku ini buku bagus tentang warna (color). " 「色の識別させる練習に良い本だと思った」 "Easy to understand and the illustration was cute"	Room to read	Campur, campur, campur
4	Nasi dan Goreng		「この本には動物がたくさんでできて、とても愛らしかったです🥰 ドリアンが登場して、いろんなドリアンスイーツが出てきて食べてみたくなりました。やっぱり匂いがくさいという場面はあったけど、味は美味しくてお話の中でも完食していたので一度ドリアン試してみたいです。子どもたちにも読んでもらいたいなと感じました。」 "The story was interesting."	Student's Final project (APU)	
5	Nasi Putih		"Some of the vocabulary in the book were different but the meaning was written on bottom of the page so it was easy to understand the words meaning." "I loved it but how white rise and raisin bread could be sisters?????????? I also liked there were words list under each page. " " It was a surprise that the they were ingredients of .... which I did not realize until the end. "	Student's Final project (APU)	

4.3 Formulating the reading record

Lestari (2024) introduced several reading records used in ER activities at APU from Spring 2022 to Fall 2022. Two examples of these records are presented here, highlighting their application in Spring 2023 and Spring 2024.

In Spring 2023, the reading records were designed for intermediate-level students in Malay/Indonesian III and IV. These records emphasized content comprehension and helped students improve their ability to retell the book's contents. Students were also trained to create short, structured summaries and present them to peers and the instructor.

In contrast, the Spring 2024 reading records were tailored for beginner-level students in Malay/Indonesian II. The primary goal was to help students enrich their vocabulary through reading. Most children's books included unfamiliar vocabulary and expressions, encouraging students to infer meaning from context and visual aids. To avoid overwhelming students, the records focused on documenting new vocabulary rather than requiring impressions or opinions about the book.

Importantly, there was no set target for the number of vocabulary items to be recorded; if students encountered no unfamiliar words, they could leave the 'new vocabulary' column blank.

Figure 3 - Sample of reading record given to students (Spring 2023)

Figure 4 - Cover and content of the reading record booklet used in Spring 2024

5. ER in formal classroom settings

5.1 Overview of the program

5.1.1 Spring 2023

In Spring 2023, Extensive Reading (ER) was incorporated into Malay/Indonesian III and IV as part of the students' homework. The following guidelines were provided to help students engage with ER effectively:
1. Choose books that look interesting and are easy to read.

2. Read without relying on a dictionary, if possible.
3. Feel free to read the same book multiple times.
4. Avoid looking up new vocabulary or taking notes while reading.
5. Focus on reading quickly and for enjoyment.

Students were also given specific instructions on managing their ER homework. Each Monday, 5 minutes before class ended, students selected at least one book to take home and read. At home, they completed a reading report form summarizing their reading. The following Monday, 10 minutes before class started, students gave a 1-minute presentation summarizing the book they had read. They were encouraged to retell the story without referring to their notes starting from the third week of the program.

This ER homework activity ran for a total of six weeks. The Spring 2023 class included five students from Malay/Indonesian III and two from Malay/Indonesian IV. The discussion here focuses on the experiences and outcomes of the Malay/Indonesian III students.

5.1.2 Spring 2024

The author began conducting Extensive Reading (ER) as a formal classroom activity (rather than homework) in the Spring 2024 semester. The participants included 10 students from Malay/Indonesian II and 3 students from Malay/Indonesian IV. The course was divided into two quarters, with ER activities implemented from the first week of the second quarter until the end of the semester (June 10 to July 19). ER sessions were held twice a week during class time, totaling 12 sessions. While this number of sessions might seem limited for an ER program, the time constraints were due to the need to cover all language skills and achieve the course's learning objectives, as detailed in Section 4.1.

The flow of ER activities during Spring 2024 was as follows:
1. **Scheduled Reading Time:** Activities were conducted 20 minutes before class began on Mondays and Thursdays.
2. **Book Selection Process:** Books were displayed in rows on a table. Initially, they were categorized by word count (e.g., 30–50 words, 50–100 words, etc.), but students preferred selecting books based on their covers rather than the categorized arrangement.
3. **Independent and Optional Aloud Reading:** Students read individually and silently after choosing a book. Some students opted to read aloud, which was allowed without restriction.
4. **Minimal Dictionary Use:** Dictionaries were provided on the table for reference, but students were encouraged to rely on context and visuals, using the dictionaries sparingly.
5. **Instructor Guidance:** Students were welcome to seek assistance from the instructor if they encountered challenging vocabulary.
6. **Documenting Progress:** After completing a book, students filled out a reading record form (as described in Section 4.3).

This report focuses on the results of the 10 students from Malay/Indonesian II, as their experiences form the core of the analysis.

5.2 Reading target

Day and Bamford (1998, pp. 86–87) highlight the importance of setting reading targets in Extensive Reading (ER) programs. A reading target requires students to read a specific number of books or pages, providing a measurable way to evaluate their progress. Following this principle, a reading target of 20 books was established for the Malay/Indonesian II class's ER program in Spring 2024.

Students responded positively to the reading sessions. They were informed that completing 20 books during the second quarter would earn them full marks (100) for a designated task. To further motivate students, the author introduced an additional target mid-program. Students who read 25 or more books were eligible to earn extra credit equivalent to a quiz score. This new incentive aimed to encourage continued engagement and higher achievement. The scoring system was structured as follows:

- **20 books** : 100 points (Task score)
- **25–29 books** : 90 points (Extra Quiz score)
- **30 or more books** : 95 points (Extra Quiz score)

The overall grading system in the syllabus allocated:
- 5% to Participation,
- 25% to Tasks and Quizzes,
- 35% to the Quarter 1 Test, and
- 35% to the Quarter 2 Test and Presentation.

The scores for reading targets were calculated as part of the "Task and Quiz" category, ensuring alignment with the syllabus requirements.

5.3 The Achievement to the Reading Target

All students who participated in the Spring 2024 ER program met the reading target. On average, students read 28 books during the program. Specifically:
- Two students read 32 books,
- One student read 31 books,
- Three students read 30 books,
- One student read 29 books, and
- Three students read between 20 and 23 books.

5.4 Questionnaire results

After the program concluded, the author administered a questionnaire to participating students. The questionnaire consisted of 20 questions divided into the following sections:
- Nine 5-point scale questions (strongly agree, agree, disagree, strongly disagree),
- Five open-ended questions, and
- Six yes/no questions.

The questions were designed with reference to previous research by Hitosugi and Day (2004). This report focuses on the results of four 5-point scale questions (Q6–Q9) and two open-ended questions (Q10 and Q12), specifically discussing the responses of the Malay/Indonesian II program participants. Of the 10 students, 8 completed the questionnaire.

Table 4 Summary of responses for 5-point Likert scale questions (Q6–9)

Question	Response Summary	Interpretation
Q6: When I was doing ER, I looked at the pictures carefully to understand the contents.	6 students: 'Strongly Disagree'; 2 students: 'Agree'	Pictures in books help beginners understand vocabulary and text. Children's books are effective starting materials for ER activities.
Q7: I like reading Indonesian books.	8 students: 'Strongly Agree' or 'Agree'	Students showed enthusiasm and positive attitudes toward reading Indonesian books, with no reluctance evident.
Q8: I want to read more Indonesian books to learn Indonesian.	3 students: 'Strongly Agree' or 'Agree'; Other responses varied	Mixed responses suggest varying levels of interest in continuing to use Indonesian books for language learning.
Q9: ER helps me to learn Indonesian (increase vocabulary, practice grammar, understand text from context and pictures).	5 students: 'Strongly Agree'; 3 students: 'Agree'	Most students recognized ER's benefits for vocabulary building, grammar practice, and comprehension.

In response to Q10 (Before and after your extensive reading activities, have you noticed any changes in your own learning of Indonesian or in reading itself?"), students noted several positive impacts of the ER activities on their Indonesian language learning. Some observed improvements in

vocabulary acquisition, as they became familiar with common words, root words, and their variations. Students appreciated the opportunity to discover word spellings and nuances, especially for words they usually only heard. The other students highlighted the benefit of learning informal and colloquial expressions that are not typically covered in class, enriching their understanding of everyday language used by locals and children.

Students also found that using picture books was particularly effective, as it allowed them to understand unfamiliar words through context and visuals rather than constant dictionary use. Additionally, a student mentioned increased ease in understanding grammatical structures, contributing to their confidence in reading Indonesian texts.

Table 5 - Summary of responses for open-ended Q10

Question	Response Summary
Q10 Before and after your extensive reading activities, have you noticed any changes in your own learning of Indonesian or in reading itself?	1. It was great to see the spelling and make new discoveries when looking at words in a book that I usually pronounce out loud. 2. I was able to learn not only the formal Indonesian taught in class but also the words used by locals and children. 3. I felt that my retention of words improved faster. 4. Instead of looking up every unfamiliar word, I was able to guess the meaning from the context and pictures. I also thought about whether related words had similar meanings. 5. Honestly, our vocabulary level is around that of a 3-year-old, so using local picture books is a very effective approach. Through picture books, I was also able to learn about the culture. It was also very interesting to read books made by other students. 6. I became more familiar with commonly used words and the root words and their variations. 7. I increased the number of words I can read, and understanding grammatical structures became easier.

The next bit of discussion focuses on the responses to Q12: *"How many books could you read (approximately)? What made you work up to that number?"* Eight students provided answers regarding the number of books they read, but only six offered reasons for achieving their respective totals. Below are their responses:

Table 6 - Summary of responses for open-ended Q12

Question	Response Summary
Q12 How many books could you read (approximately number is ok)? What made you work up to that number?	1. 20 books. Because I was aiming to reach the target number along with everyone in the class, not just by myself. 2. More than 30 books. I enjoy reading, so I was able to keep going while having fun. 3. 25 books. I wanted to achieve a better grade, and having classmates also motivated my competitive spirit. 4. 30 books. I chose short and easy books… and picture books were interesting. 5. 32 books. I worked hard because we would receive a grade. 6. 20 books. Because I had to read them.

The presence of classmates working toward the same goal fostered a sense of friendly competition, motivating many students to continue reading. Overall, a combination of external factors, such as grades, and intrinsic enjoyment played significant roles in sustaining their engagement with the extensive reading activity.

5.5 Suggestions for post-reading activity

Q16 asked the students "The original purpose of Extensive Reading is for enjoyment and general knowledge. What do you think is a good post-reading activity?" Below are some suggestions gathered from students.

Table 7 - Summary of responses for open-ended Q12

Question	Response Summary
Q16 The original purpose of Extensive Reading is for enjoyment and general knowledge. What do you think is a good post-reading activity?	1, I think it would be fun to have a read-aloud experience with Indonesian students (preferably children). Share what we learned from the book. 2, It would be nice to write a book review on Canva like we did this time and, if time permits, give a presentation. 3, Create our own picture book. 4. Choose one book and try translating it into Japanese or English ourselves. 5. We can engage with Indonesian culture and content.

6.   Conclusion

The questionnaire results from Malay/Indonesian II ER program show that students enjoyed reading Indonesian books and found them helpful for learning. Most students liked using picture books because they made it easier to understand new words and concepts without always needing to use a dictionary.

While many students expressed a desire to read more Indonesian books to improve their language skills, the majority agreed that ER helped them learn new vocabulary and understand grammar better. The program created a fun and friendly atmosphere, where students felt motivated by their classmates and the chance to earn good grades.

Students also suggested exciting ideas for post-reading activities, like reading aloud with Indonesian children, sharing what they learned, writing book reviews, creating their own picture books, and even translating stories into Japanese or English. This shows their interest in continuing to learn and engage with the Indonesian language and culture in creative ways.

Because the small sample due to few participants in this ER program, the result must be considered as indicative, not conclusive.

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Proceedings Part 2

Engaging in PRESENT REFLECTIONS, Addressing Current Challenges

The common denominator across these studies is addressing challenges in language education through innovative strategies and tools. Specifically, they focus on:

- **Motivation and Engagement**: Enhancing learner motivation and achievement through gamified instruction, multimedia tools, and cooperative activities (*Gueguen, Yang et al., Salvacion & Ohba*). Studies also explore learner motivations to continue language courses and compare these motivations across diverse language groups (*Auracher et al.*).

- **Innovative Pedagogies**: Introducing creative teaching methods such as film-based courses, visual image training, and instructional translanguaging to enrich learning experiences and address context-specific needs (*Zhang, Dryden, Yang & Huang*).

- **Feedback and Reflection**: Emphasizing the role of feedback literacy and corrective feedback in improving language skills, whether through collaborative feedback training or synchronous computer-mediated communication (*Asagoe & Sano, Chen*). Additionally, insights from student feedback inform course design and pedagogical strategies to enhance learning outcomes (*Walker et al.*).

- **Sociocultural and Emotional Dimensions**: Investigating how emotions and sociocultural factors shape language teaching and learning, including identity construction, heritage language challenges, and caregiver perspectives in language education (*Santyarini, Kwan et al., Dryden*).

- **Learning Strategies and Flow**: Exploring how learners develop effective reading strategies and achieve "flow" in learning tasks, as well as addressing "anti-flow" experiences that may hinder engagement (*Salvacion & Ohba, Huang*).

These studies collectively explore solutions to optimize language learning and teaching practices in diverse and evolving educational contexts.

7 - Gamification as an Approach to Grammar in French Language Class

Ewa Gueguen
ewa.gueguen@gmail.com
University of Kuala Lumpur, Malaysia

Abstract

Traditionally, the teaching of grammar and vocabulary is perceived as monotonous by most learners. However, creative (Weiss, 2002; Silva, 2009) and interactive approaches are essential to stimulate interest and motivation among students. In the current digital learning context (Schmoll, 2021), new opportunities are emerging for learning grammar through games. This article offers an analysis of games designed to reinforce the grammatical and lexical skills of adult learners from levels A1 to B2 (CEFR) in French language classrooms. The goal is to demonstrate the effectiveness of these games while highlighting the benefits of an action-oriented approach and the role of creativity in the learning process. By incorporating these educational tools, we will illustrate how the teaching of grammar and vocabulary can become dynamic, spontaneous, communicative, and action-oriented, empowering learners to take risks in their second language and become in control of their own learning journey.

Keywords: Action-oriented approach, creativity, games, gamification, motivation.

1. Introduction

In the ever-evolving landscape of education, the integration of technology and innovative teaching strategies has transformed how languages are taught and learned. Among these innovations, gamification has emerged as a powerful tool, captivating the attention of educators and learners alike. We believe that by infusing game-design elements into the learning process, gamification offers a dynamic and engaging approach to mastering language skills, particularly in the realms of grammar and vocabulary. The term "gamification" is a large concept that covers traditional games: carts, board games, word games, letter games etc but also digital games, video games, online games, escape games, team building games. In our study for this article we have been analysing traditional and commercial games that have been adapted for the French language classroom.

This article discusses the potential of game-based activities in the language classroom as a tool for fostering more engaging and effective grammar and vocabulary acquisition or, alternatively, as a potential distraction from structured learning.

2. Theoretical foundations

The integration of games into language teaching has garnered significant attention within educational theory, as scholars increasingly recognize the potential of games to enhance linguistic competence and engagement (Caré et Debyser, 1978; Weiss, 2002 ; Silva; 2008). The theoretical foundation for this approach is rooted in the principles of Piaget's constructivism, which suggest that learners build/construct the knowledge through active, meaningful interaction with their environment rather than passively taking in information (Taber, 2006). In the context of language acquisition, games provide a dynamic platform where students can engage with the target language in authentic, contextualized scenarios.

Debyser (1978) highlights the motivational value of games, particularly their ability to reduce learner fatigue and encourage active participation. Debyser sees games as a way to make language learning more enjoyable and less daunting for students. He notes that games can reduce inhibition,

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making students less self-conscious about their language use. By focusing on the fun and interactive nature of games, learners are more likely to take risks and engage in the language learning process.

Weiss also discusses the potential of games to introduce and explore cultural aspects of the language being learned. Through culturally relevant games, students can gain insights into the customs, traditions, and social norms of the target language community, enriching their overall understanding and appreciation of the language. Taking this approach even further, Weiss mentions that games can serve as informal assessment tools, providing immediate feedback to both students and teachers. Through games, teachers can observe how well students are applying their language skills in real-time, allowing for quick adjustments to instruction if necessary. Weiss (2002) emphasizes in his work on the use of games in the classroom, the role of creativity and imagination. He particularly highlights activities that involve the creation of new words, lexical structures, sentences, and stories as essential elements in fostering linguistic creativity.

Lubart (2015) advocates for creativity to flourish in educational settings where students feel safe to explore and make mistakes, which can lead to innovative ideas, risk-taking, and original thinking. Creativity as a learning strategy involves encouraging learners to solve problems in non-routine ways. In language education, this could involve tasks that require learners to generate their own sentences, create stories, or engage in role-play, thus fostering both language acquisition and creative thinking, his theory links with Silva's (2008, 2009) emphasize the motivational power of games in the language classroom. She argues that games have a unique ability to engage students in a way that traditional teaching methods often fail to do. The competitive and playful nature of games can turn learning into an enjoyable experience, which in turn increases student motivation and willingness to participate. Silva highlights how games provide a context for authentic language use. In her research, she points out that games often require learners to use the target language in meaningful ways, which mirrors real-life communication scenarios. This contextualized use of language helps students to better understand and retain language structures and vocabulary.

The researchers agree that gamification is a Tool for Active Learning. While Silva (2008, 2009), Weiss (2002), and Debyser (1978) approach the topic from slightly different angles, their findings converge on several key points: the motivational power of games, their ability to reduce anxiety, the importance of contextualized language use, and the enhancement of communicative competence. All three researchers agree on the cognitive and social benefits of games, as well as their flexibility in meeting diverse learner needs. Together, their work underscores the value of integrating games into the language classroom as a multifaceted tool that supports both linguistic and holistic development.

Taking the gamification to the digital world, Silva's (2012) research explores the effectiveness of games in language education, specifically how they contribute to the learning and reinforcement of linguistic skills such as vocabulary and grammar. She examines both digital and non-digital games, analyzing their impact on different age groups and proficiency levels. She emphasizes that games often provide contextualized learning environments where language is used meaningfully. This context helps learners to see the practical application of grammar rules and vocabulary, which aids in deeper understanding and long-term retention.

Schmoll (2017) takes a step further considering gaming (jeu vidéo) as a "product" not a tool or activity in language teaching. She argues that gaming gives a teacher an opportunity to immerse students in the activity giving them a different angle of learning a language. By participating in game-based activities, students are not only exposed to new vocabulary and grammatical structures but also encouraged to use the language in a way that is both purposeful and enjoyable. Schmoll argues that this practical application of language skills within a game setting fosters deeper cognitive processing, leading to better retention and proficiency.

3.   The context of our study of gamification in the French language classroom.

In response to theoretical research, we conducted a year-long study on the use of games in a French language classroom setting. The participants were 18-19-year-old students from Universiti Kuala Lumpur, Malaysia, enrolled in the Pre-France Program. This preparatory program equips students for engineering and business-management studies in France. Starting in their second semester, the students learn all subjects in French. With no prior knowledge of the language, they achieved the official B1 DELF certification after nine months, assessed by an external examiner.

For the study, we selected three groups of 21 students, each receiving 12 hours of French language instruction per week. The primary teaching materials were the *Cosmopolite A1* and *A2* textbooks and activity books. The student textbook served as the basis for the pedagogical units taught during class.

Our case study began with an analysis of the prescribed textbook to assess its inclusion of game-based activities targeting grammar and vocabulary acquisition. Apart from a few memory games with images available on the external Digital Learning app, we found no substantial game-based learning activities. To address this gap, we introduced various games from the first week of the semester, including *Bingo* for numbers, *Hangman*, family card games for practicing nationalities, and digital platforms like *Quizlet*, *Quizizz*, and *Kahoot*.

The objective of incorporating gamified activities was to create a more interactive and engaging approach to learning grammar and vocabulary. Observations during the Pre-France Program revealed that as the program's content became more challenging, students faced declining grades and a noticeable drop in motivation. To mitigate this, we integrated a game-based activity into each lesson as the semester progressed. These activities were designed to support memorization, reinforce grammar points, and encourage the practical reuse of vocabulary.

Additionally, the games aimed to foster independent learning, risk-taking, and confidence in language use. By creating an active and enjoyable classroom environment, this approach sought to sustain student engagement and motivation throughout their language learning journey.

3.1   Analysis of Specific Games.

For this article, we have selected five games integrated into French classes, ranging from A1 to B2 levels. These games are easy to implement, adaptable to any proficiency level, engaging for all participants, and require minimal materials. Each game aligns with specific learning outcomes, enabling students to apply their knowledge in meaningful interactions. Simple materials like flashcards, board games, and digital tools support real-time feedback, collaboration, and communication. By analyzing these activities, this study aims to explore whether game-based learning significantly enhances language skills or primarily serves as a tool for engagement.

Charades – Verbs Game. The first game, *Charades – Verbs Game*, exemplifies an action-oriented approach by combining language learning with physical activity. Students engage with French verbs through movement and dramatization, working in small teams of 3–4 players. Each team member acts out a verb or sentence while others guess, earning points for their team. This interactive format reinforces verb usage by having students act out verbs in their infinitive forms or conjugated in a specified tense, catering to A1–B1 learners. Verbal and non-verbal communication are key, as gestures and context clues support comprehension, making this game a dynamic tool for vocabulary reinforcement.

To further boost engagement, this game was implemented following a flipped classroom approach, helping to re-engage students and boost morale. By integrating dramatization and teamwork, *Charades – Verbs Game* transforms language learning into an active, social process.

Taboo. The adapted *Taboo* board game fosters vocabulary recall and communication skills. In this version, learners work in teams to guess a target word while the 'clue giver' describes it without using any forbidden words listed on the card. Correct guesses allow the team to advance, while using a forbidden word results in a penalty. The game stimulates listening and speaking skills as students collaboratively decode clues. A1 students focus on basic vocabulary like family or food, while B1 and B2 learners tackle complex topics such as politics or professional life, aligned with specific lesson objectives.

Adding a sand timer introduces urgency, while unique board challenges simulate real-life conversational dynamics. Adaptations included assigning students as rule explainers or using only cards for easier setup. An online version was also implemented for remote learning. With B1 students, discussions about culturally 'taboo' topics extended vocabulary learning into cultural exploration. These modifications made *Taboo* versatile and effective for all levels.

UNO – Les COI-COD en Folie. *UNO* was modified by Marion Gautier as *Les COI-COD en Folie* to support B1–B2 learners in mastering direct and indirect object pronouns (COD and COI). Players match 'sentence' cards with pronoun cards while following familiar UNO rules. Special cards like '+2' or 'skip' added engagement. This activity broke the traditional teacher-centered approach, encouraging interaction and benefiting shy or anxious learners. A variation introduced grammar discovery, where students identified COI rules themselves before reviewing an answer key.

Simplified adaptations, such as using only sentence cards or counting correct responses instead of points, made the game accessible. Answer keys were provided to ensure accuracy, and some groups had a designated monitor to verify responses. This flexibility allowed *UNO* to succeed in both in-person and online settings.

Hot Potato. The popular *Hot Potato* game was adapted based on versions like *Tic Tac Boum Junior* by Maxime Girard and simplified by Abdou from Flippizz. Students pass a ball while a timer ticks. When the timer stops, the player holding the ball 'loses' the round. To keep the ball moving, each player must create a sentence using a displayed word or picture without repetition. This game promotes spontaneous language production, critical thinking, and real-time sentence formation.

The game was suitable for A1–B2 learners, adaptable to various topics, and encouraged collaborative vocabulary expansion. A variation involved recording the activity, which reinforced vocabulary retention through post-game review. For larger groups, smaller teams and pre-made vocabulary cards ensured inclusivity. By promoting authentic sentence formation, *Hot Potato* exemplifies the action-oriented approach.

Battleship – Verbs. *Battleship – Verbs* was adapted for French language learning to practice verb conjugations. Players use two 10x10 grids—one for placing their 'ships' (verbs) and one for marking guesses. Instead of coordinates, players call out conjugated verbs based on a grid layout featuring subject pronouns and verbs. For example, a player might say "il est" to check for a 'hit.' This activity reinforced conjugation in various tenses and verb groups, catering to A1–B2 learners.

Explicit instructions were necessary for students unfamiliar with the traditional game. Preparatory activities, like creating verb conjugation charts and limiting the number of verbs, eased the learning curve. Online versions were also introduced to simplify gameplay. *Battleship – Verbs* successfully combined grammar practice with interactive gameplay, reducing anxiety and fostering collaboration.

Benefits of Gamification. These games, inspired by Lumbart's (2015) theory that language learning is inherently creative, demonstrated clear advantages. By engaging with new linguistic structures, cultural contexts, and communication scenarios, students retained information more effectively and applied language rules flexibly. Gamification aligns with an action-oriented approach, where students actively participate in meaningful scenarios and take ownership of their learning.

While occasional use of the mother tongue or English for spontaneous reactions (e.g., "Oh no, I lost!") was observed, the requirement to earn points exclusively in French ensured consistent target language use. Repeated integration of games led to more natural use of French, confirming their value as a pedagogical tool for both skill development and engagement.

3.2   Challenges and Limitations of the games in the language classroom.

While integrating games like *Hot Potato*, *Battleship-verbs*, *Taboo*, and *Charades - Verbs* into language learning has proven to be effective, challenges arise in balancing competition, educational focus, and sustained motivation. Though competition can drive engagement, we noticed that some students initially struggled with the high-energy environments of *Charades - Verbs* and *Hot Potato*, as they found the competitive nature intimidating. Over time, however, these students grew more comfortable and even began enjoying the collaborative, goal-oriented aspects. It was also essential to ensure that the fun of gamified elements, especially in games like *Taboo*, did not overshadow the educational objectives. The vocabulary and grammar focus remained central to gameplay, keeping language learning as the core purpose. Additionally, maintaining long-term motivation presented a unique challenge as the novelty of these activities wore off. Despite this, students expressed lasting motivation, as playing structured games in French gave them a sense of achievement and helped them feel more at ease using the language in authentic scenarios.

3.3   Motivational aspect of gamification.

In our experience with Pre-France students who were often juggling a full schedule, tend to be less focused and more fatigued during early morning or late-day classes, which has impacted their engagement in language learning, particularly in French. By integrating gamification into the classroom, we could effectively capture and sustain students' attention, even in less ideal time slots. Gamification not only encouraged active participation from all students, including those who were typically shy or anxious, but also facilitated peer interaction. We believe that this approach broke the traditional teacher-student dynamic and fostered a collaborative learning environment, especially in our class of 21 students, where games are structured in small groups of four. Randomly mixing players has encouraged students to work with different classmates and helped them build social connections while enhancing their language skills. Beyond improving learning outcomes, gamification also shifted the pace of the lesson, re-energizing students and setting a positive tone for the next phase of instruction. In our opinion this combination of social and academic engagement has led to more dynamic and effective language learning experiences.

3.4   Students feedback at the end of the academic year.

At the end of the academic year we conducted a survey in the groups we have implemented games. Students were asked questions if the games played in class were useful to memorise or practise grammar topics. 100% agreed with the statement. They saw the importance of games in their learning process.

We would like to mention here that those students live in a multicultural and multilingual context, as for most of them, their mother tongue is Malay, the second language they have learnt is English, some of them spoke Mandarin or Tamil at home. They have been learning languages since early ages, and they have been exposed to languages since early ages. We believe that according to Spiro and Jehng (1990) they have developed cognitive flexibility in learning a new language.

Did you find games useful to help you memorise/ practise grammar topics?
63 responses
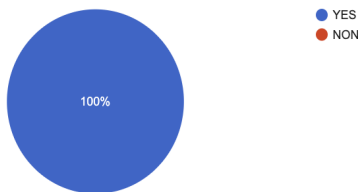
Figure 1: Answer to first question from the survey.

As for the question about specific games we have used in the class the 49,2 % answered online games/quiz, which shows the trend that online platforms are winning their audience.

Which game did you find most useful to help you with grammar topics?
63 responses
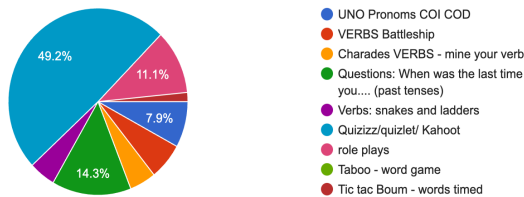
Figure 2: Answers to the second question from the survey.

In our survey, we included an open-ended question inviting students to share their thoughts on the integration of games in the French classroom. Their responses align closely with existing research on the benefits of gamification in language learning, highlighting reduced stress, increased interactivity, and enhanced engagement. For instance, one student remarked, "The games make the learning process less stressful and interactive, helping us grasp the information faster." Another student noted, "These games helped me to learn French in a fun way," while others focused on how games supported specific skills: "The most important part in the game is speaking, where students can show and improve their ability to speak French fluently." Another student reflected on the cognitive benefits: "All the games helped me to learn French and also improved my critical thinking when I wanted to express myself in French." Acknowledging the challenges, one participant remarked, "Even though it was hard, the games increased my pronunciation and writing skills."

These responses suggest that students recognize the pedagogical value of games in language learning. They attribute improvements in communicative competence, pronunciation, and grammar to this engaging, interactive approach. Additionally, many students noted that games fostered creative thinking, particularly when navigating challenges in French expression. Through this feedback, we observe that gamification not only supports language acquisition but also promotes critical and creative thinking, in line with current research in the field.

4.   Conclusion

In this article, we highlighted the importance of gamification as a motivational and creative tool in the French language classroom. Over the course of one academic year, we implemented various games and selected five with specific grammar-focused learning objectives to discuss in detail. These games were incorporated into a university-level French course to evaluate their impact on student engagement and learning outcomes. At the end of the academic year, a survey was conducted to assess the perceived benefits. While students expressed a preference for online quizzes and digital platforms, they also acknowledged the advantages of in-class games, citing improvements in language skills and a more enjoyable, interactive learning experience.

The integration of games and game-based activities in language learning provides a dynamic and engaging, action-oriented approach. By creating immersive environments where students can experiment with language in a playful, low-pressure setting, games foster not only linguistic skills but also creativity, collaboration, and critical thinking. Their interactive nature aligns seamlessly with communicative language teaching methodologies, encouraging students to actively participate, take risks, and apply their knowledge in meaningful contexts.

Our study found that this approach supports natural repetition and reuse of communicative structures, reinforcing language retention while introducing real-life scenarios that enhance pronunciation and comprehension. These findings underscore gamification as an effective tool for language acquisition.

As research on gamification evolves, future studies should investigate the long-term effects of these techniques on language retention, cultural understanding, and the challenges of implementation. However, current evidence suggests that games are not merely recreational activities but powerful tools for fostering deep, lasting learning in the language classroom.

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Appendix. Description of the games discussed in this article.
Game 1. Charades - verbs
A. **Description**: students will act, move, speak French in order to help their team to guess the verb or a sentence in tense given
B. **Set up:** students are in small groups of 3-4 players, each team gets 10 cards, one player acts out the verb or the sentence on the card, a team gets a point for a correct answer, variation we can add time factor. Points will be given for each correct answer given within the time line.
C. **Learning objective:** verbs in infinitive, verbs conjugated in a tense given;
D. **Learners level**: A1-B1;
E. **Age**: adults, young adults, teenagers;
F. **Time**: 20 min;
G. **Strengths:** rules are easy, it is fun and interactive, makes students move, change the set up in the class and change dynamics. The game could be adapted for online class.
H. **Weaknesses:** this game is very exciting and competitive, not encouraged for the beginning of the class as it will escalate the dynamics of the class therefore it will take time to settle down back the students (especially children and teenagers)
I. **Solutions:** Perfect game to boost the dynamics and energy of students, to gain back their engagement at the end of the class.

Game 2. Taboo - board game adapted version[#]
A. **Description**: it is a board game, the goal is not only to guess the words but also induces interactions between players

Figure 3. Example of the board
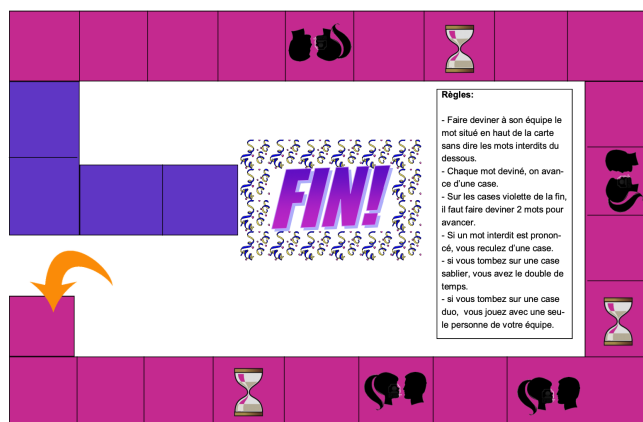
One team member makes the team guess the word at the top of the card without saying the forbidden words below. Rules for the players displayed on the board:
- For each word guessed correctly, you move forward one space.
- On the purple spaces at the end, you must make them guess 2 words to move forward.
- If a forbidden word is said, you move back one space.
- If you land on a sand timer space, you get double the time.
- If you land on a duo space, you play with only one person from your team.
- The clue giver draws a card, and as soon as the hourglass is flipped, they begin giving clues. Only the clue giver and the opposing team can see the card. The first word on the card is the "word to guess." The other words are the "forbidden words" that the clue giver MUST NOT say.
- The person who drew the card gives clues to help their team guess the word.
- The members of the clue giver's team shout out words they think might be the word to guess. They can say as many words as they want until they either guess the correct word or a sand timer runs out of time
B. **Set up:** one board, cards, 2 pawns, game rules, a sand timer, 2 teams of 3 players
C. **Learning objective:** vocabulary
option proposed by Sophie Bossu-Gastou B1 vocabulary: Feelings/ Emotions / Appearance
option we have adapted for our classes:
A1: Food, school items, house, sports, family members

    A2: physical description, holidays, work,
    B1: Travel and Tourism, Environment and Ecology, Media and Communication
    B2: Professional Life and Education, Politics and Society
D. **Objectives**: 3 skills: reading, reading comprehension, listening and speaking
E. **Learners level**: A1-B2
F. **Age**: adults, young adults, teenagers,
G. **Time**: 30 min
H. **Strengths:** rules are the same for all levels, cards can be created according to the topic to study or revise. One student in charge of explaining rules to the others, students are working cooperatively.This game can be adapted on line.
    <u>Discussion opening</u>: at the end of the game we can talk about "tabou" subjects in their cultural
    Weaknesses:
- few tools are needed, one game may take more time
I. **Solutions:**
- once the students are familiar with the rules, only the cards can be changed,
- Only cards and stopwatch can be used as proposed by ISL Collective

Moustache	**Barbe**	**Sourcils**	**Dents**	**Ongles**
Barbe Bouche Homme	Visage Homme Rasoir	Les yeux Front Froncer	Bouche Blanche Dentiste	Mains Doigts Ronger

Figure 4. Example of cards by Yousif, D., Sophie Bossu-Gastou, S.

Game 3: UNO, adapted by Marion Gautier (<u>Les COI-COD en folie</u>**) for the website leszexpertsfle[#]**
A. **Description:** 324 cards, 2-10 number of players, for language purposes we propose 2-4 players.
B. **Learning objective:** Pronom Objet Direct et Indirect short form COD and COI
C. **Learners level:** B1 and B2 (CEFR)
D. **Age:** adults, young adults, teenagers
E. **Time:** 10-30 min
F. **Original Uno set up[#]:** Every player starts with seven cards, and they are dealt face down. The rest of the cards are placed in a draw pile face down. Next to the pile a space should be designated for a discard pile. The top card should be placed in the discard pile, and the game begins.
G. **Game objectives:** Once a player wins, has no cards remaining, the game round is over, points are scored (optional), and the game begins over again.
H. **Game Rules: by Marion Gautier[#]**
    Set aside the "sentence" cards. Shuffle all the other cards. One player deals 7 cards to each participant. The remaining cards form the draw pile. The first round can begin. The dealer picks a "sentence" card, and the player to their left starts the game. This player must cover the sentence card with a card matching the correct direct object pronoun (COD: LE, LA, LES, L') or indirect object pronoun (COI: LUI, LEUR) and correctly says the sentence using the proper pronoun placement. For example, "Je chante la chanson" becomes "Je la chante."
    If the player cannot play, meaning they don't have the correct COD or COI card, they can play a special card. If the player has no usable cards, they must draw one from the pile. If the drawn card can be played, they may do so immediately; otherwise, they keep it, and the turn moves to the next player. Once the correct COD or COI card is played, the player who won the round places a new "sentence" card. If a player makes a mistake, they must draw a card.
I. **Special cards:**
- **" +2" card:** When played, the next player must draw 2 cards and skip their turn.
- **"Skip your turn"** (*Passe ton tour*) **card:** When played, the next player misses their turn.
- **"Speed" card:** The player who plays the correct card the fastest wins the round.
J. **Strengths:**
- the game helps to memorise the pronouns in a fun and interactive way, without standard handouts,
- all students are participating, as they are divided into small groups, effective learning,
- the original UNO game rules are well known
- activity is action oriented
- students interacting in small groups, which breaks typical teacher/students set up,
- helps shy and anxious learners get engaged in the learning process,
- this game can be adapted online.
J. **Weaknesses:**
- Some students found the rules too complicated, difficult to follow.
K. **Solutions:**
- only sentence cards were distributed, students needed to reformulate the sentences.
- special cards as optional;
- no points were given but the number of correct sentences was counted.

HE CALLS HIS MOTHER	DID YOU SEE THIS ACTOR IN THIS MOVIE?	SHE DID NOT GIVE ALL THE MONEY TO HER FATHER
PARENTS GIVE ADVISE TO THEIR KIDS	WE ARE WATERING FLOWERS EVERY DAY	YOU SING A SONG TO YOUR GIRLFRIEND?
SKIP YOUR TURN	SPEED	+2

Figure 5. English version of question cards in French
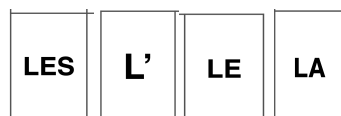
Figure 6. Pronoun cards. Direct pronouns four options

Figure 7. Pronoun cards. Indirect pronouns two options
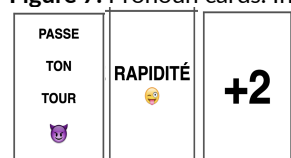
Figure 8. Special cards

Game 4. Hot potato (The Bombe) - commercial name Tic Tac Boum by Asmodee[#]
This game has been proposed by par Maxime Girard[#] in 2014 Tic Tac Boum Junior commercial version and by Abdou from Flippizz[#] in adapted minimum material required version. We will be analysing the adapted version.
A. **Description:** players are passing the ball to each other while the time is ticking, once the alarm rings it means the ball has exploded and the player who holds the ball loses. The aim of the game is to be able to say the word and pass the ball. The teacher displays the word or the picture and each player needs to make a sentence, but can not repeat whatever was said.
B. **Set up:** 1 ball or paper ball, stop watch, 1-8 payers, cards (optional)
C. **Learning objective:** to make sentences, connecting the words.
D. **Learners level**: A1 to B2 (CEFR)
E. **Age**: adults, young adults, teenagers, children
F. **Time**: 15-20 min
G. **Strengths:**
   ● this game can be easily adapted for any level,
   ● students are learning from each other,
   ● can be used for all grammar and vocabulary topics,
   ● rules are easy to understand,
   ● one game (until the bombe explodes) can be voice recorded, the recording can be reused after the game to write down all the words pronounced by students,
   ● or teacher can write down all the words pronounced by students on the board[#].
H. **Weaknesses:**
   ● In this adapted version the teacher is the one who gives the words, which means all group plays together if we have 20 students in the class many will be bored while waiting.
I. **Solutions**:
   ● By making cards or using a commercial version, students can play in smaller groups independently.

Game 5. Battleship-verbs is a classic strategy game where two players try to sink each other's fleet of ships by guessing the locations of their opponent's ships on a grid.
A. **Description**:
   ● Each player has two grids:
      ○ One for placing their own ships.
      ○ One for marking guesses about their opponent's ships.
   ● The grids are usually 10x10, labelled with letters for rows (A-J) and numbers for columns (1-10). In our case for language learning purposes, we will have verbs on the first left column and subject pronouns in the top row.
   ● Players will draw their boats secretly for 3 verbs of their choice.
   ● Instead of saying G3 they will say "il est" - (he is) to check if the boat is there.

- Extra vocabulary will be introduced: like: not touched, touched, sink (pas touché, touché, coulé).
B. **Set up:** 2 grids per player, 2 players;
C. **Learning objective:** to study conjugation of verbs in French;
D. **Learners level**: A1 to B2 (CEFR);
E. **Age**: adults, young adults, teenagers;
F. **Time**: 20-30 min + 10 min for explanation

Figure 9. The grids we will be using come from the Mondolinguo website# Although we can find similar rules in "En Jeux" #

G. **Strengths:**
- this game can be easily adapted for any level,
- can be adapted online,
- we can practise all tenses and all 3 groups of verbs,
- students are conjugating the verbs while having fun,
- written and spoken grammar topic is practised,
- work in pairs, students are more at ease and less intimidated to make mistakes.
H. **Weaknesses:**
- some students are not familiar with the game, teacher needs to take time to explain and demonstrate,
- students need time to prepare for this game,
- how to make sure that students are conjugating and pronouncing the verbs correctly?
I. **Solutions**:
- online# classic version can be played to demonstrate,
- sometimes even 45 min is needed for this game,
- students will prepare the conjugation on the separate paper to help them during the game,
- first time we would suggest 5 verbs only.
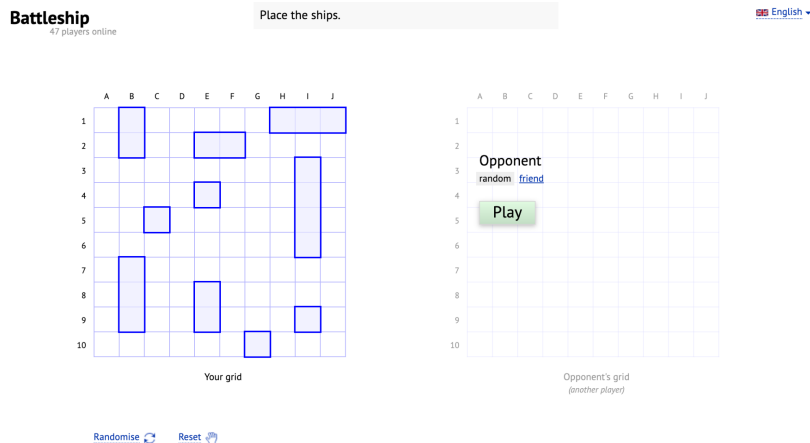
Figure 10. Online interface at https://battleship-game.org/en

Appendix 2: Students survey results

Response	Did the games help you learn grammar?	Which game was the most useful for learning grammar?	Would you like to leave any comments about games that helped you learn French?
1	YES	Questions: When was the last time you…. (past tenses)	
2	YES	Quizizz/quizlet/ Kahoot	
3	YES	Quizizz/quizlet/ Kahoot	
4	YES	Quizizz/quizlet/ Kahoot	
5	YES	Quizizz/quizlet/ Kahoot	I think the best game that helps me while learning French is quizizz, because when we do those activities, we are actively recalling the verbs, which I think helps in memorising a lot.
6	YES	UNO Pronoms COI COD	games that involves snakes and ladders
7	YES	Quizizz/quizlet/ Kahoot	i think all the games help for us to learn french more effectively

8	YES	Quizizz/quizlet/ Kahoot	I really enjoyed using Quizizz, Quizlet, and Kahoot because they make learning grammar fun and engaging. Competing with others adds a motivating aspect and pushes me to give my best. Moreover, it helped me review and thoroughly understand the chapter content.
9	YES	UNO Pronoms COI COD	
10	YES	role plays	
11	YES	Questions: When was the last time you.... (past tenses)	
12	YES	VERBS Battleship	
13	YES	Quizizz/quizlet/ Kahoot	Actually, all games were helping me to learn French. And it also helped my critical thinking when I wanted to say something in french. Eventhough it was hard but the games increase my pronunciation and writing skills
14	YES	Questions: When was the last time you.... (past tenses)	Those game were very helpful. The most important part in the game is speaking where students can show and improve the ability to speak french fluently.
15	YES	Quizizz/quizlet/ Kahoot	
16	YES	Charades VERBS - mine your verb	
17	YES	Questions: When was the last time you.... (past tenses)	
18	YES	Quizizz/quizlet/ Kahoot	Fun games attract me to learn more about the subject rather than something theoretical which makes me easier to feel bored.
19	YES	Quizizz/quizlet/ Kahoot	
20	YES	Quizizz/quizlet/ Kahoot	It's really fun and helps me learn French more easily
21	YES	UNO Pronoms COI COD	they helped me a lot with vocabulary and verbs
22	YES	Quizizz/quizlet/ Kahoot	
23	YES	Quizizz/quizlet/ Kahoot	
24	YES	Quizizz/quizlet/ Kahoot	Sometimes, while we were playing, I found it funny because there were words we didn't know, but we still didn't look them up afterward. So, it's important to always make an effort or ask the teachers to learn them.
25	YES	Charades VERBS - mine your verb	Play several games in class
26	YES	Quizizz/quizlet/ Kahoot	
27	YES	role plays	
28	YES	Quizizz/quizlet/ Kahoot	making me more focusing on what and how the grammar works and also know some new words
29	YES	Quizizz/quizlet/ Kahoot	I think I can learn from my mistakes on Quizizz.
30	YES	Quizizz/quizlet/ Kahoot	
31	YES	Quizizz/quizlet/ Kahoot	the quizizz really improved my french as i need to answer the questions fast so that i could get the most points but at the same time i need to make sure my answers are correct
32	YES	Quizizz/quizlet/ Kahoot	
33	YES	Verbs: snakes and ladders	
34	YES	Quizizz/quizlet/ Kahoot	-
35	YES	Quizizz/quizlet/ Kahoot	
36	YES	Quizizz/quizlet/ Kahoot	I really love it and always get excited when we play Quizziz in class.
37	YES	Questions: When was the last time you.... (past tenses)	
38	YES	Verbs: snakes and ladders	It's useful for learning French by heart.
39	YES	role plays	
40	YES	Verbs: snakes and ladders	
41	YES	Questions: When was the last time you.... (past tenses)	
42	YES	Quizizz/quizlet/ Kahoot	
43	YES	role plays	
44	YES	VERBS Battleship	

45	YES	Quizizz/quizlet/ Kahoot	
46	YES	Questions: When was the last time you.... (past tenses)	
47	YES	role plays	These games helped me to learn French in a fun way.
48	YES	role plays	The games make the learning process less stressful and interactive hence able to grasp the information more faster.
49	YES	Charades VERBS - mine your verb	
50	YES	UNO Pronoms COI COD	I help me a lot to increase my understanding on how to use the COD and COI correctly in a sentence
51	YES	Quizizz/quizlet/ Kahoot	
52	YES	role plays	
53	YES	Tic tac Boum - words timed	
54	YES	VERBS Battleship	It's interesting because you can remember many French verbs.
55	YES	Questions: When was the last time you.... (past tenses)	
56	YES	Quizizz/quizlet/ Kahoot	
57	YES	VERBS Battleship	It helped me to remember the conjugation to each verb
58	YES	UNO Pronoms COI COD	
59	YES	Quizizz/quizlet/ Kahoot	-
60	YES	Quizizz/quizlet/ Kahoot	
61	YES	Questions: When was the last time you.... (past tenses)	
62	YES	Quizizz/quizlet/ Kahoot	
63	YES	Quizizz/quizlet/ Kahoot	

8 - Enhancing Junior High School Students' Motivation and Achievement Through Multimedia-Assisted English Instruction

Chieh-Ming Yang

m1241004@gm.ncue.edu.tw
National Changhua University of Education, ROC

Shan-Mao Chang

sfchang@cc.ncue.edu.tw
National Changhua University of Education

Abstract

With the rapid development of technology, multimedia has been widely adopted in language learning. This study aims to explore students' motivation and achievement in English instruction within a multimedia-assisted learning context. The researchers implemented instruction designed to enhance students' desire to learn English, improve their ability to use modern technology, inspire innovation, and cultivate competence simultaneously. Four junior high school students were recruited from a public school in New Taipei City, Taiwan. Over ten weeks, self-designed multimedia-assisted English lessons were observed and analysed. A qualitative research method was employed, with data collected from classroom observations, student interviews, instructional materials, and assignments from various multimedia platforms. The findings indicated that students' motivation to learn English has indeed increased. Furthermore, students demonstrated improved achievement in the four English language skills, media literacy, critical thinking, and problem-solving abilities, etc. In conclusion, educators who embrace such innovative multimedia-assisted instructional approaches could not only significantly boost students' motivation and engagement, but also contribute to more effective and enjoyable English learning experiences.

Keywords: Multimedia-assisted instruction, English learning motivation, competency-oriented education, digital tools, junior high school students

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1. Introduction

Nowadays, with the rapid development of science and technology, multimedia has been widely adopted in language learning (Alobaid, 2020). Through multimedia, teachers can explore the most effective ways to create a conducive environment for foreign language teaching and learning, enabling students to learn English without pressure (Gilakjani, 2012). Additionally, with multimedia as the medium, learning is no longer constrained by time, space, or geographical location, significantly influencing education (Tsai, 2021).

In Taiwan, multimedia-assisted language instruction is emphasized in the *Curriculum Guidelines for 12-Year Basic Education*, which is based on a competency-oriented vision (Ministry of Education, 2019). Despite its recognized importance, junior high schools in Taiwan face challenges in incorporating multimedia-assisted, competency-oriented English instruction into their schedules due to curriculum content constraints and the pressures of entrance exams. To address these challenges, the Ministry of Education (MOE) launched an innovative initiative called the *Bilingual Digit Companions for Learning Project*. However, as the program is still in its early stages, there is a lack of research investigating its effects or impact on multimedia-assisted, competency-oriented English instruction.

This study aims to fill this gap by exploring junior high school students' motivation and achievement in competency-oriented English instruction within a multimedia-assisted learning

context. As part of the project, the researchers, who are teacher-researchers participating in the *Bilingual Digit Companions for Learning Project*, designed 10-week multimedia-assisted, competency-oriented English lessons for secondary school students.

This study seeks to answer the following research questions:

RQ1. How does the 10-week multimedia-assisted competency-oriented English course influence students' motivation to learn English?

RQ2. How does the 10-week multimedia-assisted competency-oriented English course influence students' achievement, especially English four skills and competency?

2.   Literature review

2.1   *Multimedia-assisted English instruction*

2.1.1   *The definition of multimedia-assisted English instruction*

Multimedia-assisted English instruction refers to the integration of digital media—such as text, images, graphics, videos, audio, animations, and interactive applications—into English language teaching. This pedagogical approach offers multimodal resources that cater to diverse learning styles, promote active engagement, and foster language acquisition in dynamic and interactive environments (Nami et al., 2018; Meskill, 1996). By incorporating multimedia tools, educators can design engaging and less stressful learning experiences, making language learning more attainable and enjoyable for students (Hwang et al., 2021).

This approach also facilitates a shift from teacher-centered to student-centered learning, empowering students to take active roles in their language development through adaptive, self-paced digital resources (Kim, 2020). Multimedia supports differentiated instruction by addressing varied proficiency levels and learning needs, aligning with trends in language education that emphasize learner autonomy and personalized learning (Hockly, 2018).

Furthermore, multimedia addresses challenges related to geographical and temporal constraints in language education. Online platforms and digital content enable remote learning and flexible access to instructional materials, benefiting students with limited opportunities for direct language immersion or classroom interaction (Godwin-Jones, 2019). The integration of authentic materials, such as podcasts, exposes learners to genuine language usage and cultural contexts, enhancing communicative competence and bridging the gap between classroom learning and real-world application (Zhang & Zou, 2020).

Additionally, multimedia fosters collaborative learning through online discussions, virtual exchanges, and peer-to-peer language practice with students from diverse locations (Hampel & Stickler, 2015). Such collaborative activities provide meaningful, real-world contexts for practicing language skills, further enriching the learning experience.

In conclusion, multimedia-assisted English instruction leverages digital media to enhance students' language abilities. By enriching traditional teaching methods, it creates a multimodal, interactive, and adaptable learning environment that addresses individual learners' needs while preparing them for authentic language use in real-world situations.

In this study, the multimedia tools integrated into English instruction were categorized into three key aspects:

- Interactive platforms: Padlet, Slido, Jamborad, Peardeck, Google Chat, etc
- Collaborative tools: Canva, Jamboard, etc
- Gamified learning platforms: Cool English, Quizizz, Quizlet, Baamboozle, Wordwall, etc

2.1.2   *Studies on the learning motivation of multimedia-assisted English instruction*

Research indicates that multimedia-assisted instruction significantly increases students' motivation to learn English, both intrinsically and extrinsically.

On the one hand, **intrinsic motivation** refers to an internal desire to learn, driven by interest and enjoyment rather than external incentives. According to Self-Determination Theory, intrinsic

motivation is more likely to develop when learning activities satisfy students' needs for autonomy, competence, and relatedness (Ryan & Deci, 2017). Multimedia-assisted instruction supports these needs by offering adaptive and self-paced learning experiences, providing instant feedback, and allowing students to engage with content in diverse ways. For instance, Nami et al. (2018) found that incorporating multimedia elements such as interactive exercises, videos, and animations in English language instruction significantly increased EFL learners' intrinsic motivation, especially when the content was designed to be engaging and aligned with their interests. Similarly, Hwang et al. (2021) demonstrated that gamified multimedia learning activities enhanced students' intrinsic motivation to learn English grammar by making the learning process more enjoyable.

On the other hand, **extrinsic motivation**, driven by external factors such as grades, rewards, or recognition, also plays an important role in language learning. Multimedia-assisted instruction can enhance extrinsic motivation by providing digital tools that help students achieve tangible learning outcomes, such as improved test scores. Multimedia improves learning efficiency by offering a variety of resources tailored to different learning speeds and styles, helping students recognize the value and benefits of their efforts (Sun et al., 2018). For example, Chiu and Liu (2023) examined the impact of achievement goal orientation on students' extrinsic motivation in a multimedia-assisted English learning context. Their study revealed that students with performance-oriented goals were more motivated by external rewards such as grades and teacher recognition when engaging with multimedia resources. Additionally, Huang et al. (2022) found that multimedia tools incorporating gamification elements, such as points, levels, and leaderboards, notably enhanced students' external drive to participate in English language learning.

To sum up, considerable research suggests that multimedia-assisted English instruction positively impacts learning motivation, addressing both intrinsic and extrinsic aspects.

2.1.3 Studies on the achievement of multimedia-assisted English instruction

Research consistently demonstrates that incorporating multimedia in English teaching can lead to significant improvements in students' language skills, including reading, writing, listening, and speaking, as well as their overall academic achievement (Zhang & Zou, 2020; Hwang et al., 2021).

The positive impact of multimedia on English skills is well-supported by recent studies. For example, Hsu (2019) reported that EFL students taught English with multimedia assistance outperformed those in traditional classrooms on vocabulary and grammar tests. Additionally, Hsu (2019) found that multimedia-assisted teaching significantly improved vocabulary acquisition and retention among EFL students. By utilizing multimedia resources such as videos, audio clips, and online quizzes, students engaged more actively with vocabulary learning tasks, resulting in higher retention rates compared to traditional instruction methods. Furthermore, Chen and Hsieh (2021) demonstrated that incorporating multimedia resources into English writing instruction significantly enhanced students' writing quality. Digital tools provided scaffolding for writing tasks and immediate feedback, supporting students' development as writers.

Research also suggests that multimedia-assisted instruction is particularly beneficial for students with lower proficiency levels or specific learning needs. Lai (2021) found that multimedia tools, offering both visual and auditory support, helped struggling students improve their comprehension and processing of language input.

Moreover, multimedia-assisted English instruction has been shown to positively impact students' overall academic achievement in language learning. Sun and Yang (2015) reported that students in multimedia-assisted classrooms scored higher on English proficiency tests than their peers in traditional settings, particularly in reading comprehension and listening skills. Recent studies have also highlighted the role of multimedia tools in standardized test preparation. For instance, Liu et al. (2022) found that using multimedia tools such as video tutorials and interactive language learning applications significantly improved EFL students' performance on standardized English tests, including TOEFL and IELTS.

Overall, there are considerable studies highlight that multimedia-assisted English instruction positively affects students' English skills and overall academic achievement.

2.2   Competency-oriented English instruction

2.2.1   The definition of competency-oriented English instruction

In Taiwan's education system, competency-oriented instruction has been integrated into the English curriculum. The objective is not only for students to master the knowledge of the English language but also to cultivate their interdisciplinary application abilities and core competencies. This teaching approach emphasizes the flexible application of learned knowledge in real-world contexts, fostering skills such as problem-solving, critical thinking, self-directed learning, and collaborative communication to equip students with the ability to tackle real-life challenges (Ministry of Education, 2019).

According to the *Curriculum Guidelines of 12-Year Basic Education*, competency-oriented English instruction requires teachers to design contextualized learning activities that engage students in exploration and practice within challenging situations. It prioritizes the depth and breadth of learning over memorization and rote learning. This teaching model aims to develop students' "knowledge, skills, and attitudes" simultaneously during the learning process, enabling them to flexibly apply their learning in dynamic environments and achieve the ultimate goal of cultivating true competency (Ministry of Education, 2019).

The *Curriculum Guidelines of 12-Year Basic Education* identify 19 key issues in competency-oriented instruction, including the following: Family Education Course, Character Education Course, Life Education Course, Environmental Education Course, Multicultural Education Course, Gender Equality Education Course, Human Rights Education Course, Energy Education Course, Marine Education Course, Legal Education Course, Technology Education Course, Resource Education Course, Safety Education Course, Disaster Prevention Education Course, Career Planning Education Course, Reading Literacy Education Course, Outdoor Education Course, International Education Course, and Aboriginal Education Course (Ministry of Education, 2019). These are the issues of competency-oriented instruction that are worth teaching, learning, and studying.

In this study, the program incorporated the four competency-oriented issues into the English curriculum design.
• Family awareness and responsibilities (Family Education Course)
• Character development (Character Education Course)
• Life lessons (Life Education Course)
• Environment protection (Environmental Education Course)

3.   Methodology

3.1   Research design

This research uses a case study method to explore junior high school students' motivation and achievement of competency-oriented English instruction within a multimedia-assisted learning context. It is hoped that this study may investigate and reflect on whether multimedia-assisted competency-oriented instruction in the MOE program could indeed be effective in cultivating the ability of English and multimedia tools use, and competency, as well as could improve the learning motivation and achievement of junior high school students simultaneously.

The researchers designed 10-week teaching materials and would observe 40 sessions in class, which are related to multimedia-assisted competency-oriented English instruction for four secondary school students from the Bilingual Digit Companions for Learning Project. A qualitative research method was employed, with data collected from classroom observations, student interviews, instructional materials, and assignments from various multimedia platforms.

3.2   Research context

Guided by the core value of "life accompanies life, life teaches life," the *Bilingual Digital Companions for Learning Project* focuses on two main objectives: fostering "co-learning and companionship

between university students and secondary school students" and cultivating "the spirit of self-management, social responsibility, moral growth, and digital literacy among university students" (Ministry of Education, 2022). The program aims not only to enhance students' ability to use English but also to develop their proficiency in applying multimedia tools, fostering competencies simultaneously.

By integrating multimedia tools into English teaching, the project creates a more diverse digital learning environment for students in remote areas, enhancing their motivation to learn and improving their academic achievement. Additionally, these tools support the establishment of a cooperative mentoring system between secondary and university students (Ministry of Education, 2022).

The program incorporated four key issues into its curriculum design: **family awareness and responsibilities**, **character development**, **life lessons**, and **environmental protection**. The teaching objectives for each issue are as follows:

1. **Family awareness and responsibilities**:
   Students are expected to develop the ability to explore family development and the interaction between family and society. They will also cultivate a sense of responsibility and awareness in family relationships.
2. **Character development**:
   Students will enhance their moral development and gain competencies to perform acts of kindness, thereby promoting overall character growth.
3. **Life lessons**:
   Students will strengthen their ability to reflect on fundamental life issues and enhance value-based critical thinking and emotional understanding.
4. **Environmental protection**:
   Students will understand the environmental crises and challenges facing humanity, recognize the importance of sustainable development, and take practical action.

As teacher-researchers, we carried out the program schedule as shown in the table below.

Table 1 - Program Schedule

Month	Program schedule
August	1. Participated in the training.
	2. Designed 10-week lessons.
	3. Implemented the teaching demonstration.
	4. Revised and adjusted the lesson plan through the professors' feedback.
September to November	1. Participated in systematic educational training.
	2. Gave lessons.
	3. Wrote diary for instruction.
	4. Collected feedback from professors and students.
	5. Participated in monthly meetings.
	6. Implemented regular assessment.
December	1. Gave lessons.
	2. Wrote diary for instruction.
	3. Participated in monthly meetings.
	4. Implemented final assessment.
	5. Improved from the professors' feedback and suggestions.

3.3   Lesson schedule

The table below shows the lesson schedule adopted in the research. Each issue would be covered for two weeks. Interviews would be conducted in the first, sixth and the final week.

Table 2 - Lesson Schedule

Week	Lesson	Week	Lesson
Week 1	Overview & Class management (+Interview)	Weeks 6-7	Life lessons (+ Interview)
	Introduction to the use of multimedia tools	Weeks 8-9	Environmental protection
Weeks 2-3	Family awareness and responsibilities	Week 10	Reflections for the course (+Interview)
Weeks 4-5	Character development		

3.4   Participants

The participants in this study were four junior high school students from New Taipei City, enrolled in a program under the Ministry of Education (MOE). The group consisted of two first-year students and two second-year students.

The students demonstrated varying levels of motivation. While some exhibited high levels of enthusiasm and engagement, others required additional support to strengthen their motivation. Most students were actively engaged in class; however, one student occasionally displayed signs of distraction. Some participants showcased strong English proficiency, excellent multimedia tool usage, and a solid understanding and application of competency. Nonetheless, there was room for improvement among certain individuals.

To address the research questions, data was collected through student interviews, classroom observations, instructional materials, and assignments submitted via various multimedia platforms.

3.5   Data Collection Techniques

3.5.1   Interviews with Students

The type of interview (outlined in the Appendix), developed by the researchers, consisted of online, informal, semi-structured interviews with the four participants. These interviews were conducted during the first week, the sixth week, and the final week of the program

The interview procedure included the following steps:
1. Creating an interview guide.
2. Conducting interviews with students during class at the beginning, middle, and end of the semester.
3. Recording the interviews and noting key points from students' responses.
4. Reviewing the recorded videos and transcribing the interviews after each session.

Table 3 presents the categories of interview questions used at the beginning, middle, and end of the program.

Table 3
Categorization of the Interview

Schedule	Category
Start of the program (Week 1)	1. Motivation for participating in the program 2. English learning experiences 3. Motivation for learning English 4. Experiences with using multimedia tools to learn English
The middle of the program (Week 6)	1. Learning interest - affective domain 2. Learning interest - cognitive domain 3. Learning interest - behavioural domain
The end of the program (Week 10)	1. Changes in ideas about the course 2. Changes in feelings about the course 3. Reflections on the integration of multimedia tools in the competency-oriented English curriculum 4. Reflections on perceived progress in English, competency, and multimedia tools use

3.4.2   Researcher's Diary for Instruction

After each class, the researchers documented an instructional diary (Figure 1), which included the class date, a summary of the course content, teaching focus, instructional objectives, learning outcomes, and the performance of each student that addressed aspects such as learning engagement, language usage ratio, improvement, and the learning situations, etc.

Figure 1 - Instructional Diary of the Researchers

3.4.3 Samples of students work

Samples of student work were collected from weekly class activities and included a diverse range of multimedia-assisted products, such as Padlet class interaction responses and sharing, Jamboard brainstorming ideas and reflection, and Canva presentations and posters.

3.5 Data collection procedure

The beginning of the semester

Course guideline	Interview	Class observation

The middle of the semester

Interview	Learning outcomes from multimedia platforms	Class observation

The end of the semester

Interview	Final achievement performance	Reflection	Class observation
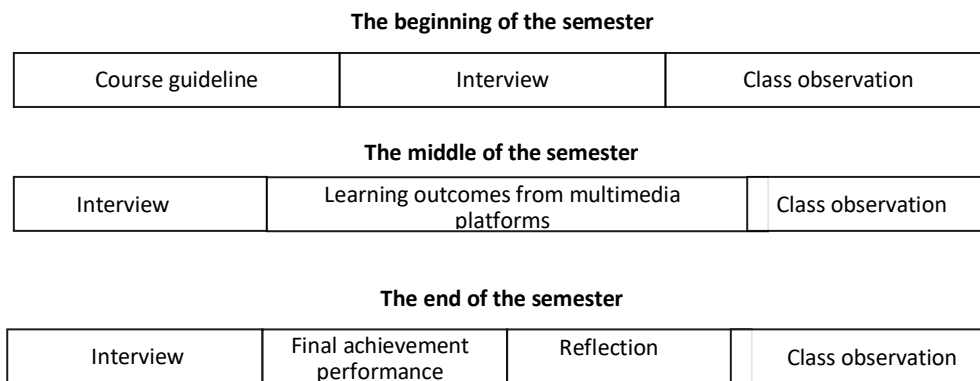
Figure 2 - Data collection procedure at the beginning, middle, and end of the semester.

3.6 Data analysis methods

Step 1: Organizing and preparing the data for analysis. The initial phase of data analysis involved transcribing interviews and systematically organizing the data. The researchers began by creating individual folders for each focal student, then further divided these four students' data into the beginning, middle, and end of the semester to organize.

Step 2: Reading through all the data and conducting initial open coding. The researchers used three-column tables to facilitate the initial open coding process. As shown in Figure 3, meaning units were entered in the right-hand column, preliminary codes in the middle column, and topic categories in the left-hand column. The **topic categories** represent initial, broad classifications used to identify and organize larger chunks of data. Sorting data into these categories provided an overview of the various topics within the dataset. These broad categories were subsequently refined, deleted, or combined to develop more specific coding categories.

Table 4 - Sample Open Coding Table

Topic categories	Codes	Data
Motivation	Motivation to join the program	1. I kind of like learning English and enjoy having the company of friends when learning new things. 2. I just wanted to find something to learn and enrich myself. 3. I don't have tutoring right now, so I want to enrich myself.
Changes	Changes for achievement	1. My English indeed has improved. For instance, I don't turn on Chinese subtitles anymore. I watch only English subtitles now. Also, I have learned how to apply various competency-oriented issues. 2. I found I have improved in English, technology, and competency. For instance, I spelled words faster and knew more important issues in the world. 3. I have learned how to read and use more words and sentences.
	Changes for learning motivation	1. I just wanted to find something to do at first and I didn't really like English, but I like English a little bit right now. 2. I didn't like English very much before, it was forced by my parents at first, but I try to like English now. 3. I was a little anxious about the class at the beginning and didn't think I had a good level of English; however, I didn't feel that way anymore and was convinced that I had more interest and motivation.

Step 3: Creating narratives about the student learning journey. The researchers created a narrative for each student's learning journey. Each narrative told a story about a student's initial motivation to join the program, his or her experience and motivation for learning English and using multimedia tools,

their learning interest for cognitive, affective as well as behavior, and their perceived progress in all aspects as English learning motivation, achievement, competency, and multimedia tools use.

Step 4: Identifying emergent themes. Themes are patterns or trends across data that are associated with a specific research question (Bazeley, 2013). In this study, the researchers used the student learning journey narratives and coding of sample student work to generate emergent themes that describe the impact of the multimedia-assisted competency-oriented English course on student motivation and achievement. For instance, in analyzing students' learning motivation, the researchers noticed a recurrence of codes across all four student data sets. A thematic statement with regard to the change in student motivation was therefore generated: While the four focus students entered the program with varying motivations for learning English, the 10-week multimedia-assisted competency-oriented English course appeared to have cultivated their interest in studying English, both in and out of classroom contexts.

Step 5: Making an interpretation of the findings. According to Patton (2002), "interpretation means attaching significance to what was found, making sense of findings, offering explanations, drawing conclusions, extrapolating lessons, making inferences, considering meanings, and otherwise imposing order" (p. 480).

The researchers interpreted the findings by examining changes in students' motivation, changes in students' achievement, and implications for future multimedia-assisted English instruction, etc.

4.   Results and discussion

4.1   Narratives of four students' learning journeys

4.1.1   Angel's learning journey

Angel perceived notable progress in her learning motivation, interest, and achievement in English and competency throughout the program, as detailed below.

Angel entered the program with high motivation to learn English alongside friends. When asked about her reason for joining the program, she shared, "I kind of like learning English and enjoy having the company of friends when learning new things" (Informal Interview, September 2023). Before joining the program, Angel had already formed a habit of regularly exposing herself to English through watching "YouTube videos and Netflix movies" (Informal Interview, September 2023). She found that multimedia made English learning more enjoyable and expressed a desire to share these tools with her friends while learning new multimedia tools in the program (Informal Interview, September 2023).

After a few weeks of classes, Angel reflected that multimedia-assisted English learning "was very helpful in all aspects," benefiting her reading, writing, listening, and speaking skills. For example, she noticed an increased willingness to express her ideas in English during class. She remarked, "If I encounter something I don't know, I can just think it is a practice" (Informal Interview, November 2023). Angel's positive learning attitude was also noted in the researchers' instructional diary. In addition to improving her English proficiency, Angel observed that she had become more attentive to "the important issues that global citizens must care about" (Informal Interview, November 2023).

As Angel continued participating in the program, her learning interest and motivation grew stronger. In her final interview, when asked about changes she noticed since the beginning of the program, Angel remarked, "I used to like English a little bit, but now I really love to learn it." She also reflected on her progress, emphasizing improvements in her English skills and competency: "My English indeed has improved. For instance, I no longer use Chinese subtitles; instead, I now listen to English directly with English subtitles as support. Also, I have learned how to apply various competency-oriented issues such as problem-solving ability, self-expression ability, and critical thinking ability" (Informal Interview, December 2023).

4.1.2   Chino's learning journey

Chino initially demonstrated some learning motivation but faced challenges in her learning environment. Over time, however, her motivation and achievements in English, competency, and technology use showed notable improvement, as detailed below.

Chino entered the program with some motivation and interest in learning. When asked about her reason for joining the program, she explained, "I just wanted to find something to learn and enrich myself" (Informal Interview, September 2023). Before joining the program, Chino recognized the importance of English as an international language for communicating with foreigners and broadening her horizons. However, she felt her English skills were insufficient and admitted she lacked familiarity with certain multimedia tools. Her primary goals were to improve her English, fully understand the content taught by the teacher, and gain confidence in using multimedia tools.

After a few weeks of classes, Chino noticed improvement in her English skills. She expressed a desire to use English to convey her ideas during class as a way to demonstrate her progress and achievements. Additionally, she became proficient in using multimedia tools that had previously been unfamiliar to her. Beyond enhancing her English and technology skills, Chino also developed competencies such as expressing her feelings, respecting others, and practicing gratitude in a digital English learning environment. Observations recorded in the researchers' class diary highlighted her gradual growth in English proficiency, multimedia tool usage, and overall competency.

As Chino continued participating in the program, her learning interest and motivation strengthened. In her final interview, when asked about changes she noticed since the beginning of the program, Chino reflected, "I just found something to do at first, and I didn't really like English, but I have a little bit liked English right now" (Informal Interview, December 2023). She also shared, "I found I have improved in English, multimedia tools use, and competency. For instance, I spell words faster, know how to use more multimedia tools, and understand more important competency-oriented issues in the world, such as self-expression ability and communication skills" (Informal Interview, December 2023). By the end of the program, Chino recognized her progress in all aspects of learning.

4.1.3 Kiki's learning journey

Kiki initially exhibited low levels of learning motivation and achievement; however, her learning motivation, interest, and achievements in English, competency, and technology use ultimately improved, as detailed below.

Kiki entered the program with low learning motivation. When asked about her reason for joining, she responded, "My parents forced me to join this program" (Informal Interview, September 2023). She also felt anxious due to previous negative experiences with digital learning. While she acknowledged the importance of learning English and expressed a desire to improve her skills, she admitted,

> "I was not very interested in learning English, especially with multimedia tools. I felt that technology was constantly changing, and I was too lazy to learn" (Informal Interview, September 2023).

After a few weeks of classes, Kiki noted that her anxiety had decreased. She became more willing to learn English and engage with competency-oriented issues using multimedia tools, describing the experience as "a little bit interesting" and "useful" (Informal Interview, September 2023). She also observed gradual improvement in her English skills, including reading, writing, listening, and speaking. Furthermore, Kiki began actively using English to express her ideas in the stress-free class environment, which was observed by the researchers and documented in the instructional diary.

As Kiki continued participating in the program, her learning interest and motivation grew stronger. In her final interview, she reflected on the changes she experienced: "I didn't like to learn English very much before because it was forced by my parents, but now I try to like English." She added,

> "At the beginning, I was afraid that the teacher would be fierce or that I wouldn't be able to learn English well. But I don't feel that way anymore. I don't feel terrified. Instead, I have learned a lot, like how to use more vocabulary and sentences" (Informal Interview, December 2023).

Finally, Kiki recognized the benefits of using multimedia tools to learn English. She mentioned that her school English scores had significantly improved due to these multimedia courses. Additionally, she learned how to apply competency-oriented issues, such as media literacy and environmental awareness, in real-life contexts.

4.1.4   Jerry' learning journey

Jerry perceived notable progress in his learning motivation, achievement in English, technology use, and competency, as detailed below.

Jerry entered the program with a high level of motivation. When asked about his reason for joining, he explained,

> "I don't have tutoring right now, so I want to enrich my English" (Informal Interview, September 2023).

In the initial interview, Jerry expressed that he thought learning English was essential and believed using multimedia tools could strengthen his English skills while making the learning process more interesting. His main expectation was to improve his English. Observations from the researchers highlighted Jerry as a motivated and proactive student.

After a few weeks of classes, Jerry's motivation to learn English continued to grow, fueled by the use of multimedia tools. He became more willing to express himself in English, even though he initially lacked confidence. Over time, his anxiety about the English course diminished, thanks to his progress and increasing motivation. In a digital English environment, Jerry not only improved his ability to write complete sentences but also learned how to use multimedia tools effectively to organize his assignments and notes. Overall, his learning motivation and achievement showed steady improvement.

As Jerry continued participating in the program, he remained highly motivated to learn. In his final interview, he reflected on his progress:

> "I was a little anxious about the class at the beginning and didn't think I had a good level of English; however, I don't feel that way anymore and am convinced that my English has indeed improved, and I have more interest now" (Informal Interview, November 2023).

Jerry also acknowledged that the multimedia tools he learned during the program were truly "useful." He credited the multimedia courses with improving his English skills and helping him develop competency-oriented abilities closely tied to real life, such as critical thinking, teamwork, and maintaining healthy friendships and family relationships.

4.2   The impact of the 10-week multimedia-assisted competency-oriented English instruction on students' English motivation

The four narratives about the students' learning journeys revealed varying levels of initial motivation for learning English. Angel and Jerry entered the program with high motivation, as evidenced by their interview responses and consistently reflected throughout their narratives. Chino, meanwhile, expressed mixed feelings about learning English. Although she acknowledged its importance and expressed a desire to enrich herself, she admitted that she didn't really enjoy learning English initially, indicating a moderate level of motivation. Lastly, Kiki demonstrated minimal motivation at the outset, stating that she joined the program because her parents forced her to. However, she still recognized the value of learning English.

After a few weeks of classes, Angel and Jerry experienced even higher motivation to learn English, largely due to the use of multimedia tools. They both found these tools beneficial, interesting, and engaging, which encouraged them to actively pursue English learning. Chino's motivation gradually increased over time, while Kiki's anxiety about learning English decreased, making her more willing to engage with the language. For both, multimedia tools played a significant role in fostering a positive attitude toward learning English.

By the end of the semester, all four students expressed in their final interviews that their motivation to learn English had indeed increased, as evidenced by the narratives of their learning journeys.

4.3 The influence of the 10-week multimedia-assisted competency-oriented English instruction on students' achievement

4.3.1 English achievement

The analysis of students' English achievement was based on students' assignments, informal interviews, and the researchers' weekly diary for instruction. In general, the four focal students perceived that their English proficiency had improved. They all mentioned this improvement in their final informal interviews. This improvement was also reflected in student assignments and the researchers' weekly diary for instruction. Focal students' listening, speaking, reading, and writing achievements are reported in the following sections.

(A) Listening. This study found that students made progress in their listening proficiency. For instance, Angel was able to watch English movies without Chinese subtitles. In her interview, she said,

> "My English listening skills indeed have improved. For example, I no longer use Chinese subtitles; instead, I now listen to English directly with English subtitles as support" (Informal Interview, December, 2023).

Besides, Jerry perceived the progress of his English listening skills. He stated,

> "I was initially a bit anxious about the class because I didn't think my English listening was good; however, I didn't feel that way now and was convinced that my English listening skills indeed improved" (Informal Interview, November, 2023).

Jerry's listening progress was also documented in the researchers' diary for instruction.

(B) Speaking. The four focal students entered the class with a reluctance to speak English. They interacted with each other and the instructor mainly in Mandarin. However, as the course progressed, the instructor observed a growing willingness and progress among the students to speak English.

In the final achievement performance, all students were required to orally present their final assignments and share their reflections, which found that students made progress in their speaking proficiency. For instance, Angel thought that her speaking skills improved a lot as she learned how to speak more fluently, accurately, and appropriately. Besides, Chino felt that her English speaking also improved as she learned how to speak more English sentences and vocabulary.

In addition, students' improvement in their speaking proficiency was also revealed in the researchers' diary for instruction. At the beginning of the semester, the researchers mentioned in the diary, "Students were afraid and resistant to speak English, while they interacted with the instructor only in Mandarin." In the middle of the semester, the researchers found that students had become more willing to speak English, with a general improvement in their speaking skills. By the end of the semester, it was demonstrated that some students performed very well, and some students made great progress in their English speaking.

(C) Reading. The study found evidence of progress in students' reading proficiency. For example, in Kiki's reflection, she mentioned that she could read more storybooks and apply what she learned in her reports or presentations. In the interview, Kiki also stated, "At the beginning, I was afraid that I wouldn't be able to learn English well. But I don't feel anxious anymore. Instead, I have learned how to read the English books and can understand more vocabulary and sentences" (Informal Interview, December, 2023).

Similarly, Angel, Chino, and Jerry also recognized improvements in their reading skills, as indicated in their final reflections and documented in the researchers' instructional diary.

(D) Writing. The four focal students entered the class with a resistance to writing English. Most of them finished assignments in Chinese at the beginning of the semester. Over the course of the program, however, the researchers observed they became more willing to write in English, accompanied by improvements in their writing performance. As shown in Figure 3, students initially

wrote exclusively in Chinese or just wanted to write a few English words. In contrast, Figure 4 illustrates that the four focal students later demonstrated an increased willingness to write English vocabulary and sentences, with gradual improvement in their writing skills.
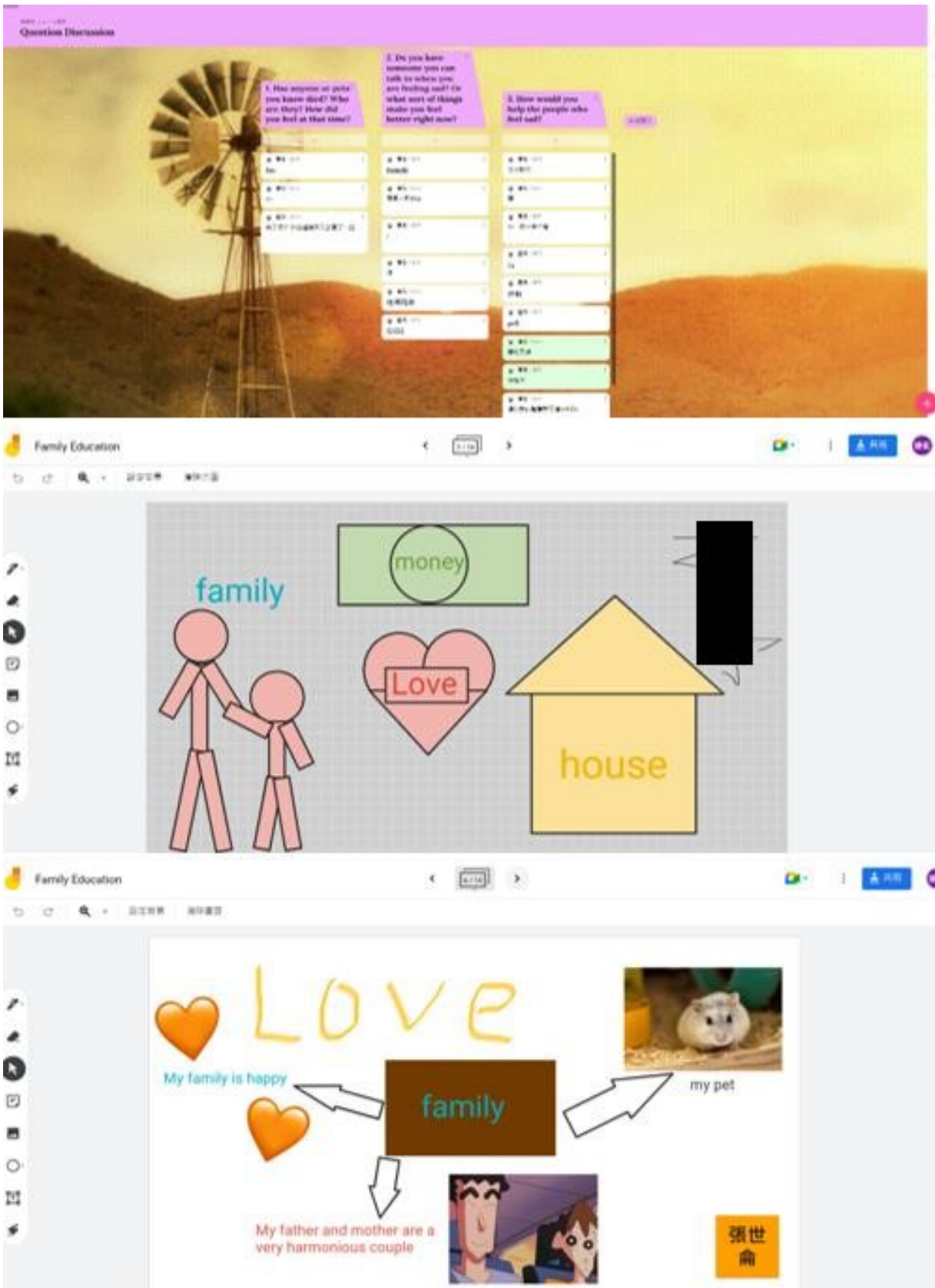
Figure 3 - Students' Assignments at the Beginning of the Semester
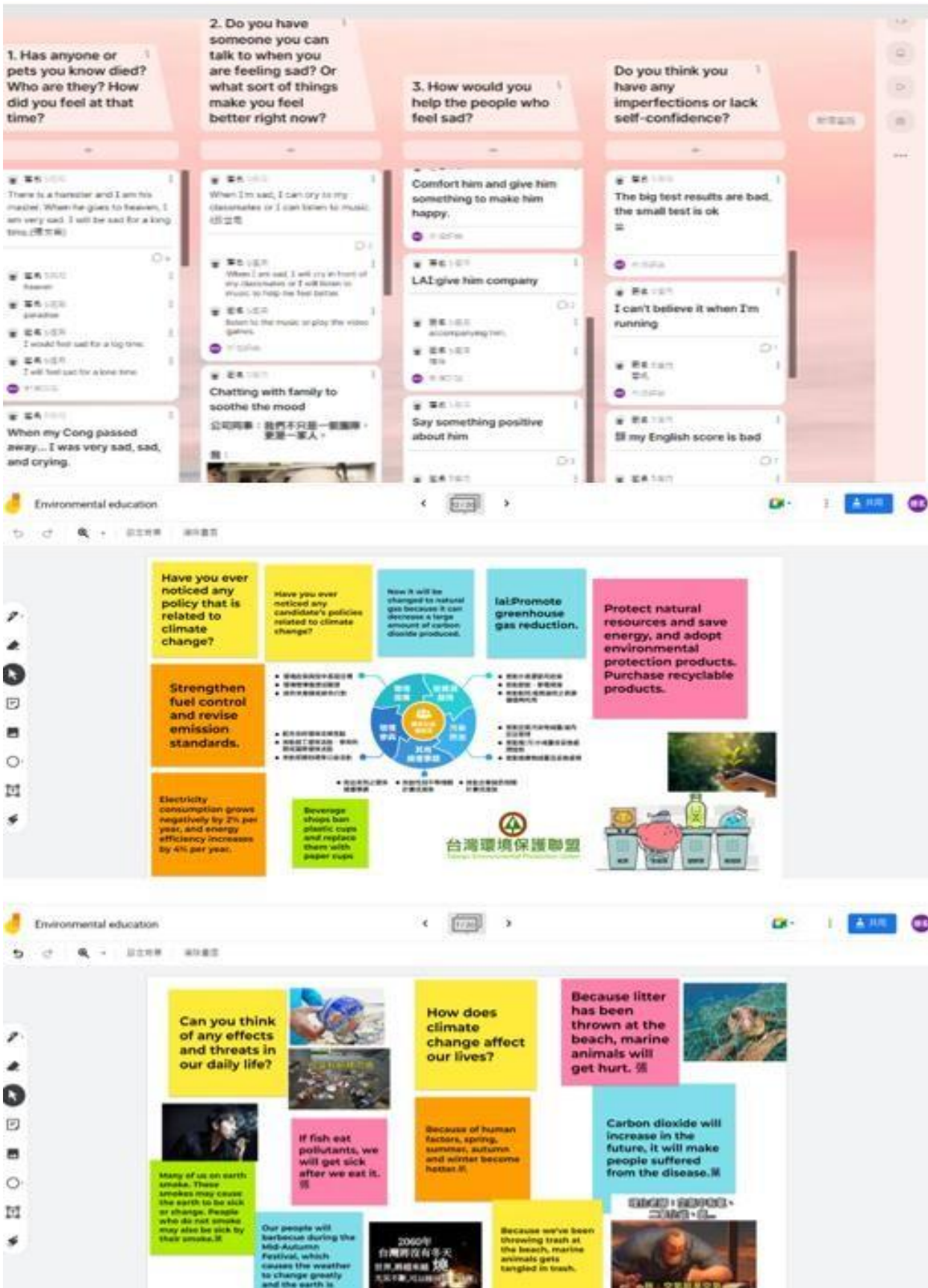
Figure 4 - Students' Assignments at the End of the Semester

Students' improvement in writing proficiency was also documented in the researchers' instructional diary. At the beginning of the semester, the diary observed, "Students were resistant to writing in English; most wrote in Chinese or only wanted to write a few English words." By the middle of the semester, students had become more willing to write in English, demonstrating general improvement in their writing skills. By the end of the semester, students' performance was remarkable, and their writing showed significant progress.

Figure 5 illustrates the four focal students' perceptions of their progress in writing skills. For instance, Angel reflected,

> "I could write more words that rarely appear in my daily life." Similarly, Jerry remarked, "I learned the usage of different words and could write more diverse sentence patterns."
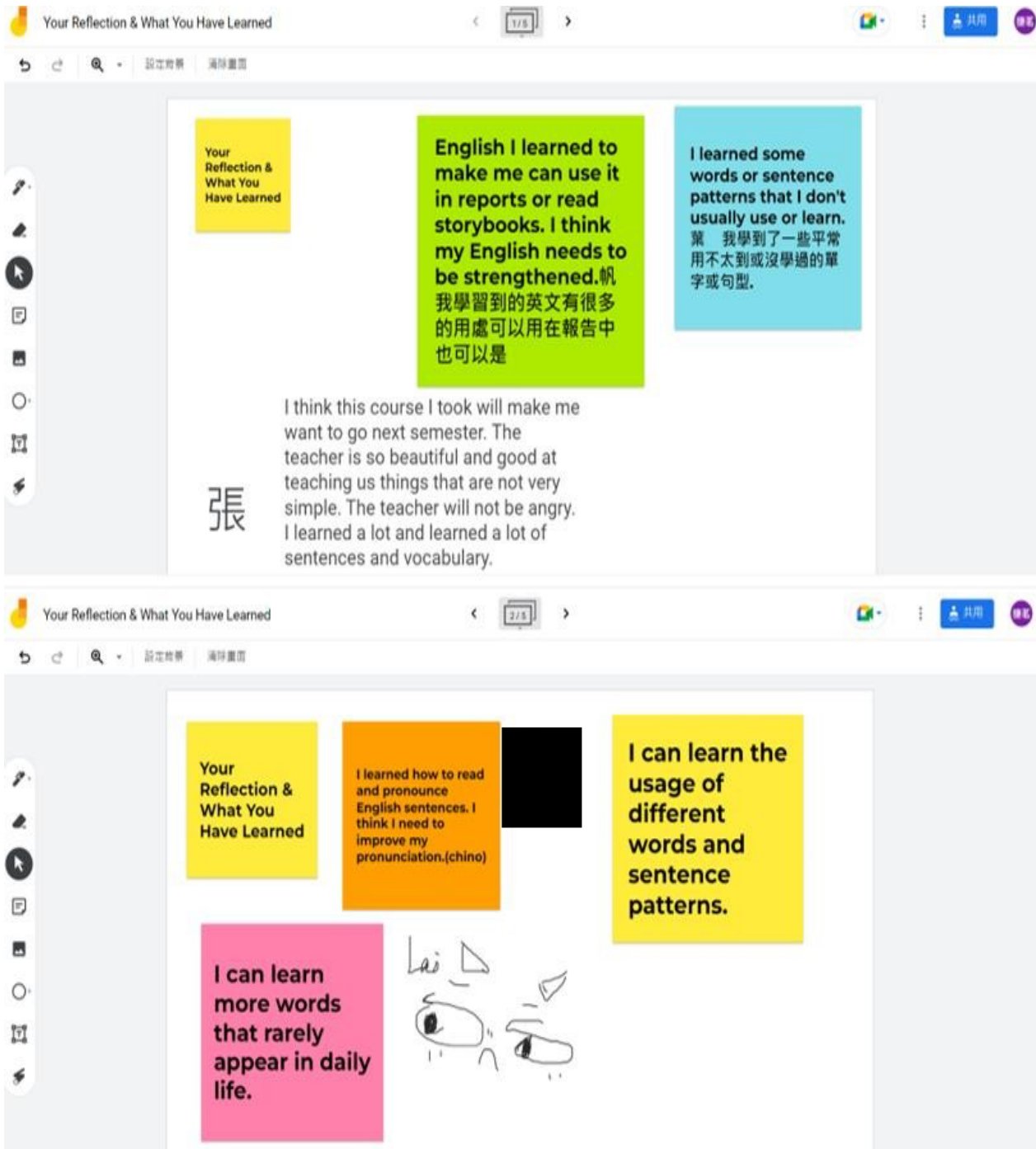
Figure 5 - Students' Reflections on Their Progress in English Writing

4.3.2   Achievement in competency-oriented issues

The analysis of the four focal students' task outputs and interview responses demonstrates significant improvement in their understanding and ability to explore competency-oriented issues. For example, Angel stated in her interview, "I have learned how to apply various competency-oriented issues such as problem-solving ability, self-expression ability, and critical thinking ability" (Informal Interview, December 2023). Similarly, Kiki remarked, "I gained a better understanding of how to apply these competency-oriented issues in real life, such as media literacy ability and environmental awareness" (Informal Interview, December 2023). Jerry also shared, "I learned more competency-oriented issues that are closely related to life, such as critical thinking ability, teamwork skills, and how to maintain good friendships and family relationships" (Informal Interview, December 2023).

The researchers' instructional diary further documented the students' progress in understanding competency-oriented issues. Midway through the semester, the diary noted, "there was still room for improvement in students' understanding of competency-oriented issues." However, by the end of the semester, the students not only demonstrated better performance but also showed a notably advanced understanding and application of these issues.

The following includes examples of students' classroom performance. Figure 6 illustrates work produced by students in the unit on **family awareness and responsibilities**. In this task, students were asked to create cards expressing their gratitude to their family and teachers. This activity was designed to help students recognize the importance of gratitude as a competency-oriented issue and to take actionable steps by using English to convey their appreciation.

Figure 6 - Students' Works for the Competency-oriented Issue of Family Awareness and Responsibilities

Similarly, in the unit on **life lessons**, students read a picture book by Pat Thomas. This unit focused on expressing ideas and feelings in English related to facing death, as well as the importance of cherishing what they have in life. Figure 7 illustrates students' personal expressions of their

thoughts and feelings for someone who has passed away, conveyed through messages on cards. This activity served as both a medium for communication and a form of spiritual expression, enabling students to symbolically communicate with the deceased.
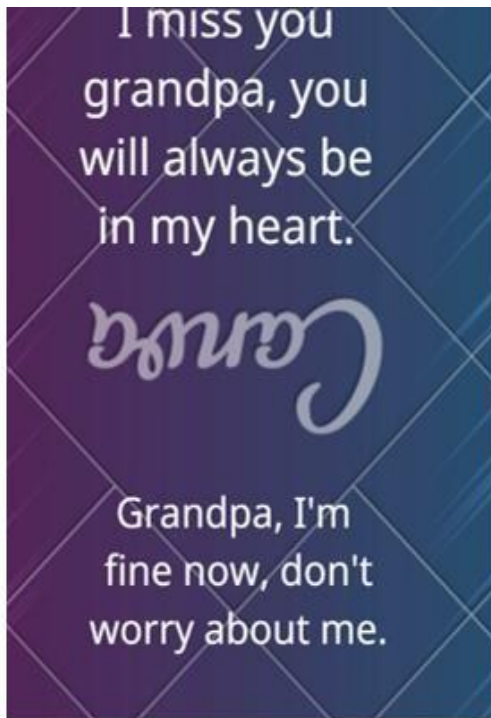
Figure 7 - Students' Works for the Competency-oriented Issue of Life Lessons

In the unit on **environmental protection**, students were tasked with proposing an environmental policy aimed at saving the planet. Additionally, they were required to identify and prioritize essential items needed for personal protection during natural disasters, as illustrated in Figure 8.

Figure 8 - Students' Works for the Competency-oriented Issue of Environmental Protection

The students' achievements demonstrate that this program effectively supports their learning of English and the development of key competencies. Furthermore, the findings revealed that, over the 10-week course, students not only increased their learning motivation but also made significant improvements in their listening, speaking, reading, and writing skills. Additionally, they developed critical competencies, including media literacy, critical thinking, problem-solving, self-expression, communication, and teamwork skills.

5. Conclusion

To summarize, the findings indicate that students' motivation to learn English significantly increased during the program. Additionally, students demonstrated improved achievements in listening, speaking, reading, and writing skills, as well as in competencies such as media literacy, critical thinking, and problem-solving abilities.

Based on the findings, the researchers offer several suggestions and strategies for instructors to enhance students' learning:

1. Boosting Students' Motivation: Firstly, to enhance students' motivation, the following strategies are recommended:

(a) **Incorporate game-based learning tools**: Platforms such as Kahoot, Quizizz, Quizlet, Wordwall, and Blooket can improve motivation by providing engaging and rewarding learning experiences. These tools offer a sense of achievement and foster greater focus, particularly for students with a competitive mindset.

(b) **Frequent encouragement**: Positive reinforcement—"encourage rather than blame, praise rather than criticize"—can build students' confidence, increase their willingness to learn, and empower them to overcome setbacks.

(c) **Create a stress-free learning environment**: A relaxed and enjoyable classroom atmosphere can make students more willing to learn, engage, and express their ideas, thereby improving their learning outcomes and achievement.

2. Supporting Content Comprehension: Secondly, to enhance students' understanding of lesson content, instructors might **utilize visual aids and multimodal instructional techniques**: Since students learn in different ways, combining visual aids with multimodal approaches can cater to diverse learning preferences, improve content comprehension, and foster greater interest in learning.

3. Integrating Multimedia Tools: Thirdly, integrating multimedia tools into lessons can create opportunities for language practice and support students' English achievement. Several free online tools can help instructors design interactive activities.

(a) **Interactive writing practice**: Tools like Jamboard, Padlet, Slido, and VoiceThread can assist students in developing their writing skills.

(b) **Vocabulary learning and review**: Platforms such as Quizizz, Wordwall, Kahoot, and Quizlet are particularly effective for vocabulary practice.

4. Benefits of Multimedia Integration: Fourthly, the study suggests that integrating multimedia into English instruction can:

(a) make lessons more dynamic and interactive.
(b) foster differentiated and adaptive teaching approaches.
(c) encourage autonomous learning.
(d) provide diverse assessment tools for evaluating students' progress.

In conclusion, educators who embrace innovative multimedia-assisted instructional strategies can significantly enhance students' motivation, engagement, and achievement. These approaches not only contribute to more effective English learning but also create a more enjoyable and rewarding educational experience.

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Appendix - Interview questions

I. At the Beginning of the Semester
1. Motivation for participating in the program
   - Why did you want to join the Bilingual Digital Companions for Learning program?
   - Do you have any expectations or concerns about participating in this program?
2. English learning experiences
   - How long have you been learning English?
3. Motivation for learning English
   - Is learning English important to you? Why or why not?
   - How much time do you spend learning English each week?
4. Experiences with using multimedia tools to learn English
   - In your daily life, do you have opportunities to use multimedia tools to learn English or use English?
   - If you answered "yes" to this question:
   - Please describe how you use multimedia tools to learn or use English.
   - What are your thoughts about using these tools?
   - If you answered "no" to this question:
   - Would you be looking forward to using multimedia tools to learn English?

II. In the Middle of the Semester
1. Learning interest - Affective domain
   - Do you feel worried or nervous when the teacher uses English to discuss competency-oriented issues in class?
2. Learning interest - Cognitive domain
   - Do you think that an English digital learning environment helps you learn English while also acquiring other knowledge/skills?
3. Learning interest - Behavioural domain
   - After participating in the Bilingual Digital Companions program, are you willing to actively use multimedia tools to learn English?
   - Are you willing to actively express your thoughts and opinions on competency-oriented issues in English during classes?

III. At the End of the Semester
1. Changes in ideas about the course
   - Regarding English learning, at the beginning of the semester, you said, "xxx." Has your opinion changed now?
2. Changes in feelings about the course
   - You initially had concerns about "xxx." Do you still have these feelings now?
3. Reflections on the integration of multimedia tools in the competency-oriented English curriculum
   - After a whole semester, what are your thoughts on multimedia-assisted competency-oriented English instruction?
4. Reflections on perceived progress in English, competency, and multimedia tools use
   - Do you think your abilities in English, competency, and multimedia tools use have improved?

9 - Innovating Chinese Language and Culture Education: A Film-based Course for Singapore's Digital-Era Learners

Mo Zhang

yncmz@nus.edu.sg

Yale-NUS College / National University of Singapore

Abstract

This paper introduces a novel approach to Chinese language and culture education for advanced learners in Singapore. The course integrates traditional cultural elements with modern digital themes, employing film-literature pairings, interactive assignments, and collaborative digital tools to foster a deeper understanding of Chinese language and heritage. By addressing challenges specific to Singapore, such as bridging heritage and non-heritage learners, the course prioritizes cultural identity while advancing formal language skills. It equips students to navigate Chinese social media, understand cultural references, and engage confidently with both classical and modern texts, positioning heritage language learning within a vibrant, modernized framework.

Keywords: Chinese language education, heritage language learning, film-based pedagogy, digital tools, cultural identity

1.   Introduction

In today's digital and multilingual Singapore, where English increasingly dominates in education and business, heritage languages like Chinese often find themselves relegated to secondary status. Teaching Chinese language and culture thus requires an approach that not only deeply engages heritage learners but also enriches the experience for non-heritage students, subtly bridging cultural gaps. Former Prime Minister Lee Hsien Loong has emphasized the essential role of proficiency in mother tongue languages in nurturing Singapore's national identity and deepening cross-cultural understanding. His perspective highlights the necessity for younger generations not only to know their heritage language but also to use it confidently in meaningful contexts.

This course, specifically crafted for students at the ACTFL Advanced High level, which corresponds to HSK Level 5 and above, adopts a dynamic approach that utilizes digital tools, interactive media, and real-world projects. By integrating traditional cultural content with new educational technology, the course transcends mere memorization to offer an immersive and comprehensive learning experience. Students will develop advanced linguistic skills alongside critical cultural competencies, preparing them for a lifetime of effective communication and cultural engagement. By fostering these abilities, the course supports Singapore's commitment to uphold linguistic diversity and positions heritage languages as central to national identity.

2.   Relevance to Singaporean Society

This course addresses the unique challenges faced by advanced learners of Chinese in Singapore. Insights from students who have grown up attending Chinese classes reveal a common pattern: while many are fluent in speaking and understanding Chinese, they often struggle to engage effectively with Chinese social media or converse naturally with native speakers. Key challenges include interpreting implied meanings, using language appropriately across various contexts, and avoiding unintentional impoliteness.

Additionally, many students follow cultural norms without fully understanding their origins, largely due to the lack of explanation from parents or traditional educational settings. This limited cultural and literary exposure creates a gap in their ability to recognize commonly used references and expressions, further hindering their ability to communicate with nuance and depth.

Feedback also suggests that traditional Chinese education methods in Singapore, which often focus on rote memorization and a rigid pedagogical approach, do not always resonate with all students and may lead to decreased motivation. The limited exposure to the broader spectrum of Chinese literature and culture typically afforded to native speakers further exacerbates this issue. There is an increasing recognition of the need for more dynamic and inclusive teaching strategies that can deepen students' understanding and appreciation of the language.

To bridge these gaps, the course integrates a variety of cultural references that students encounter in their everyday digital and social interactions, smoothly transitioning from historical to contemporary contexts. For instance, students explore Chinese myths to see their impact on modern values and local Singaporean religious practices, delve into classical literary phrases such as Li Bai's '深藏功与名' (keep one's merit and fame hidden), and examine how themes from 'Journey to the West' and Lu Xun's 'Kong Yiji' appear in modern media forms like memes. This approach not only informs students about the origins of these cultural elements but also shows their modern applications, filling knowledge gaps and enhancing their understanding of nuanced language use. The course's clear explanations and historical context enrich students' appreciation of the significance of these expressions and behaviors.

3.   Theoretical Foundation

3.1   Cultural Relevance and Social Identity in Language Learning

Research highlights the importance of cultural relevance in language education, especially for learners in multicultural settings like Singapore. Studies, such as those by Wen (2011) and Kagan (2012), underscore the unique motivational and identity-related challenges faced by students when cultural content is minimal. Dos Santos (2021) finds that students demonstrate greater commitment to language studies when these studies strengthen their cultural and social identities. By incorporating culturally relevant materials, the course not only enhances learners' connections to the language and culture but also helps them integrate their complex identities.

3.2   The Role of Movies in Language Education

The use of movies in language classes effectively bridges cultural and linguistic understanding. Films provide dynamic engagement by presenting cultural nuances in authentic contexts, as noted by Cai (2020) and Liu (2013). These movie-based activities allow students to construct and share cultural knowledge, thereby creating contexts for new conversations in their language, making the learning process both engaging and deeply informative.

3.3   Collaborative and Digital Tools in Language Education

Digital tools, including AI-based platforms and collaborative technologies like OneNote, play a critical role in modern language education. Niu et al. (2022) and Blake (2013) highlight how these technologies support tailored instruction and foster authentic language use through real-time feedback and collaborative learning environments. These tools provide dynamic, interactive opportunities for students to engage deeply with both the Chinese language and culture, facilitating a more effective and immersive learning experience.

4.   Course Design and Structure

This course combines traditional Chinese culture and contemporary perspectives through film and text pairings, with weekly assignments that involve vocabulary development, cultural analysis, film

study, and peer-led discussions to foster active engagement. The course culminates in a creative final project that encourages students to apply their learning in a comprehensive, hands-on adaptation.

4.1   Film and literary pairings

The curriculum is thoughtfully structured to explore six major topics over the semester, each topic featuring a combination of one film and two literary texts that complement and deepen the understanding of each theme. For each topic, (i) the First Text introduces the historical and cultural background relevant to the topic. This preparatory phase is crucial for setting the context. For instance, before watching the movie *Chang'an*, students study Tang poetry—its forms, evolution, famous poets, and the stylistic rules and rhythms that characterize it. This foundational knowledge equips them to appreciate the cultural nuances depicted in the film. On the other hand, (ii) the Second Text involves a close reading of the literature related to the film. This deep dive helps students analyse and connect the thematic elements of the text with the film. For example, when exploring Liu Cixin's *The Wandering Earth*, students not only watch the film adaptation but also critically engage with the novel, comparing and contrasting the literary narrative with its cinematic interpretation. This dual-text approach ensures that students gain a robust understanding of each topic by engaging both broadly with cultural contexts and specifically with textual analysis. The film serves as a bridge, linking theoretical knowledge with visual and narrative representation, thereby enhancing students' appreciation and critical engagement with Chinese language and culture.

4.2   Classroom activities and assignments

The course is designed to maximize student engagement and autonomy, employing a flipped classroom model that emphasizes student-driven learning and preparation. This approach not only enhances linguistic and cultural comprehension but also fosters critical thinking and collaborative skills.

4.2.1   Pre-class preparation

In this course, preparation plays a crucial role and is highly collaborative, designed to foster both independence and teamwork. Instead of being provided with predefined vocabulary and grammatical structures, students are actively engaged in creating their own vocabulary lists, identifying key grammatical points, and noting significant phrases from the assigned texts.

To facilitate this collaborative process, the entire class shares a OneNote notebook, which enables real-time collaboration and asynchronous contributions while allowing the instructor to monitor progress and provide continuous feedback. Serving as a central repository, the OneNote notebook allows all students to compile their findings, prepare for discussions, and stay organized. This approach ensures that students remain focused and productive throughout the course.

Students are also required to develop thought-provoking questions based on their readings to bring to class discussions. These questions are designed to delve deeper into the material, encourage critical thinking, and challenge their peers' understanding. This preparatory work is a cornerstone of the course, forming the basis for in-class discussions and contributing significantly to students' final grades.

Using OneNote in this manner enhances students' ability to manage and organize their work while fostering a sense of community and shared responsibility for learning. It transforms the classroom into a dynamic, collaborative environment where preparation is integral to success. This approach not only makes the learning process more engaging but also instills a greater sense of accountability among students, ensuring a richer educational experience for everyone involved.

4.2.2   In-Class Discussions and Analysis

In-class discussions are a cornerstone of this course, primarily driven by students to foster a deeper engagement with the cinematic content. Each movie featured in the curriculum is paired with a student-led discussion session, where two students work as a group to facilitate the conversation.

This collaborative approach not only helps students delve deeper into the film's content but also enhances their leadership and presentation skills.

Before each movie discussion, all students are required to watch the designated movie independently and complete a detailed worksheet as homework. This worksheet covers various aspects of the film including its summary, themes, characters, and cinematic techniques. It serves as a preparatory tool that prompts students to critically analyze the film and organize their thoughts and observations, which they then bring to the classroom discussion.

For each movie, a pair of students is tasked with leading the in-class discussion. These discussion leaders use the completed worksheets as a foundation, combining them with their own findings and prepared questions to guide the session. This approach ensures that the discussions are thorough and informed, allowing for a deeper exploration of the film's content. The leaders are encouraged to foster a dynamic dialogue, challenging their classmates to engage more deeply with the material and to think critically about the cinematic presentation and its underlying messages.

This method not only enriches the learning experience but also cultivates leadership and presentation skills among the students, making the classroom environment more interactive and student-centered.

4.2.3   Creative Assignments and Final Project

Tang Poetry Analysis. Students engage in an analytical assignment where they compare translations of Tang Poetry by both humans and AI. This task involves a detailed examination of which translation captures the essence of the original poems most effectively. Students are required to document their analysis process, including sharing prompts and chat logs, which deepens their understanding of translation nuances and enriches their appreciation of poetic language and its cultural implications.

After completing this task, students reported a greater appreciation for the unique beauty of Tang poetry. They noted several challenges and unique aspects of translating such works, including:

Beauty of Chinese Characters: Students recognized the aesthetic and semantic richness of Chinese characters, which often cannot be fully replicated in translation due to their visual and conceptual complexity.

Lack of Tenses: The absence of tense in Chinese poetry can lead to ambiguities when translated into languages with strict tense requirements, posing significant challenges in maintaining the original's temporal fluidity.

Allowed Ambiguity: Chinese poetry often leverages ambiguity to enhance the lyrical quality and depth of meaning, a feature that can be lost in translation where clarity might be prioritized.

These insights highlight the intricacies of translating poetic language and underscore the inherent limitations of conveying certain poetic qualities across languages.

Final Project: "With Her Eyes" Film Adaptation. The final project challenges students to adapt the novel "With Her Eyes" by Liu Cixin into a visual narrative, integrating their accumulated knowledge creatively. The project involves several key phases:

Novel Analysis and Adaptation Planning: Students analyze the main themes of "With Her Eyes" and identify essential scenes for the film adaptation, choosing between a faithful adaptation or an innovative one focusing on core emotions and themes.

In-Class Essay – Key Scene Adaptation: During an in-class essay, students adapt a key scene, requiring detailed scene descriptions, character dialogues, and camera directions.

Storyboard Design: Using digital tools like Canva, students create storyboards that visualize the narrative transitions and designs, also submitting prompts and chat logs used in directing AI tools for scene visualization.

Final Presentation and Evaluation: Students present their adaptations, discussing their creative decisions and the visual language used, followed by a Q&A session where they receive feedback and are evaluated based on the depth and creativity of their work.

This approach strengthens language and cultural comprehension while empowering students to collaborate with AI tools, sparking innovation and creativity in their projects related to Chinese literary and cinematic traditions.

5. Impact on Learners

Students have reported remarkable improvements in their confidence and language abilities as a result of taking this course. They have developed a deeper understanding of cultural references, including the language used on Chinese social media, memes, and emojis. This newfound knowledge has made their interactions on these platforms more accessible and relatable. Additionally, students feel more confident in their spoken Chinese, effectively employing both sophisticated vocabulary and everyday expressions. This balance has significantly enhanced their conversational fluency.

Furthermore, students have noted substantial increases in their reading speed and comprehension. Through exposure to a wide range of texts—from classical poetry to modern prose and digital content like social media posts—they have become adept at recognizing different writing styles. This varied exposure has sharpened their analytical skills, enabling them to appreciate and distinguish nuances between formal and colloquial language across diverse texts.

Overall, student feedback highlights the course's effectiveness in fostering a well-rounded development of cultural understanding and language proficiency. This growth not only aligns with the course's objectives of preparing students for various communicative contexts but also deepens their engagement with the Chinese language and culture across multiple formats.

5. Conclusion

This course offers an innovative approach to advanced Chinese language education in Singapore, combining cultural relevance with collaborative and digital methodologies to enhance learning. Pairing classical texts with contemporary media helps students forge deep cultural connections and strengthen their linguistic foundations. It boosts confidence, equips students to navigate Chinese social media, and develops critical language skills essential for advanced learners in a diverse society.

This educational model also supports language preservation and cultural understanding in Singapore. By making learning meaningful and engaging, it meets advanced learners' practical needs while sustaining the vibrancy of Chinese cultural heritage in a multicultural context. It benefits Singapore's societal and cultural landscape, showcasing how innovative educational practices can deepen connections to heritage while embracing modernity.

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10 - Helping Them See from Caregiving Perspectives: Visual Image Training in English Language Pedagogy for Nursing Students and Other Learners

Izumi Dryden

izumeerkat@me.com
Mie Prefectural College of Nursing, Japan

Abstract

The present study showcases the potential of visual image training to improve English language proficiency. While the study focuses on Japanese undergraduate nursing students in EFL courses, the benefits of visual image training extend to many other students preparing to work in caregiving and service fields. Visual image training asks students to cultivate their abilities to "read" the emotional and physical states of patients––through focused classroom observation of "case studies" involving characters in videos (feature films and television series) and in imaginative literature. In such ways, visual image training enriches not only communication competencies but also the empathy and cultural sensitivity essential for holistic nursing practice. For learners and teachers, visual image training is an emerging and promising approach in English language pedagogy. Visual image training can improve the communication skills of nursing students as providers of effective patient care. It can also help many other students prepare to work in a variety of service disciplines.

Keywords: visual image training, communicative competence, critical thinking, empathy, cultural sensitivity, holistic and interactive teaching and learning

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1. Introduction

The present study explores the potential of visual image training to significantly improve the English language proficiency of EFL students, particularly Japanese nursing students and others preparing for caregiving professions. Visual image training involves developing the ability to "read" the mental and physical states of patients through practice in analyzing visual case studies drawn from videos (feature films and television series) and imaginative literature. This method not only enhances students' diagnostic and communication skills but also fosters empathy and interpersonal sensitivity, which are key components of holistic nursing practice.

The integration of visual image training into English language pedagogy represents a shift towards more holistic and interactive teaching methods. Traditional language teaching often emphasizes grammatical accuracy and vocabulary acquisition in isolation. By contrast, visual image training situates language learning within the context of meaningful, emotionally resonant interactions. Such an approach not only improves linguistic proficiency but also encourages the development of critical thinking, empathy, and cultural sensitivity—skills that are essential for success in many service-oriented professions (Brown, 2007).

Moreover, visual image training aligns with contemporary trends in education that emphasize multimodal learning, including the use of various media forms to deepen understanding. Feature films, television series, and literary works offer rich, layered narratives that students can analyze, discuss, and reflect on, providing a more engaging learning experience than traditional language exercises. Research shows that multimodal learning improves both language acquisition and emotional engagement, making it a powerful tool for language teachers (Stein, 2008).

The integration of visual image training into English language pedagogy is promising for both learners and educators. By focusing on visual case studies, students sharpen their interpersonal

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communication skills as they learn to interpret the emotions and the non-verbal cues of patients more effectively. For nursing students like mine––Japanese undergraduates taking required courses in English as a foreign language––visual image training aligns with the practical demands of patient care, improving students' abilities to communicate and empathize with patients from diverse backgrounds.

Beyond the healthcare field, visual image training holds great promise for students in many service disciplines, helping them develop communication skills necessary for effective engagement with clients and colleagues across many domains in business, education, and other fields. As an emerging pedagogical tool, visual image training offers an innovative approach to language learning that bridges the gap between linguistic competence and the interpersonal skills vital in professions involving caregiving and service to others.

The present study argues that visual image training is a method with considerable potential for enriching both the language proficiency and the caregiving abilities of students preparing for service-oriented careers. By blending language learning with attention to emotional intelligence and cultural literacy, visual image training improves the overall effectiveness of language teaching and learning in contexts that prioritize human connections and caregiving.

Video is an ideal medium for visual image training. Much like literary works, feature films and television series present scenes of men and women struggling with the problems of life. Such drama provides learners with models that help them cultivate their skills in communication, critical thinking, and empathy. For nursing students, videos with health care themes offer dynamic, emotionally charged scenes of interactions between nurses and patients and between professional colleagues that offer rich learning opportunities.

Nursing education scholar Brent W. Thompson advocates the use of videos specifically in nursing courses. Thompson (2016) notes the effectiveness of video in representing scenes of emotional drama, notably in patient care situations that can help nursing students develop empathy:

> Showing movies and videos has long been part of nursing education but the introduction of streaming videos simplifies their use. Videos can convey psychomotor skills, emotional situations, and patient care situations better than any other media (Edmonds, 2013). Streaming videos help engage students and encourage critical thinking (June, Yaacob, & Kheng, 2014). Videos are particularly useful for addressing learning objectives in the affective domain (May et al., 2013). A video of a patient relating an experience with a disease can help students learn empathy for others. (Thompson, 2016, pp. 871-872)

Videos in the classroom have many uses across a range of subject matters and pedagogical purposes. In nursing English courses, well-selected videos can represent models of empathy that can, in turn, inspire empathy in the hearts of the viewers themselves. Such videos provide much for learners to reflect on as they pursue their professional goals (Dryden et al., 2024, pp. 11).

The present study considers several ways in which visual image training can improve both language learning and overall professional preparation for many students, with attention here to students of nursing. As already noted, videos present models of patient–caregiver interactions, even non-verbal exchanges. Films and television series with medical themes often depict behavior from which nursing student can learn to read patients and even colleagues through their body language, facial expressions, and other non-verbal cues. Teachable moments in such videos, which can be replayed many times, help nursing students learn to function effectively in real health care settings, where patients may not always communicate verbally.

Furthermore, video image training has the pedagogical potential to deepen students' cultural sensitivity. Videos that depict patients and caregivers from diverse cultural backgrounds help nursing students develop an understanding of how cultural beliefs and practices affect health care. Such observations promote cultural competence, which is vital to promoting respectful and individualized care in the nursing field but also in many other areas of human relations and service in the business world and in education.

Moreover, video image training provides models and opportunities for students to develop the interpersonal skills of empathy and compassion. Videos with medical themes present complex ethical dilemmas that allow nursing students to explore decision-making processes in high-stress situations. These scenarios give students opportunities to reflect on professional ethics, patient autonomy, and the balancing of medical treatment with compassionate care. Videos with emotionally charged

narratives allow students to step into the shoes of patients and caregivers, fostering empathy and compassion. Skilled navigation of such emotions is crucial in nursing, where understanding the patient's experience can lead to more compassionate care.

Through close observation of selected scenes in feature films and television series, students can practice critical thinking and decision-making. Videos for nursing students may portray complex medical cases that encourage students to apply their knowledge to assess patients' needs and take appropriate measures. Moreover, films and TV series may depict medical teams working together, offering examples of interdisciplinary collaboration. Nursing students can observe how health care professionals from different fields communicate and work towards a common goal in patient care. Videos that focus on patient narratives help nursing students understand the emotional and psychological impact of illness and hospitalization. Deeper understanding of such situations can help nursing students appreciate the patients' experiences and lead to a more patient-centered approach in nursing practice.

Visual image training aligns with recent trends in education that emphasize the importance of multimodal learning, i.e., the use of multiple forms of media and communication to enhance understanding. Visual images—whether from videos, paintings, or literary works—provide rich, multi-layered texts that students can discuss, analyze, and interpret. Visual image training not only helps students improve their language skills but also encourages critical thinking and deeper comprehension of human behavior. While the principal focus of the present study is on nursing training, visual image training has considerable potential to improve skills in language learning and human relations for students in many other fields.

2.   Analyzing Patient Behavior and Non-Verbal Communication

As already noted, visual image training encourages students to cultivate their ability to read the mental and physical states of patients by analyzing case studies drawn from videos and literature. For nursing students, an immersive approach in visual image training develops clinical and interpersonal skills essential for effective patient care while fostering empathy, cultural sensitivity, and linguistic competencies. By engaging with visual narratives that mirror real-life patient–caregiver interactions, students enhance their communicative abilities and prepare to provide holistic care.

The challenges faced by Japanese undergraduate nursing students in EFL courses are multifaceted, as such students must not only master medical terminology but also develop the ability to communicate clearly and compassionately with patients from diverse backgrounds. The many demands beyond traditional language learning require an approach that surpasses ordinary grammar and vocabulary knowledge by including extralinguistic skills like emotional intelligence and cultural awareness. Visual image training satisfies these many demands by creating an immersive environment, most effectively through videos, in which students can practice reading non-verbal cues—facial expressions, body language, and tone—while engaging with fictional but realistic scenarios that mirror patient–caregiver interactions.

The ability to communicate effectively with patients is critical in nursing, where misunderstandings can have serious consequences. Visual image training equips students with the skills needed to communicate clearly and compassionately with patients from diverse backgrounds. Munro et al. (2007) asserted that communication in nursing is not only about the exchange of information but also about creating "an emotional connection with the patient, which fosters trust and promotes healing." Visual image training helps students develop this emotional connection by teaching them to interpret non-verbal cues and respond with empathy, skills that are particularly valuable when language barriers exist.

Furthermore, visual image training encourages active learning, which has been shown to improve language retention and communication skills (Prince, 2004). Rather than passively memorizing vocabulary or grammar rules, students actively engage with the content by analyzing characters' emotions, motivations, and actions. This process encourages deeper cognitive processing, which in turn improves language acquisition and fluency (Richards, 2006). By focusing on both verbal and non-verbal communication, visual image training helps students become more effective communicators, capable of managing the complex interpersonal dynamics in health care settings.

Well-made feature films and television series with medical themes show a range of communication styles between patients, families, and health care providers. Students can observe both effective and ineffective communication and reflect on how to improve their own patient interactions. For example, in The Doctor (Haines, 1991), the protagonist is an outwardly successful surgeon who is nevertheless impersonal and emotionally distant with his patients and even with his own family. When the doctor is diagnosed with laryngeal (throat) cancer, he is thrust into the position of a patient in ways that involve a painful role reversal. The film offers insights into the ways that patients' emotions, moods, and body language shift when they feel vulnerable or misunderstood, helping students grasp the need for empathy in caregiving situations.

The doctor in Haines (1991) undergoes cancer treatment administered by a specialist who is also impersonal and emotionally distant. Being on the receiving end of professional coldness forces the doctor to reevaluate his entire medical practice, in which, he realizes, empathy had been largely absent. Later, as a cancer survivor, the doctor shows his inner transformation in the ways that he trains his medical interns. He has them role-play patients, then assigns them various illnesses and orders tests to make them feel the patients' experiences themselves. In such ways, the doctor atones for his past professional shortcomings by encouraging his interns to develop empathy and compassion for the patients they will treat one day.

By dramatic contrast, in Patch Adams (Shadyac, 1998), Robin Williams portrays a real-life medical doctor named Hunter Doherty "Patch" Adams who uses humor and empathy to connect with patients. (The real Adams also organizes volunteers around the world to dress as clowns and entertain children in orphanages and patients in hospitals.) While the film touches on a variety of conditions treated by general medical practitioners, some issues for specialists are presented, including cancer and mental illness, specifically depression and suicidal ideation, as well as patient care in hospitals. Through this film, students learn to appreciate the importance of active listening, with attention to tone, body language – and especially humor – in creating trust and rapport with patients.

In nursing and many other fields of caregiving and service, communication is not just about the exchange of information; it is about creating meaningful and respectful connections with clients, patients, or others. Visual image training helps students develop the skills needed to interpret emotional and cultural cues, making them more effective communicators and more empathetic professionals.

3.   Enhancing Cultural Sensitivity

In addition to fostering empathy, visual image training deepens students' sensitivity to cultural differences, an increasingly important skill in today's globalized health care environment. Cultural sensitivity refers to the ability to recognize and respect cultural differences, including communication styles, values, and behaviors (Kirmayer, 2012). For Japanese nursing students in EFL courses, cross-cultural communication is essential to their future careers, as breakdowns in communication due to cultural misunderstandings can cause major errors in patient care.

Visual image training sharpens cultural sensitivity, a critical skill for nurses working in multicultural environments. As health care becomes increasingly globalized, the ability to understand and respect cultural differences is vital. Visual case studies from films, television episodes, and literature offer a rich resource for exploring cultural narratives and ethical frameworks that may differ widely from students' own backgrounds. By engaging with diverse perspectives, students can expand their worldview, improving their capacity to deliver care that is both linguistically and culturally appropriate.

In effect, visual image training operates as a form of intercultural communication training. It exposes students to a variety of communication styles, behaviors, and social norms through the characters they study. Such exposure is particularly valuable in health care, where miscommunication due to personal and cultural misunderstandings can have serious consequences. For example, a patient's non-verbal cues or tone may differ based on their cultural background, and the ability to recognize these subtleties is crucial for effective care. Visual image training enables nursing students to become more adept at recognizing and interpreting these signals, thereby minimizing miscommunication and improving patient outcomes.

Visual case studies drawn from videos and literature provide rich opportunities for students to engage with diverse cultural perspectives and explore ethical frameworks that may differ from their own. By analyzing how characters from different cultural backgrounds interact and communicate, students are better equipped to understand and manage cross-cultural dynamics in real-world health care settings. This intercultural training helps prepare students to provide culturally competent care, which has been shown to improve patient satisfaction and health outcomes (Betancourt et al., 2002).

Videos that tackle broader societal issues––such as health care access, inequality, and medical ethics––can prompt discussions about the social determinants of health and the broader impact of health care policies. For example, The Farewell (Wang, 2019) portrays a family keeping a terminal cancer diagnosis secret from their elderly grandmother, a practice common in some Asian cultures. Students can discuss cultural differences in communication about illness and death and how they might manage such differences as health care professionals.

Two other notable feature films offer students examples of profound medical problems and opportunities to reflect on them. Awakenings (Marshall, 1990), based on the book of the same title by the eminent neurologist and writer Oliver Sacks, features patients in a prolonged catatonic state who are treated with an experimental drug. The patients suffer from encephalitis lethargica (also known as "sleeping sickness"), a condition that left them in a catatonic state for decades; the drug, L-Dopa, is administered to temporarily awaken the patients. Nursing students can discuss the clinical reasoning behind the treatment decisions and consider the potential risks, benefits, and ethical concerns involved in such trials. The second film, John Q (Cassavetes, 2002), highlights the challenges of health care access and insurance in the U.S. health care system. A young boy needs a heart transplant to survive a life-threatening heart condition, but medical insurance coverage complicates his eligibility. Nursing students can discuss the implications of such barriers to patient care and consider ways for healthcare professionals to advocate for patients in difficult circumstances.

Of the many television dramas that deal with medical issues, Grey's Anatomy (Rhimes, et al., 2005–present) is a long-running television series that regularly shows surgeons, nurses, and other health care professionals collaborating on patient cases. Students can reflect on the importance of teamwork and how to handle conflict or communication breakdowns in a clinical setting. Various diseases and conditions appear throughout the series, including trauma injuries, cancer, Alzheimer's disease, heart disease, liver failure, surgical complications, and rare medical syndromes. Each episode tends to focus on a different medical case or condition, providing students with an immense range of health care issues to consider.

4.   Practicing Empathy and Compassion

Japanese students in nursing education programs in Japan face unique challenges in their health care education that require some coursework in English. The students must not only master complex medical terminology but must also navigate cross-cultural communication and build rapport with patients. Traditional language teaching methods often focus on grammar and vocabulary in isolation, but visual image training integrates language learning with real-world applications, offering a more holistic and dynamic approach to education. The visual image training method encourages students to engage with visual and emotional cues to make themselves more effective communicators in diverse, multicultural contexts.

One of the most significant benefits of visual image training is its ability to foster empathy. Empathy is fundamental in nursing, and ideally students become caregivers who can provide patient-centered care. Through the analysis of characters in feature films, television episodes, and literary works, nursing students encounter a variety of emotional states and behaviors that reflect real-world patient experiences. This interaction allows students to practice interpreting emotions and responding compassionately, helping them prepare for the complexities of patient care, where empathy is key to establishing trust and building rapport.

Empathy, the ability to understand and share the feelings of others, is a foundational skill in health care, enabling caregivers to provide patient-centered care that respects individual, emotional, and cultural differences (Stepien & Baernstein, 2006). Through the analysis of characters in videos and literature, nursing students are exposed to a wide range of emotional states, behaviors, and ethical

dilemmas that mirror real-world patient interactions. Students develop the ability to interpret non-verbal cues—such as facial expressions, body language, and tone of voice—which are crucial for understanding patient needs and emotions (Vogel et al., 2018).

By practicing empathy through visual case studies, students learn how to respond compassionately to patients, preparing them for the complexities of clinical practice. Research shows that healthcare professionals with higher levels of empathy tend to have better patient outcomes and report higher job satisfaction (Hojat et al., 2011). Visual image training supports the development of these empathetic skills while simultaneously enhancing language proficiency. Classroom discussions that follow the analysis of visual case studies allow students to practice linguistic structures while engaging with emotional content, reinforcing both language learning and emotional intelligence (Eisenberg & Lennon, 1983).

Some videos highlight the emotional toll that health care work can take on providers, offering insights into the importance of self-care and stress management. Students can learn how to balance personal well-being with professional responsibilities. In one such film, My Sister's Keeper (Cassavetes, 2009), a family deals with a child's leukemia diagnosis, offering a lens into family dynamics, grief, and emotional stress. The film focuses on a young girl with acute promyelocytic leukemia (APL) and the ethical dilemmas posed by the very existence of her sister, who was conceived to be a genetic match to provide donations for treatments such as bone marrow transplants. Students can discuss how to manage their own responses to such complicated ethical issues as well as how to provide empathy for both patients and their families during emotionally charged life-altering illnesses.

Several other films present images of the emotional trauma of extreme medical conditions, giving students opportunities to consider the patients' perspective. For example, Still Alice (Glatzer & Westmoreland, 2014) follows the progression of early-onset Alzheimer's disease from the patient's point of view. The film follows the protagonist, a linguistics professor, as she experiences the early symptoms and progressive decline caused by Alzheimer's disease. Nursing students can discuss the importance of patient-centered care and the role of empathy when dealing with the tragic course of degenerative illnesses that attack both the body and the mind of patients.

In *One Flew Over the Cuckoo's Nest* (Forman, 1975), the authoritarian style and emotional detachment of the passive-aggressive Nurse Ratched contrasts dramatically with the need for compassion in nursing. The story takes place in a mental institution and depicts a range of such mental health disorders as depression, acute anxiety, and schizophrenia. The film also addresses the controversial use of electroconvulsive therapy (ECT) and lobotomy. The many difficult health care issues raised in this film can spark students' discussions about emotional resilience and stress management in less-than-ideal circumstances, both for patients and for themselves as future caregivers.

Wit (Nichols, 2001), a film about a Stage-IV cancer patient undergoing chemotherapy, exposes students to ethical questions around end-of-life care, informed consent, and the emotional toll on both patients and caregivers. As the protagonist, a professor of English, undergoes aggressive treatment for advanced ovarian cancer, she reflects on life and death and her interactions with healthcare providers. Students can analyze patient–caregiver interactions and debate how best to manage care decisions with empathy in such emotionally fraught situations.

5. Conclusion: A Promising Future for Visual Image Training in Language Pedagogy

The films and the television series mentioned in the present study cover a wide range of medical conditions and issues, offering nursing students a wealth of case studies for learning about patient care, medical ethics, and the emotional impact of various diseases. With videos on medical themes integrated into their training, nursing students can develop a range of skills—from clinical judgment and communication to empathy and cultural sensitivity. Analyzing characters, plots, medical scenarios, and ethical choices from such videos offers students creative, engaging, and reflective ways to prepare for real-world challenges in health care. Visual image training provides valuable tools that bridge theoretical knowledge and practical patient care.

The present study investigated the transformative potential of visual image training as a pedagogical method for improving English language skills in EFL courses for Japanese undergraduate

nursing students preparing for careers in caregiving. Visual image training, which uses "case studies" from films, television series, and literature, asks students to analyze the mental and physical states of fictional characters who are sometimes based on real people. Students experience simulations of future professional life that cultivate crucial interpersonal skills–notably the abilities to read people and situations––for effective communication and patient care. By engaging with diverse visual narratives, nursing students observe models of empathy, cultural sensitivity, and linguistic competencies that provide models of holistic caregiving.

Through contextualized learning, visual image training becomes a powerful tool for improving language learning and acquisition. With language practice linked to images that reflect real-life situations and emotions, students may find it easier to internalize new vocabulary words and technical terms. In a classroom setting, guided discussions about video and literary characters' emotions, ethical dilemmas, and interpersonal dynamics help reinforce language structures while improving students' ability to communicate with greater precision and appreciation of nuances. Visual image training integrates cognitive learning with emotional engagement, internalizing the language-learning process for learners, making learning more meaningful for them and increasing the likelihood that learners will retain what they learned.

While the present study has focused on nursing education, the benefits of visual image training extend beyond clinical care to encompass many service-oriented fields, including social work, counseling, hospitality, and education. Visual image training helps students prepare for careers in social work by developing the skills needed to provide compassionate care (Bride, 2007). Visual image training can help business and service-industry students anticipate the emotional and psychological needs of their clients. Similarly, for education students, visual image training fosters a more inclusive learning environment that improves learners' ability and willingness to communicate with people from diverse cultural backgrounds, (Gay, 2002). In short, visual image training equips learners in many fields with the ability to manage complex interpersonal situations, interpret emotions accurately, and communicate effectively across cultural borders.

Students preparing for careers in social work or in service industries can benefit from analyzing characters in videos and literary works who exhibit psychological distress or trauma. Visual image training helps students in many fields learn to identify signs of emotional and mental health issues and prepare appropriate responses, all while refining their English language skills. Similarly, those preparing for careers in education can use visual image training to better understand student behavior, making it easier to address diverse learning needs in multicultural classrooms.

The integration of visual image training into English language pedagogy marks a shift towards more holistic and dynamic teaching methods. Traditional language teaching tends to emphasize grammatical accuracy and vocabulary acquisition, often in isolation from real-world applications. By contrast, visual image training situates language learning within the context of meaningful, emotionally resonant interactions, making the process more engaging and relevant to students' future professional roles. In effect, visual image training confirms an intuition that many teachers have –– that the optimal situation for language learners is to be so deeply engaged in activities which interest them that they forget they are learning a language.

Visual image training offers long-term benefits, too. By blending visual analysis with language instruction, educators can provide a comprehensive learning experience that prepares students for the complex, interpersonal demands of their future careers. Visual image training is not just a language teaching method; it is a pathway to developing well-rounded professionals who can communicate effectively, demonstrate empathy, and manage the nuances of intercultural interactions with confidence and sensitivity.

As the demands of health care and other service-oriented professions continue to evolve, so too must the preparation of students for these roles adapt to changing times. Visual image training offers an innovative and effective way to enhance English language proficiency while simultaneously developing the interpersonal and affective skills essential for the caregiving and service professions. By immersing students in visual narratives that reflect real-world patient–caregiver dynamics, visual image training enriches learners' abilities to communicate with empathy, cultural sensitivity, and emotional intelligence. In short, visual image training forms a bridge between language acquisition and empathy in ways that make learners more effective and successful communicators.

The findings of the present study suggest that visual image training can play a pivotal role in the future of language education, particularly in fields where communication and caregiving intersect. As an emerging pedagogical approach that closes the gaps between language acquisition and emotional intelligence, visual image training holds promise not only for nursing students but also for learners in a wide range of service disciplines––equipping them with the language and interpersonal skills needed to succeed in their careers in an increasingly diverse and globalized world.

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11 - Navigating Challenges in Teaching and Learning Mandarin at a British University in Malaysia

Hwee Ling Kwan
hweeling.kwan@nottingham.edu.my
University of Nottingham Malaysia

Yut Moy Leong
yutmoy.leong@nottingham.edu.my
University of Nottingham Malaysia

Seungyeon Lee
seungyeon.lee@nottingham.edu.my
University of Nottingham Malaysia

Hazel Jin May Ng
hazel.ng@nottingham.edu.my
University of Nottingham Malaysia

Sandrine Yee Chin Sim
sandrine.sim@nottingham.edu.my
University of Nottingham Malaysia

Abstract
Proficiency in Mandarin is increasingly valuable in multilingual regions like Malaysia, where it serves as both a lingua franca and a key cultural element. This study explores the challenges of teaching and learning Mandarin at the University of Nottingham Malaysia (UNM), focusing on diverse student backgrounds, localized Mandarin variations, and the disconnect between standardized curricula and practical application. Data from surveys and reflections reveal obstacles such as limited practice opportunities, diverse proficiency levels, and insufficient time for teaching Chinese characters and cultural nuances. Teaching staff face difficulties adapting resources to meet student needs, while students struggle with motivation, peer support, and authentic language use. The study highlights the importance of cultural immersion, linguistic adaptability, and innovative teaching methods in addressing these issues, offering practical recommendations for improving Mandarin education in multicultural university settings.

Keywords: heritage language education, Mandarin learning, multicultural university, language teaching strategies, language learning challenges, Malaysia.

1. Introduction

Mandarin is not only the most spoken native language in the world but also one of the most influential, playing a vital role in international business, diplomacy, and cultural exchange. With over a billion native speakers, the global prominence of Mandarin continues to grow, driven by China's emergence as a significant global power. As China's economic, political, and cultural influence expands, proficiency in Mandarin has become an essential skill for individuals and nations seeking to engage effectively with Chinese-speaking regions and markets.

Within this global context, Malaysia stands out as a unique multicultural society where Mandarin holds significant sway, alongside Malay and English (David & Govindasamy, 2003). Malaysia's historical and cultural ties with China have reinforced Mandarin's role within its society. The Chinese Malaysian community, which constitutes about 23% of the population, predominantly speaks various Chinese dialects, including Mandarin (Department of Statistics Malaysia, 2023)[#]. This demographic has not only preserved traditional cultures and languages but has also facilitated Mandarin's integration into the wider Malaysian sociolinguistic fabric. Malaysia's Southeast Asian position as a melting pot of cultures is mirrored in its linguistic diversity, where multilingualism is the norm. In both urban and rural settings, Mandarin is widely spoken and understood, reflecting its importance as a lingua franca among different ethnic groups, especially in business and commerce where Chinese Malaysian entrepreneurs are particularly active.

The global impact of Mandarin is profound, and its role in Malaysia exemplifies a unique blend of cultural, economic, and educational dynamics. As Malaysia continues to foster its relationship with China and emphasizes multilingual education, the significance of Mandarin will naturally expand, moulding future generations to be globally competent and culturally aware. This background sets the stage for examining the specific challenges and strategies associated with teaching and learning Mandarin in a British university setting within Malaysia, where such multicultural and linguistic dynamics are vividly present.

2. Literature Review

The globalization of education has led to a significant increase in the number of students learning Mandarin as a foreign language worldwide. According to statistics, Chinese, including its varieties, is the most spoken language globally with 1.31 billion speakers, accounting for about 16% of the world's population. Mandarin is the predominant variant, with 898 million speakers among the 7 to 13 main regional groups of the Chinese language (McCarthy, 2020). As one of the most spoken languages globally and a key language for international business and diplomacy, Mandarin has become an important asset in the global educational landscape.

Given this, Malaysia offers a unique environment to students as a significant portion of the population uses at least one of the Chinese varieties in their everyday life, including Mandarin. Proving its importance, public schools and universities, where a majority of students are from non-Chinese speaking backgrounds, teach Mandarin as a subject in their curriculums. A study from UiTM, for instance, acknowledges that every year, non-Chinese students enrolling in Mandarin language classes outnumber those enrolling in other languages (Loh et al., 2021). However, the same study presents that one of the challenges perceived in Mandarin education is overcoming the cultural differences that the majority of students need to familiarize themselves with (Loh et al., 2021). Another study highlights the differences in the general approaches to teaching Mandarin between UiTM and Beijing Language and Culture University, noting that the language learning environment is one of the factors challenging the teaching and learning of Mandarin in Malaysia (Hoe & Lim, 2013). A study from Universiti Malaysia Terengganu shows similar findings, focusing on majority Malay students' demographics (Chua et al., 2020). These studies emphasize the cultural and language backgrounds of the majority of students, highlighting the challenge of integrating Malaysia's rich multicultural background into teaching and learning Mandarin.

In this context, the British university campus in Malaysia encounters additional challenges when teaching Mandarin to their students. First, the backgrounds of each student vary widely – they include not only the major group within Malaysia but also students from other parts of the world, with the increase of international students, and the exchange students from the UK campus. Second, the unique cultural and language background in Malaysia cannot easily be matched with textbooks and curriculum developed by mainland Chinese sources, which students in the current Mandarin course often find alien to use outside the campus. What they learned in the classroom may not be practically applicable in real-life situations in Malaysia, where different Chinese dialects are prevalent, and the subtle differences of Mandarin exist between in Malaysia and the Mainland China.

Connected with this issue, students familiar with other Chinese varieties often face a challenge. They cannot sit in the classroom with other beginner-level students because they do not qualify as

beginners when the curriculum is built to start as a beginner. Thus, this research attempts to explore the current state of teaching and learning Mandarin at a British university in Malaysia, examining pedagogical approaches, challenges, and the role of technology. Taking a mixed method of qualitative and quantitative research, this research will first conduct an online questionnaire combining numerically rated items and open-ended questions targeting the existing student group and alumni, to find out the current obstacles and their practical usage of the language after graduation.

This research investigates challenges encountered by teaching staff and students, proposing strategies to overcome them. It highlights cultural immersion, linguistic adaptability, and pedagogical innovation as crucial elements. The study seeks to optimize these factors to enhance learning experiences for a diverse student body. By examines the different struggles faced by all parties involved in the teaching and learning process, we are aiming at fostering a supportive learning environment that celebrates linguistic diversity and cultural exchange, where students are empowered to not only navigate but also thrive within the diverse linguistic (cultural) landscape.

1. To examine the different challenges faced by both teaching staff and students
2. To explore strategies for overcoming these hurdles, emphasizing the importance of cultural immersion, linguistic adaptability, and pedagogical innovation.

3. Methodology

A qualitative research cycle which consists of design, data collection and analytic cycle (Hennink et al., 2020) was used in this study to identify the issues faced by students and teachers and to explore strategies for overcoming these issues. This section illustrates the site and setting, participants and procedure.

3.1 Site and Setting

This study was conducted at the UNM, a private British higher learning institutions in the prefecture of Selangor, Malaysia. The main medium of communication at the university is English, but target languages are spoken in each language class. Mandarin courses have been offered under the School of Media, Languages and Cultures as one of the core language modules, with 5 contact hours weekly (12 weeks per semester; 2 semesters per academic year). It is also offered as an elective module to students from all faculties with 4 contact hours weekly; number of weeks and semester same as core language mentioned above. Students who need to study Mandarin as a core language module are learning the language consecutively for 3 years (6 semesters) throughout their undergraduate programmes.

3.2 Participants and Demographics

The first step in respondent selection is to define who will provide required data to answer the research question. Secondly, the researcher ensured that the respondents were easily accessible to the teaching staff. For this study, the respondents were undergraduates learning Mandarin as a foreign language at UNM. Specifically, the respondents included students who took Mandarin as a core subject for a duration of 3 years, those who took it as an elective for a minimum of 12 weeks, students who graduated between 2012 and 2023, and current students in 2024. Additionally, the study included Mandarin teachers who had taught at UNM for more than 10 years.

From the total of 52 responses received, a wide range of nationalities are observed. 37 respondents are Malaysian from different ethnicities according to the parent's mother tongue: Bidayuh from Sarawak Malaysia (1); Chinese (either parent is from Chinese ethnicity, 5); Indian (5); Lun Bawang from Sarawak Malaysia (1) and Malay (25). The remaining 15 respondents are non-Malaysian: Bruneian (1); British (2); Burmese (2); German (1); Hindu (1); Japanese (1); Mainland Chinese (1); Maldivian (1); Polish (1); Malay Singaporean (1); Sri Lankan (1); Thai (1) and Vietnamese (1).

The medium of communication between the parents and the Malaysian respondents are English, Malay, Mandarin, Tamil, as well as Chinese dialects such as Cantonese and Hokkien. It is also worth noted that:

(a) A British respondent's parent's mother tongue is Swahili but converses with the respondent in English; while another British respondent's parent's mother tongue are English and Spanish and converses with the respondent in both English and Spanish;

(b) A Bruneian respondent's parents' do speak Cantonese, Hokkien, English and Mandarin, but mostly speak with the respondent in English and a little bit of Mandarin;

(c) A Mainland Chinese respondent who attended international school does not consider Mandarin as his/her mother tongue (the mother speaks Mandarin; the father speaks English);

(d) A Tamil speaking parent also understands Mandarin but converses in Tamil with the respondent.

While the medium of communication between the parents and the non-Malaysian respondents are Dhivehi (Maldives), English, German, Hindi, Japanese, Kachin (Myanmar), Spanish (in Britain), Singhala (Sri Lanka), Polish, Thai and Vietnamese. Some of the parents do not speak their mother tongues (Bidayuh and Burmese, Cantonese, Hokkien, Swahili (in Britain), Malay, Tamil) with the respondents but in English.

Seven respondents state "Yes" and 45 state "No" in the question "Is either of your parents categorized as Chinese ethnically?" Of the seven whose answer is "Yes", only 2 parents speak Mandarin. And from these 2 parents who speak Mandarin, only 1 parent speak Mandarin with the respondent at home.

3.3   Procedure

Topics for research were discussed based on current issues and were selected by the researchers. A specific topic was chosen, and a range of survey questions was developed. Before distributing the survey questionnaire, it was crucial to consider the ethical principle of "doing no harm," which involves safeguarding participants' information and ensuring the data remains anonymous (Hennink et al., 2020). The research ethics application form, along with the research proposal and survey questionnaire, was completed and approved by the UNM Research Committee. The questionnaire was designed in English, was anonymous, and was administered online using Microsoft Forms. The form consisted of questions regarding the students' personal background, family background, language background and so on. It was expected to take approximately 15-20 minutes to complete. The survey was conducted over one month, ending in July 2024, and approximately 80 students were invited via Facebook Messenger, WhatsApp, and Microsoft Teams but only 52 responded. The survey data was coded and categorized.

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4.   Limitations

This case study is based solely on data collected from a survey questionnaire; no interviews were conducted. Some responses were provided by students who graduated some time ago, which may affect the consistency of the data. Additionally, this study focused on various teaching methods applied to different groups of students, which could result in differing viewpoints.

5.   Findings

According to the survey, teachers' and students' challenges are categorised into 7 areas. "S" represents students while "T" represents Teacher.

5.1   Unique Challenges of Mandarin

S: Most of the respondents in this research are English speakers who are familiar with Latin alphabets. The challenges related to the target language reported by the respondents are memorization of characters, differentiation of tones, the large amount of vocabulary and grammar.

T: The teaching staff mainly finds that it is difficult to teach the Chinese characters one by one during the 4-5 contact hours per week because there are many other skills to be covered. Students are expected to do self-study outside of the class, including practicing the writing of Chinese characters. But it fully depends on how much time a student invests in the self-study due to the non-existence of compulsory monitoring or reporting system in making sure the students have really done so.

5.2 Environment (Class Setting)

S: Regional dialect differences between Malaysia and China often lead to confusion, as the various dialects make it difficult to follow conversations and identify topics being discussed. The lack of Mandarin-speaking peers, especially in environments where people are more comfortable speaking English, limits practice opportunities. Non-native speakers, particularly Malays, face additional challenges due to limited support, such as the absence of study groups. The fast pace of speech and unfamiliar vocabulary also contribute to a lack of understanding, while differences in words and cultural nuances create further communication barriers.

T: The lower number of students makes it challenging to create dynamic and engaging activities and to pair students effectively. The lack of peer support and motivation further complicates the learning environment. Different gaps between students of varying levels due to differences in learning pace. Students' limited time for self-study and diverse learning methods add to the challenge. Moreover, exposing students to genuine and authentic Chinese culture is difficult due to constraints such as timetable matching, school budgets, and the availability of someone to lead field trips.

5.3 Technology

S: No significant challenges identified.

T: Many students prefer in-person tandem learning over virtual alternatives, while some prefer using hardcopy materials for revision. Although students were informed about the resources available on Moodle, most did not log in to access them.

5.4 Resources

S: The differences between textbook Mandarin from Mainland China and local slang used in Malaysia create confusion for students, as the Mandarin spoken in daily life differs from what was taught in classes. This makes it difficult for them to apply their learned knowledge. Variations in word usage between Mainland Chinese and Malaysian Chinese add to the challenge. Although students are not expected to sign up for extra courses off-campus, time constraints and high course fees outside of university further hinder student's ability to improve their language skills.

T: Teaching either Mandarin used in Malaysia or Mainland China presents challenges, particularly for incoming and outgoing inter-campus exchange students. At UNM, the short duration of the course requires standardizing syllabi to align with inter-campus exchanges, as students need to catch up with University of Nottingham Ningbo Campus (UNNC) in China, leading to rushed lessons. Catering to students at different proficiency levels is difficult, as preparing tailored materials demands more time and effort.

5.5 Activities

S: Students face challenges mastering pronunciation and speaking due to limited practice, which also leads to a lack of confidence in their pronunciation. Fast speech and thick accents further hinder comprehension, while inconsistency in learning, particularly in speaking skills, worsen the issue. The lack of practice outside of class slows progress, and the non-phonetic nature of the language makes it even more difficult to learn. Students often need to translate or repeat words to ensure understanding.

T: Students at different levels due to varying learning paces, making it difficult to encourage in class participation from slower-paced learners. Providing Mandarin-speaking partners for everyday practice is also challenging, as most local students are more comfortable speaking English with Mandarin learners, limiting opportunities for tandem learning. The limited time during class restricts the ability to thoroughly teach each Chinese character.

5.6 Employability

S: In the question of "What could have been done to increase your motivation in learning Mandarin?", respondents find their motivation would increase when they: know Mandarin helps expand career opportunity; do an internship that requires them to use basic Mandarin; sit for a proficiency exam; get to know there were seniors who performed well in Mandarin and landed on a good job after graduating because it is an assurance that the efforts will pay off in the future.

T: The teaching staff finds that if the proficiency of Mandarin among students are strengthened, undoubtedly the stakeholders would be very keen to recruit our graduates who can utilize the language in the massive world market. But due to the difficulties in learning Mandarin and its limitation of the proficiency level, some graduates who have yet to master the language well may find it challenging to increase their employability.

5.7 Personal

S: A student with ADHD and Asperger's Syndrome finds it challenging to communicate with peers or when practicing the language. Others indicate the lack of time to practice outside of the class; lack of self-consciousness to practice regularly; low level of motivation; lack of financial aid to attend additional language classes outside of the class. It is also worth noted that a respondent finds that "motivation in language learning is always personal and everyone improves as quickly as they can/ want to."

T: The teaching staff finds that it would have been helpful to know if a student is struggling with neurodevelopmental conditions and other challenges mentioned above.

6. Discussion

6.1 Unique challenges of Mandarin

To attain complete literacy in Chinese, one needs to learn 3,000 - 4,000 characters. Nevertheless, one will be able to comprehend 92% of written material by mastering 1,000 characters (Wong et al., 2012). According to Yan and Lin (2023), Japanese, Korean and Vietnamese language share more similarities with Chinese than alphabetic languages. The two Japanese and Vietnamese respondents in this research who are associated with the use of Chinese characters in their native logographic writing systems do not consider Chinese character writing a challenge in their learning. Logographic Chinese characters has long been a huge challenge to those who are native to non-logographic writing systems. Respondents who are more familiar with alphabetic language such as English and Thai, indicate that they have problems recognizing and remembering Chinese characters.

In the question "Do you think it is necessary to be able to handwrite Chinese characters?", 34 respondents (65%) answer "Yes". They find handwriting Chinese characters is a significant skill for understanding and mastering Mandarin. While 18 respondents (35%) answer "No", by emphasizing the use of technology helps eliminating the hassle of memorizing the writing of Chinese characters.

It could be impractical to teach Chinese characters one by one in the classroom due to the limitation of contact hours. In order to tackle the difficulties in memorization of characters, vocabulary and grammar, students can incorporate the use of technology such as apps and online tools (see "Technology" and "Activities" below). To enable one to differentiate between *yi* in the four tones that each may represent multiple meanings (e.g., *yī* one/clothes/medical; *yí* aunt/doubt/move; *yǐ* already /chair/second; *yì* benefit/easy/translate); listening exercises, songs, dramas on any online channels

and speaking exercises with peers or online conversation partner (see "Technology" and "Activities" below) will gradually improve students' ability to differentiate the tones. But these have to be executed in a disciplined manner to yield results.

6.2   Environment (class setting)

The classroom learning environment is a formal setting where students learn under a teacher's supervision, following a structured curriculum and lesson plans (Gagné et al., 1992). It provides direct instruction, immediate feedback, and opportunities for collaboration, reinforcing knowledge in a controlled space.

In contrast, the out-of-classroom learning environment is informal and less structured, including online platforms, community involvement, and self-directed learning (Jackson, 2013). Here, learners apply knowledge in real-world contexts, developing independence and critical thinking skills (Beames et al., 2012). This environment promotes experiential learning, creativity, and self-motivation.

This study reveals that students feel classroom learning alone is insufficient for effective language practice, highlighting the need for engagement outside the classroom. At UNM, students had one-on-one online tutoring sessions with native Chinese speakers, who were university students in China, majoring in Teaching Chinese as a Foreign Language. Each UNM student participated in 10 sessions per semester, lasting 45 minutes to an hour, with flexible scheduling. However, some students felt that in-person interactions with real-life language partners might be more beneficial.

While online sessions offer additional practice, research indicates that in-person engagements often foster a stronger sense of community and provide immediate, personalized feedback. Real-life conversations tend to be more spontaneous and less structured, allow learners to practice language in authentic situations, enhancing fluency and conversational skills (Golonka et al., 2014). Nevertheless, well-designed online interactions can be equally effective, especially when they incorporate interactive tools, timely feedback, and strategies to build a sense of community among learners (Lieberman & Schroeder, 2020).

Furthermore, students agreed that more daily exercises help reinforce what they learn in class. Engaging with Mandarin speakers, both locally and online is essential. Regular practice with friends, teachers, and peers helps address pronunciation issues and improves fluency. Research shows that consistent practice is vital for building language skills, with frequent interactions crucial for overcoming language barriers (Ju et al., 2023; Wang, 2023). This consistent practice also boosts learner confidence and engagement.

However, students expressed the need for more encouragement and less judgment from peers when practicing speaking. They also wanted a larger circle of friends interested in learning Mandarin, especially at similar proficiency levels. A supportive and collaborative environment would help learners improve together, fostering confidence and reducing anxiety. Such an environment allows for mistakes and learning without fear of criticism, with positive reinforcement enhancing the overall learning experience.

6.3   Technology

This study demonstrates that technology has significantly impacted Mandarin learning by offering a wide range of resources and tools that increase accessibility and convenience. Mobile applications have proven effective in supporting Mandarin learning. Flashcard apps like Quizlet have been used during the semesters to improve students' vocabulary retention and practice, serving as valuable tools for teaching vocabulary (Pham, A. T., 2022). Research has shown that this apps boost student motivation compared to those who do not use them (Setiawan & Wiedarti, 2020). According to Jureynolds et al. (2021), mobile apps are frequently used to support both classroom learning and independent study at home due to their flexibility and accessibility. Many of the respondents mentioned about the importance of social media and streaming services in providing continuous exposure to Mandarin, enhancing both comprehension and practical application. Many studies have shown that students perceive social media as a valuable tool for academic purposes (Borau et al., 2009; Lee & Markey, 2014).

At an institution like UNM, platforms such as Moodle are integrated with YouTube content, sharing learning materials that include Mandarin-language media like Chinese music, movies, and dramas. Platforms like YouTube, Facebook, Instagram, and TikTok provide access to a wide range of diverse language content, which supports language learners by exposing them to authentic language use. These platforms not only foster informal learning but also encourage interaction with native speakers and culturally relevant content. According to Snelson (2016), YouTube plays a particularly important role in language education by offering learners access to both formal language instruction and exposure to informal, real-world language use, improving their overall comprehension and fluency.

Language learning apps such as Duolingo, Anki, and Pleco can also be included to promote regular practice, helping students reinforce and build on their language skills. Kang (2016) found that spaced repetition helps bridge learning gaps caused by inconsistent practice, supporting long-term retention even for learners struggling with limited exposure. Having said that, apps such as Duolingo may need to help its users to engage in the target language beyond the individual sentence level by integrating additional meaning-focused or task-based activities (Loewen et al., 2019).

6.4   Resources

The Mandarin textbooks used at UNM emphasize the standardized form of Mandarin from Mainland China, which can create challenges for learners, particularly when they attempt to engage with Malaysian Chinese communities. The formal and structured language taught in class often contrasts with the colloquial Mandarin spoken in Malaysia. Recent studies highlight this disconnect, as learners struggle with the variations in slang, idioms, and regional expressions. Such differences in linguistic practices, especially in vocabulary influenced by local languages like Malay, English and local dialects, make communication between Mainland Chinese and Malaysian Chinese speakers more difficult (Ong, T. & Troyer, P., 2022).

In addition, recent studies have emphasized the importance of contextual learning, advocating for integrating local language and cultural elements into Mandarin education to bridge this gap. A review of Mobile-Assisted Language Learning (MALL) in Mandarin education suggests that embedding learning in authentic social and cultural activities significantly enhances language acquisition, making the learning experience more practical and connected to real-life use (Shadiev et al., 2020). The inclusion of real-life materials in Chinese textbooks, along with practices and cultural perspectives, is considered essential for developing language skills and fostering global citizenship (Guenier & Li, 2022).

However, while this contextualized approach could mitigate communication issues, many students still feel a sense of accomplishment when their Mandarin resembles the standardized form used in China. This aligns with findings from intercultural competence studies, which suggest that feedback confirming learners' "authenticity" can boost confidence and encourage further learning (Liu, 2022). Thus, integrating local materials as supplementary resources while keeping standardized textbooks at the core could offer a balanced approach to Mandarin education. This allows students to achieve formal proficiency while becoming more adept at navigating regional language variations.

6.5   Activities

This study found that the repetition method is an effective approach to foreign language learning, emphasizing repeated exposure to language inputs and exercises to strengthen knowledge and improve retention. Various practices and tools are used to apply this method, such as repetitive drills, sentence-building exercises, word reordering puzzles, Chinese storytelling, and flashcard games, all of which help reinforce language acquisition. Research supports the effectiveness of repetition in various areas of language learning, particularly in vocabulary acquisition and listening comprehension. For example, Nakata (2016) underscores the importance of active retrieval in vocabulary learning by repeated retrieval practices, conducted within the same learning session, significantly boost retention and recall, highlighting an effective strategy for second language learners aiming to improve vocabulary acquisition. However, there are some factors that influence the effectiveness of repetition,

including learner characteristics (e.g., age, prior vocabulary knowledge), the type of learning (spaced vs. massed learning), and the use of visual aids or engagement techniques.

Despite the strengths of the repetition method, learners still face several challenges in mastering speaking skills. Difficulties such as limited practice opportunities, lack of confidence in pronunciation, and challenges with fast speech and thick accents hinder progress. Additionally, the non-phonetic nature of certain languages, like Mandarin, adds complexity to learning, often requiring translation or repetition to ensure comprehension. Inconsistent practice, especially outside the classroom, further slows progress, as learners need regular and varied exposure to the language for fluency (Suzuki, 2017).

Studies indicate that practice outside formal settings is crucial to language mastery. These difficulties highlight the need for supplementary learning activities beyond repetition, such as immersive experiences and regular practice sessions. Incorporating immersive activities like field trips, cultural exhibits, and visits to Mandarin-speaking communities is highly recommended. Studies consistently highlight the benefits of cultural immersion, which goes beyond language mechanics to provide contextual, cultural, and practical exposure that deepens language skills. For example, cultural immersion programs—both local and abroad—encourage learners to apply the language in real-world settings, which accelerates proficiency and reduces fear of mistakes by normalizing daily language use (Amor et al., 2023).

Finally, from teacher's perspective, one of the significant challenges in Mandarin language education is managing the gap between students of different learning speeds, which is especially evident in a flipped classroom model. Slower-paced students may struggle to catch up, making it difficult for teachers to prepare diverse learning materials and effectively encourage their participation. This gap is further exacerbated by the lower number of students in some classes, making it challenging to create dynamic, engaging activities and pair students for learning exercises. In tandem learning, finding suitable Mandarin-speaking partners for everyday practice is often problematic, particularly when most local students are English speakers, limiting authentic language exchange opportunities.

Additionally, logistical challenges such as limited time to teach Chinese characters and insufficient exposure to genuine Chinese culture, due to constraints in timetabling, budget, and personnel, hinder students' cultural immersion. Many students prefer in-person tandem learning and hardcopy materials for revision, rather than virtual platforms, which further limits their engagement. Despite being notified about resources available on platforms like Moodle, many students did not log in to access them, indicating a lack of motivation and self-study habits. Peer support is also lacking, and the diversity in learning methods contributes to inconsistencies in progress, as many students fail to invest enough time in self-study, which is crucial for mastering a language.

6.6   Employability

In a World Bank policy research report released in 2002, it defines the new wave of globalization began from around 1980. Globalization has immensely increased the opportunities on cross-cultural communication, which undoubtedly led to the finding of "communication" being ranked the second highest soft skill sought by the business workplace (Robles, 2012). Although Robles does not specifically indicate foreign language communication, given the unstoppable waves of globalization, it is undeniable that cross-culture communication occurs more than ever in the early 21st century. Yang (2017) points out that labour market demands proficiency in language, disciplinary expertise and global networking skills. Being a global hub for cross border collaboration, UNM is determined to enhance the employability of graduates.

Opportunities of internship can be further explored as how Ishengoma and Vaaland (2015) conclude that student internships, joint student-industry projects and industry influence on modernizing curricula and programmes are the three most effective university-industry linkage activities that can boost students' job prospects. Meanwhile sharing sessions on the learning journeys and experiences by alumni, especially those who are now utilizing Mandarin in their current jobs. This will encourage and boost the motivation of students when they witness their seniors are now leveraging Mandarin to perform their ongoing professional tasks in very diverse workplaces. (In this

research, 8 respondents are using Mandarin in their current jobs such as administrative assistant; artist; copywriter; executive; finance analyst; human resource officer; IT executive and part-timer.)

6.7   Personal

Support from the teaching staff can only take place when students reach out to address their issues, especially the challenges on a personal level. Students are encouraged to notify the teaching staff even with the minimal information so that the staff is aware, and support can be provided accordingly.

To address the lack of time to practice outside of the class, students can utilize technology to better manage their time in performing self-study (see "Technology"). In regard to the lack of self-consciousness to practice regularly, as mentioned earlier, students are expected to do self-study outside of the class, including practicing the writing of Chinese characters, learning vocabulary and grammar, and performing listening and speaking exercises. But due to the non-existence of compulsory monitoring or reporting system in making sure the students have gone through their self-study, a portfolio or self-reflective log could be adopted to help monitoring the progress of the self-study.The issue of low level of motivation usually derives from the lack of sense of achievement. Hu (2008) points out that the sense of achievement plays a crucial role in sustaining the learning motivation among university students. The ability to apply Mandarin in real life situations boosts interest, motivation and sense of achievement that will become a positive cycle for the acquisition of Mandarin. The strategies in "Environment", "Technology" and "Activities" discussed above can be adopted to help boost students' motivation and visualize the efforts they make will pay off.

Students are not expected to attend additional or private language classes outside of the class and can avoid spending money by utilizing the existing resources. Online tools can be made useful to facilitate the learning.

7.   Implications and conclusion

Students face difficulties inherent to learning Mandarin, including memorising characters, distinguishing tones, and managing the vast amount of vocabulary, whereas for the teacher, limited class time restricts in-depth instruction, particularly in teaching character writing. As a result, students are expected to engage in autonomous learning to keep up with the syllabus. Additionally, small class sizes reduce opportunities for peer support and make it difficult to foster a dynamic learning environment, as well as makes differences in students' learning pace more apparent, which complicates lesson planning.

Apart from that, the University of Nottingham Malaysia faces unique challenges due to standardizing Mandarin teaching across its tri-campus system (UK, China, Malaysia), where confusion arises from differences between the local and the Mainland Chinese variety taught in class. Additionally, learners found that on-campus Mandrin speakers prefer to use English when interacting with them. All these contribute to the lack of practice which coupled with a lack of time and motivation to practice outside of class, impede students' progress. Apart from that, budget, manpower, and timetabling constraints make it challenging to organize authentic cultural activities for immersion and language application.

Interestingly, although language learning technologies have advanced, many students still prefer in-person tandem learning and physical materials for revision over virtual alternatives like Moodle. There were no significant technology-related challenges reported by the students, indicating that they generally manage well with the technological tools available for language learning.

These challenges can be addressed by giving more support to the teacher. Offering student assistantships to existing students who are fluent in Mandarin, where these students act as in-class teaching aids, allows for differentiated instruction and personalised learning support by the teacher. Student assistants can also act as out of classroom language mentors, paired with a learner for conversational language practice. This is in line with the results which showed that students preferred face-to-face practice and were not receptive to the use technology in this aspect. With regards to

the lack of peers at the same level of proficiency, this can only be resolved if there were a larger intake of students.

Students are primarily motivated by extrinsic factors, such as improving employability and securing internships. While these motivations can push them to invest more time and effort into learning, some still struggle with personal motivation. A good way to motivate them is to showcase those who have successfully secured employment or internships due to their Mandarin language skill, and sharing how it has opened doors for them in their careers.

Lastly, neurodivergent students find communication and practicing Mandarin especially difficult. Personalized learning approaches and support could help them overcome these barriers. While a wellbeing centre exists to support neurodivergent students, not all seek assistance. As such, additional effort should be made to encourage students to seek support from the university well-being centre, where appropriate learning support plans can be created to accommodate their conditions. These support plans would then be shared with the teachers, and subsequently, the teacher can take the appropriate steps to accommodate them.

Acknowledgment

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12 - Instructional Translanguaging Patterns in Taiwan High School CLIL Biology Class

Jing-xi Cleo Yang
cleo90689068@gmail.com
National Changhua University of Education, Taiwan

Sheng-hui Cindy Huang
cindy@cc.ncue.edu.tw
National Changhua University of Education, Taiwan

Abstract

The growing emphasis on bilingual education in Taiwan has brought increased attention to the teachers' translanguaging practices in subject classroom. This qualitative study aims to classify the patterns of instructional translanguaging use and to probe the teachers' rationales of adopting these patterns. With class observations and semi-structured interviews, this study investigated two high school CLIL biology classrooms in northern and central Taiwan and concluded five patterns indicating teachers' translanguaging use. It was found that the more experienced teacher demonstrates a greater integration of body language, teaching aids, and English within teaching processes. Also three factors were found to affect teachers' use of translanguaging, including disparities in students' English proficiency, the establishment of an English-speaking environment, and teachers' own English proficiency level. Furthermore, it was revealed that teachers need to attain a requisite English proficiency level to diversify translanguaging practices and foster a natural English-speaking milieu within CLIL classes. At the end of the presentation suggestions for future study and pedagogical implications will be discussed.

Keywords: translanguaging, bilingual education, CLIL biology, instructional strategies, teacher proficiency, Taiwan.

1. Introduction

As globalization accelerates and English functions as a Lingua Franca (ELF), bilingual education has gained significant importance. To support this, Taiwan's Bilingual 2030 Policy aims to boost English proficiency and international competitiveness. Content and Language Integrated Learning (CLIL) is a dual-focused educational approach originating from Europe, involves using an additional language (typically English) as the medium of instruction for both content and language learning (Coyle et al., 2010). It has been identified as an effective method for building students' subject knowledge alongside English skills, aligning with Taiwan's internationalization goals. However, given varying English proficiency levels among students and the extra preparation required for teachers, Mandarin remains a critical support in CLIL classes, making translanguaging an essential strategy.

This study investigates translanguaging in CLIL biology classes at two Taiwanese junior high schools, addressing the gap in research on secondary bilingual contexts. Translanguaging, here defined as the use of multiple languages and multimodal aids to enhance comprehension, enables teachers to support meaning-making and students to leverage their linguistic repertoire.

With Taiwan's Bilingual 2030 policy encouraging English use and bilingual instruction, biology classes, which often rely on visual aids, provide an ideal setting for examining translanguaging. Unlike existing studies focused on TESOL or higher education EMI, this research explores instructional translanguaging patterns in CLIL biology and the factors influencing them. It seeks to answer two questions: (1) What translanguaging patterns are used in CLIL biology classes? (2) What factors shape these patterns? The findings aim to enhance understanding of effective language use in bilingual education.

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2.   Literature review

2.1   *Definitions of translanguaging*

The word translanguaging originated from the Welsh word *'trawsieithu'* by Cen Williams in 1994 (García & Li, 2014, p.20). It referred to the pedagogical practice of using Welsh and English in bilingual classes. For instance, the teacher delivers the learning content in Welsh, and the students are able to produce the learning output in the target language (English). After the debut of this new term, Baker, the scholar who first translated the Welsh word *'trawsieithu'* to translanguaging in English, made its explanation with more emphasis on its functions. He defined it as "the process of making meaning, shaping experiences, gaining understanding and knowledge through the use of two languages" (Baker, 2011). A year later, several scholars expanded Baker's interpretation with an emphasis on the usage of the two languages. Lewis et al. (2012) considered that "both languages are used in a dynamic and functionally integrated manner to organize and mediate mental processes in understanding, speaking, literacy, and, not least, learning."

Although the definitions above mostly explain translanguaging as a way to switch between languages, they were confined in the idea of the two languages. Canagarajah (2011) defined translanguaging as "the ability of multilingual speakers to shuttle between languages, treating the diverse languages that form their repertoire as an integrated system" (p. 401). Moreover, Garcia extended the concept beyond the constraint of the named languages. She stated that translanguaging refers to bilinguals selecting different linguistic features from their one and only linguistic repertoire to communicate with others effectively (Garcia, 2012). On the other hand, Li (2018) used etymology to explain the word translanguaging by dissembling the word into the prefix 'trans' and the word root 'languaging'. According to Li (2018), he explicated the prefix 'trans' as it transcends the concepts of so-called named languages, including the use of semiotics, multimodalities, etc. The word root 'languaging' displays the dynamic feature of language in the gerund form, which means the development of languages is an ongoing process.

Concluding the definitions of translanguaging mentioned above, this research defines translanguaging as "Teachers use different languages simultaneously with the incorporation of multimodal resources during the teaching process to communicate and help students understand the subject contents."

2.2   *Translanguaging in language classrooms*

The research on translanguaging in language classrooms has highlighted its potential benefits for language learning and development. Several empirical studies have explored the implementation and impact of translanguaging pedagogies in various educational contexts.

Two studies conducted in European countries and regions have noted that translanguaging plays a vital role in both mainstream education and CLIL lessons (Duarte, 2020; Karabassova & San Isidro, 2020). Duarte (2020) examined the use of translanguaging in classrooms in Luxembourg and the Netherlands, where teachers incorporated migrant and minority languages into their teaching. The analysis of classroom transcripts revealed that translanguaging helps acknowledge migrant languages, reduces language separation in immersion models, and enhances content understanding, demonstrating its potential as an effective pedagogical strategy. In the context of Kazakhstan, Karabassova & San Isidro (2020) conducted an exploratory qualitative study on CLIL teachers' perceptions of translanguaging in trilingual schools. Their findings showed an ambiguous stance towards translanguaging, with teachers employing it as a scaffolding tool, a transitional practice, and a means to address their own language proficiency limits.

Pun & Tai (2021) and Tai & Li (2021) investigated the role of translanguaging in EMI secondary schools in Hong Kong. Pun & Tai (2021) focused on how students used their multilingual and multimodal resources during laboratory work to co-construct scientific knowledge and practice their science apprenticeship. Despite the English-only policy, students employed translanguaging to mediate their understanding of science, facilitate peer collaboration, and create an enjoyable learning environment. Similarly, Tai & Li (2021) analyzed playful talk in multiple languages and modalities in EMI mathematics classrooms. Their findings demonstrated that translanguaging was a critical resource for constructing playful talk, transforming the classroom into a translanguaging space. This space allowed teachers and students to engage in creative acts, experiment with various voices, and facilitate meaning-making and knowledge construction. Both studies highlight the importance of translanguaging as a pedagogical tool in EMI contexts in Hong Kong.

Regarding the application of translanguaging in the Taiwanese educational context, Ke & Lin (2017) examined the viability of a translanguaging approach in TESOL. Their study provided an example of translanguaging practices in an EFL classroom in a rural junior high school. The results illustrated the potential of translanguaging pedagogy for developing learner agencies and identities. Concluding the empirical studies above, although they all show the positive influence of translanguaging in different educational contexts, there is a lack of studies related to translanguaging practices in Taiwanese CLIL classrooms.

3. Methodology

3.1 Participants

Due to the specificity of this research (focused on CLIL biology classes), it is challenging to find suitable participants. The recruitment process was confined to the following criteria: 1) teaching biology at a junior high school level, and 2) currently teaching CLIL biology classes. After contacting numerous schools and receiving an introduction through a professor, two in-service biology teachers agreed to participate in this study with verbal commitments and paper-based informed consents. To protect their personal information, pseudonyms were used.

Henry is a male teacher from a bilingual junior high school in Northern Taiwan, while Vivian is a female teacher from a general junior high school in Central Taiwan. Both teachers have over 20 years of experience in biology instruction. Regarding CLIL teaching experience, Henry has more experience in CLIL teaching. He has been co-teaching CLIL biology classes with a foreign teacher for three years. Although Vivian is new to CLIL, she completed the CLIL enhancement program for in-service teachers in 2022, which equipped her with knowledge and practical skills in CLIL teaching.

3.2 Data collection methods and procedures

Class observations and interviews were conducted to gather qualitative data from the two teacher participants. The entire process of data collection and transcription into verbatim transcripts spanned four months, from September to December 2022.

First, the researcher observed a 45-minute class taught by each teacher to document translanguaging practices in naturalistic classroom settings. During these sessions, the researcher took field notes on the translanguaging practices observed. The observations were video-recorded, and the recordings were transcribed verbatim for detailed analysis.

Second, each participant was interviewed twice to gather insights into their course design and the purposes behind different translanguaging patterns. Due to the fluency in the interaction, all interviews were conducted through Mandarin. Each interview lasted 35 to 40 minutes and followed a semi-structured format. Because of geographical constraints, the interviews with Henry were conducted over the phone, while those with Vivian were conducted face-to-face. All interviews were audio-recorded with participants' consent and subsequently transcribed. The participants also reviewed these transcripts to confirm their accuracy.

3.3 Data analysis

Given the diverse translanguaging practices observed in the CLIL biology classes, the researcher applied thematic coding (Braun & Clarke, 2006) to categorize the transcribed verbatim data into five distinct instructional patterns. For the interview data, open coding (Strauss & Corbin, 1990) was employed to identify the underlying factors affecting these instructional translanguaging patterns. All data were inductively analyzed following grounded theory principles (Glaser & Strauss, 1967), ensuring that insights emerged directly from the data itself.

4. Results

4.1 Instructional translanguaging patterns

Five distinct instructional translanguaging patterns were presented, accompanied by excerpts and images. Detailed descriptions of each pattern were provided to highlight the integration of language use and the specific teaching resources utilized by teachers in the CLIL biology classes. This approach

aimed to authentically depicting teaching scenarios, illustrating how teachers employed translanguaging in various contexts. Transcription conventions are provided in the appendix.

4.1.1   Target vocabulary translation

In Excerpt 1 and 2, both Henry and Vivian used L1 (Mandarin) to translate the target vocabulary, which foster students' understanding of these particular words.

Excerpt 1 (Henry, Life Cycle of a Butterfly)
17:17   你有沒有看到一個字叫 lays (Do you see a word called lays?)，下蛋 (Laying eggs.)。
18:01   這隻毛毛蟲啊 (This caterpillar)，牠會吃很多的 vegetation (It can eat a lot of vegetation)，很多的植物 (lots of plants)。

Excerpt 2 (Vivian, Your Name)
02:49   牠有 (It has) long tail，有長長的尾巴 (has a long tail)。
20:34   對 (Yes)，他名字就叫 lookdown (Its name is lookdown.)，叫你往下看 (Ask you to look down)。

4.1.2   Confirming Chinese understanding

In Excerpt 3 and 4, both Henry and Vivian asked the Chinese meaning of keywords to check students' understandings, which ensure students accurately grasps the key concepts.

Excerpt 3 (Henry, Life Cycle of a Butterfly)
03:15   有沒有人知道 abdomen 是哪個字? (Does anyone know which Chinese word abdomen refers to?)
16:07   Life cycle. 有沒有人用中文講? (Can anyone say it in Chinese?) 中文怎麼說? (How to say it?)

Excerpt 4 (Vivian, Your Name)
12:18   It lives in the sky. Sky 是哪裡 (Where is sky)?
16:59   It lives in the river. River 是什麼 (What is river)?

4.1.3   Translation of classroom English or instructions

In Excerpt 5, Henry delivered instructions in English, Mandarin, and non-verbal action, helping students to understand the regulations in CLIL biology classes and encourage their participation.

Excerpt 5 (Henry, Life Cycle of a Butterfly)
07:50   Uhh, if you need any help, please raise your hand. [Raising his left hand.]
          你需要什麼幫忙 (If you need any help)，請你舉起你的手 (Please raise your hand)，我們都可以幫你 (Both of us can help you out.)。

4.1.4   Personal sharing of thoughts or feelings

In Excerpt 6, through the sharing of personal feelings or thoughts, Henry turned the classroom atmosphere into a more relaxed one. By the joke or praise from the teacher, students will feel comfortable or even enhance their participation in class.

Excerpt 6 (Henry, Life Cycle of a Butterfly)
14:12   John?! Oh，總算找到你了(Finally found you.)。來(Come)，John，被稱讚的時候講 "Hi, John" (When being praised say "Hi, John") [Waving his hand] and maybe someone will raise your hand.
15:42   英文小老師啊 (English pupil teacher)。Oh, no wonder. Your English is wonderful.

4.1.5   Encouraging informal conversations

In Excerpt 7, Henry made a start for the informal conversation based on students' life experiences. Although most students replied in Mandarin, the responses were not the answers he expected. He simplified the question again and asked for students' non-verbal response, so students raised their hand as a reply.

Excerpt 7 (Henry, Life Cycle of a Butterfly)
19:26   T:有沒有同學回家的話把棉被變成蛹的? (Anyone wraps yourself like a chrysalis with the quilt at home?) 包起來 (wrap)，especially in winter?

S1: 只有冬天才會 (Only in winter.)
S2: 冬天才會做的事情 (Do it only in winter.)
T: 不是喇 (No)，我說冬天吶 (I said in winter.)，in winter，做成蛹 (Make it a chrysalis)，yeah? 會的舉手 (Raise your hand if you do that.)
Ss: [Raising their hands]
T: Wow! So many!

4.2 Factors affecting teachers' instructional translanguaging patterns use

Three affecting factors revealed in the interview transcripts, which are disparities in students' English proficiency, the establishment of an English-speaking environment, and teachers' English proficiency level. Descriptions and extracts were presented to clearly interpret how these factors influence teachers' translanguaging practices in class.

4.2.1 Disparities in students' English proficiency

The researcher asked Henry why he translated the target vocabulary in Mandarin for students. In Extract 1, although the original course design tended to use the target language (English) as much as possible, due to the huge gap between students' English proficiency level, Henry had to explain in Mandarin again to ensure their understanding.

Extract 1 (Henry, November 6th, 2022):
基本上，我們原先的課程設計是盡可能都不要去用中文解釋，但是後來發現學生程度參差太大。...我們只好出此下策，就是用中文再講一次，讓他至少聽得懂我在講什麼，才不會整堂課有一半的人都聽不懂、覺得實在太多英文。(Basically, our original course design is to avoid using Mandarin to explain as much as possible. However, I discovered that there's a huge gap between students' English proficiency. ... Therefore, that's why I scraped the bottom of the barrel. I used Mandarin to explain the content again, making students at least understand what I was talking about. If I didn't do so, half of the students in class couldn't understand the learning content and felt there was too much English.)

The researcher asked Vivian why she read the target sentences in the slides first. In Extract 2, she revealed the authentic scenario of students' disparities in English proficiency.

Extract 2 (Vivian, December 20th, 2022)
因為我們的落差很大，所以可能，譬如說對其中三分之一會覺得說：這個句子很簡單啊，就住在海裡這樣；但其實我知道我們有一些小孩，他們是連 sea 是什麼都不知道的，所以我才會想說我至少先念一次。(Because there is a huge gap among students. So it may be, for example, one third students considered that "This sentence is easy, it just means living in the sea". But actually I know some of my students, they don't even know the word 'sea', so I thought of at least reading the sentence for them first.)

4.2.2 The establishment of an English-speaking environment

The researcher asked Henry about whether he used classroom English frequently to communicate with students. According to his reply in Extract 3, we can know that as he increased the times of speaking classroom English in the classroom, students will gradually get accustomed to using English in class. Moreover, the more they listen, the more they understand. It is a kind of setting up a beginner-friendly English environment.

Extract 3 (Henry, November 6th, 2022)
對，因為我們這堂課有一些基本用語，學生要學會習慣這些...，然後，在我提問的時候，因為平常上課已經養成習慣了，他們就會直接聽得懂，我就不會再解釋，所以我也常常會用，讓他們習慣這種用法，習慣在英文學習的氛圍裡面。(Yes, because we have some basic instructions for this class, students have to get used to them. ... Then, when I raise questions, as the habit formation, they can understand directly, I won't explain again. So I use them frequently to make students get used to these instructions. Make them accustomed to the English-learning environment.)

The researcher asked Vivian why she read the target sentences for students in English. According to her reply in Extract 4, she took a lead as a sample for students to make comparison with. With her beginning of speaking English in class, students will be more willing to accept English happened in their classroom and gradually speak the target language during the CLIL classes.

Extract 4 (Vivian, December 20th, 2022)

如果貿然叫學生站起來念，對那些不敢開口的同學來說壓力太大，所以我比較想要先營造出那樣的環境，讓他們覺得說，反正老師念得不標準都敢念了，那我們等一下如果念得不好也沒關係。其實最主要是營造一個「我念得很輕鬆，而且也沒有到太差」。(If I unexpectedly asked students to stand up and read the sentences, it would be too stressful for some classmates to be afraid of speaking, so I want to build that kind of environment to make them feel that 'The pronunciation of our teacher is not clear but she can speak anyway, it would be okay if we can't read the sentences well.' In fact the main idea is to build a concept that "I read the sentences comfortably, and the results are not too bad".)

4.2.3   Teachers' English proficiency level

In Extract 5, the researcher asked why Henry spoke English only in vocabulary in some unexpected or unplanned situations. His response indicated that his English proficiency level is not sufficient enough to switch between English and Mandarin flexibly. Based on his current condition, he could speak the keywords to convey meanings to students.

Extract 5 (Henry, November 6th, 2022)

因為我英文能力沒那麼強，沒辦法說出完整的句子，所以我只能把 keyword 講出來，達到我要的意思就好。(Because my English proficiency is not good enough to speak full sentences, I can only speak out the keyword to express my ideas.)

The recordings in Extract 6 is a following statement about reading the target sentences for students. Although Vivian initiated English speaking in her CLIL biology classroom, she was really worried about her deficiency in English speaking would cause some mistakes in pronunciation. Therefore, she also considered that the course design was not only based on the students, but also her English proficiency level.

Extract 6 (Vivian, December 20th, 2022)

我其實沒有讓他們跟著我念，一方面是很擔心我念錯；另一方面是因為我還沒有覺得我能夠做為一個模板，讓他們能夠去模仿我的發音。所以目前真的是考量到他們的程度，可是某方面也是考量到我的程度。(Actually, I didn't ask them to read the sentences after me. On one hand, I'm afraid of reading the words in the wrong way; on the other hand, I don't consider that I can be a template for students to imitate my pronunciation. Therefore, the current situation is considering their English proficiency, but also mine in a certain level.)

5.   Discussion

The identification of five instructional translanguaging patterns and three influencing factors reveals an authentic view of the teaching and learning dynamics in Taiwanese bilingual education.

In terms of translanguaging patterns, both Henry and Vivian employed translanguaging to translate key vocabulary and confirm meanings in Chinese, ensuring students' understanding and supporting knowledge construction. These practices align with Nikola & Moore's (2016) concept of salient translanguaging, where teachers use L1 to facilitate content learning. Furthermore, these patterns reflect similarities with Wang's (2016) explanatory translanguaging strategies, which are primarily teacher-initiated.

The additional three translanguaging patterns used by Henry underscore his objectives in classroom management and interaction. Unlike Vivian's more knowledge-focused approach, Henry placed greater emphasis on teacher-student engagement. Although he translated classroom English into Chinese to enhance clarity and understanding, these practices align closely with Wang's (2016) managerial translanguaging strategies. Additionally, he employed translanguaging to share personal thoughts and facilitate informal conversations with students, resonating with Wang's (2016) interpersonal strategies. While these practices were teacher-initiated rather than student-led, they effectively fostered a more interactive classroom environment.

Regarding the factors affecting translanguaging practices, both Henry and Vivian aimed to create an English-speaking learning environment in their CLIL biology classrooms. However, limitations in English proficiency for both teachers and students meant that translanguaging primarily involved the

translation of key vocabulary and phrases. This illustrates the tension between promoting CLIL and the constraints posed by limited English proficiency.

6. Conclusion

This qualitative study sheds light on the key roles that instructional translanguaging plays in CLIL biology classrooms in Taiwan, specifically highlighting its functions in knowledge construction, classroom management, and fostering interpersonal relationships. Despite the evident benefits of translanguaging for navigating bilingual instruction, limited English proficiency among teachers and students poses challenges to fluid language-switching and incorporating additional teaching resources effectively.

While the small sample size (n = 2) limits generalizability, the findings offer preliminary insights that can inform bilingual education practices. Translanguaging shows potential as a tool for teachers to convey complex subject knowledge, manage classroom interactions, and cultivate a collaborative learning environment. Future research could build on this work by exploring students' perspectives on translanguaging and evaluating its effectiveness in supporting both content comprehension and language development. By focusing on these areas, future studies could provide a more comprehensive view of translanguaging's impact on CLIL classrooms and help shape more effective bilingual instructional strategies in Taiwan and beyond.

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Appendix. Transcription conventions
T = teacher; S1, S2, S3, etc. = single student;
Ss = more than one student;
( ) = Translation of Chinese utterances;
[ ] = nonverbal actions;
___ (at the end of questions) = short pauses indicating blank filling questions\;
... = some lines deleted

13 - Perception of Pedagogical Translanguaging and Self-Reflection by L3 Learners in Higher Education

Park Mihi

mpark@nus.edu.sg
National University of Singapore

Kim Hojung

renata88@snu.ac.kr
Seoul National University

Jeeyeoun Lee

jeeyeoun.lee@gmail.com
Woosong University

Abstract

Translanguaging provides a unique perspective on multilingualism (Vogel & Garcia, 2017), emphasising the intentional use of learners' existing language skills to acquire new knowledge (Cummins, 2019). This approach can greatly benefit learners by enhancing the overall learning experience in addition to acquiring a language. The current study aims to investigate the Korean learners' perception change on translanguaging over time by employing a mixed-methods approach, pre- and post-semester surveys and students' weekly reflections. The intervention includes an explicit class discussion about translanguaging as a method and practising pedagogical translanguaging in teaching and learning. The quantitative results showed that students' perceptions meaningfully changed in the question about the necessity of translanguaging ($t(6)=2.4504$, $p=0.0498$), students especially recognised it as a resourceful way of using linguistic diversity in leveraging their knowledge of multiple languages. Student self-reflected that they could gain a deeper understanding of Korean proverbs by drawing on their knowledge of L1 proverbs, realise a limitation of direct application or translation of prior linguistic knowledge into Korean, and select one of their L1s as a source of transfer over the other. Concisely, the results demonstrate the students' positive view of cross-linguistic approaches, learning strategies, linguistic assets, and intellectual property through pedagogical translanguaging.

Keywords: Translanguaging, bilingualism, L3 learning, pedagogical strategies, multilingualism in education, higher education.

1.   Introduction

Multilingualism has been studied from various perspectives. In earlier studies on bilingualism, it was defined as an individual's ability to use two languages. However, later research done by Cummins (1979) and Grosjean (1982) suggested that bilingualism extends beyond the mere presence of two linguistic systems in one brain. Subsequently, De Groot (2011) presented evidence suggesting that multiple languages are cognitively active during thought processing to produce linguistic output in a single language. Consequently, bi/multilingualism is a dynamic phenomenon that involves the use of multiple languages in the thought process to produce linguistic output in a single language. Therefore, all the languages in one's linguistic repertoire are interdependent in processing linguistic inputs in any medium of language. Garcia (2020, among others) re-defines this particular aspect of multilingualism as *Plurilingualism* while bringing in translanguaging to explain the aspect.

In language education, translanguaging is not just the use of more than two languages to instruct students. Translanguaging is a theoretical lens that offers a different view of multilingualism (Vogel & Garcia, 2017). It is a purposeful employment of learners' known languages to utilise their prior

conceptual knowledge in teaching a new concept (Cummins, 2019). Cenoz and Gorter (2017) distinguish pedagogical translanguaging from spontaneous translanguaging. While spontaneous translanguaging refers to the fluid use of languages both inside and outside formal settings, pedagogical translanguaging refers to the designed instructional strategies that integrate available languages.

In Singapore, multilingualism is a shared feature, especially among higher education learners. Therefore, a carefully designed lesson plan incorporating translanguaging would encourage multilingual learners to select and deploy particular features from their linguistic repertoire to make meaning and negotiate particular communicative contexts (Vogel & Garcia, 2018). Translanguaging may not only include linguistic knowledge that would be facilitative in understanding the target language. For instance, learners may realise that there is no matching concept available in prior languages to understand a new word in the target language. Then, learners would control the possibility of relying on the pattern/direct translation, rather they may actively create a totally new concept to learn the new word. For instance, a Korean verb, 섭섭하다 (*seopseophada*) cannot be translated to a single matching word in other languages easily. It has to be described with a context and an example. From the pedagogical translanguaging perspective, learners become aware that there could be no direct mapping concept that they can tap into and create a context to learn this word. As a result, their world is expanded to include once an alien concept in one language but an existing concept in another language.

Instructors can practice pedagogical translanguaging by explicitly instructing, encouraging self-reflection for learners, and having a learning community among learners. This research aims to investigate the intervention of a third language course by adult learners in higher education settings from the perspective of pedagogical translanguaging. The intended data to collect includes teachers' and students' perceptions about translanguaging, classroom discourse and practice of pedagogical translanguaging in and outside the classroom, and learner reflection.

2. Literature Review

2.1 Translanguaging

Non-target language use in a language classroom has been viewed from various angles. One of the perspectives is from language ideology. When the target language of the classroom is the dominant language of the community that learners are living in, their first languages are not appreciated in the language learning process, especially in an official education system. For instance, in English-speaking societies, the traditional view is that using languages other than English to learn English is seen as a hindrance.

On the other hand, foreign language learners who reside outside of a target-language-speaking-society are willing to maximise their opportunity to expose themselves to a target language. Therefore, the learners perceive the language classroom as a target-language only environment. That implies that language courses need to be strategically and meticulously planned in terms of language use and inclusiveness of linguistic and cultural discussion in a non-target language.

ECML (European centre for modern languages) addresses the lack of extensive and wholesome contribution of language repertoire by emphasising plurilingual education at least in EU premises. "The plurilingual approach puts forward the fact that as an individual person's experience of language in its cultural contexts expands, from the language of the home to that of society at large and then to the languages of other peoples, he or she does not keep these languages and cultures in strictly separated mental compartments, but rather builds up a communicative competence to which all knowledge and experience of language contribute and in which languages interrelate and interact." (CEFR, p.13)

To distinguish multilingualism from plurilingualism, we must consider their core definitions. Multilingualism broadly refers to the ability to use multiple languages, while plurilingualism emphasizes a deeper engagement with languages and cultures. According to the ECML, plurilingual individuals not only speak multiple languages but also understand the relationships between these languages and their cultural contexts. Two key aspects of plurilingualism—developing a learner's

plurilingual repertoire and fostering education through plurilingualism—closely align with the concept of translanguaging.

Garcia and Li (2014, p. 18) describe translanguaging as a means to embrace the complex practices of multilinguals, who navigate languages embedded in their identities while interacting across societal and semiotic contexts. Singapore serves as an illustrative example: a multiracial nation comprising three primary racial groups—Chinese, Malay, and Indian—along with long-term non-Singaporean residents, including 2.3 million permanent residents or foreigners (DSS, 2023). This diverse community fosters daily interactions with a "complex array of speakers," highlighting the practical realities of translanguaging in such a dynamic sociolinguistic landscape.

2.2   *Singapore as a multilingual society*

Based on the national statistics of Singapore (2020), 84.3% of Singaporeans are proficient in more than two languages as their home language. Among the remaining 15.7% of the population who reported having only one home language, 6.4% stated that English is their sole home language. Those who report non-English as their sole home language still use English in social settings such as school or work. Therefore, except for the 6.4% who speak English only as their home language, other Singaporeans are exposed to at least two languages in everyday life. Consequently, one's knowledge, experiences, and resources are gathered in various languages, in contact with different language-speaking micro-communities and social settings.

English is one of the official languages in Singapore. Vernacular language Singlish, or Singaporean English, is widely accepted but is not a variety of colonial English but rather a distinct creole or colloquial form of English that has developed uniquely in Singapore. Singlish incorporates elements from various languages spoken in Singapore, including Malay, Chinese dialects, and Tamil, reflecting the multicultural and multilingual nature of the society. As a result, Singlish is often characterised by its unique vocabulary, grammar, and pronunciation, and it has evolved over time as a form of linguistic identity for Singaporeans. While it may have some historical roots in the colonial period when English was introduced, Singlish has developed into a dynamic and distinct linguistic variety that reflects the local culture and linguistic diversity of Singapore. Language instructors in these multilingual contexts are aware of research highlighting the relevance of L1s and previously learnt languages for the development of an L3 or beyond. However, Singapore's education policy is restricted to English-medium unless it is officially approved by the authority. For instance, in primary school, where English is the instructional language, students are required to take a mandatory mother tongue course. There are three languages available for the mother tongue course: Mandarin Chinese, Malay, and Tamil (Tan, 2021).

Given the unique language context in Singapore, multilinguals naturally perform translanguaging to communicate with each other outside the institutional setting. While multilingualism is not appreciated in the classroom.

2.3   *Pedagogical translanguaing and the perception*

Garcia and Li (2014:43) argue that one of the functions of translanguaging is creating trans-spaces where new language practices and meaning-making multimodal practices. Importantly, they point out that translanguaging plays a dynamic role in the complex interactions of the 21st century. This argument proposes a new lens for language classrooms, especially for multilinguals. Pedagogically speaking, 'to read and discuss a topic in one language, and then to write about it in another language, means that the subject matter has to be processed and digested' Baker (2011:289). This idea suggests that providing extensive resources in multiple languages allows learners to engage with and overcome cognitive challenges, and eventually acquire procedural skills in addition to the language itself.

However, it is still unclear how much learners are cognitively aware of the process, and if the level of awareness would impact the learning outcome in short-term and long-term. To address this gap, the current study postulates the perception of the learning process incorporating pedagogical translanguaging impacts learning and aims to explore two research questions.

2.4   Research questions

How do multilingual adult learners of L3 perceive pedagogical translanguaging? And how does it change in a language course in higher education?

How do multilingual adult learners of L3 self-reflect learning experiences of an L3, in relation to their existing languages?

3.   Methodology

3.1   Survey Questionnaire

The previous studies (Fang & Liu, 2020; Rajendram, 2021; Serna-Bermejo & Lasagabaster, 2022; Wang, 2020) have shown that the attitudes and beliefs of learners and teachers have a significant impact on their use of translanguaging. Additionally, we aim to understand how learners perceive their use of languages both inside and outside the classroom. To achieve this, we have developed the Perception Inventory of Pedagogical Translanguaging (PIPT), which investigates four main topics: 1) the current use of languages by stakeholders (e.g. self, peers, and teacher), 2) the necessity and usefulness of translanguaging in teaching and learning, 3) the belief in translanguaging, and 4) the impact of translanguaging from stakeholders on learning a language.

Table 1. Design of the PIPT

Topic	Sub-category	Aims
1) Use of languages	Self, Peers, Teacher	To the student's understanding, what languages and how often do each stakeholder use in and outside the class?
2) Necessity and usefulness	Translanguaging is NOT necessary (A)	This is to understand a student's perception of the common perception about using multiple languages in a language class.
	Translanguaging is necessary (B)	This is to understand how much students perceive the truth of research outcomes as a benefit of pedagogical translanguaging.
	Translanguaging is useful for teachers… (E)	This is to understand how students perceive the usefulness of teachers' translanguaging in performing various roles in class.
	Translanguaging is useful for students… (F)	This is to understand the student's understanding of how well students may utilise translanguaging as a learning strategy.
3) Belief	Teacher, students	What is the ideal translanguaging practice by a teacher and students in the student's option?
4) Impact	Self, Peers, Teacher	What is the impact of each stakeholder in learning Korean from translanguaging perspective?

The full questionnaire is in Appendix A. Although we assume that students have their own understanding of the term "*Translanguaging*" based on their background and experiences, we chose not to provide a linguistic and pedagogical explanation of the term in order to avoid influencing the results.

3.2   Weekly Reflections

Weekly reflections aim to capture students' individual learning process in relation to translanguaging and in general. Participants were requested to write weekly reflections on their learning journey in MS Teams, using either Korean or English, with the freedom to switch between languages as needed. To guide them in reflecting, a set of prompts (Appendix B) was given to the participants at the start of the semester. The instructor reviewed and provided feedback on the weekly reflections to offer support and address any questions raised, though the feedback did not concentrate on language performance or translanguaging. Instead, the reflections aimed to provide insight into the participants' experiences and perceptions. In total, each student produced 10 pieces of reflections over one semester.

3.3. Procedure

The participants (n=22, 17 females and 5 males) were all enrolled in an advanced-level Korean course, in their fifth semester of learning Korean at the university or at an equivalent proficiency level determined through a placement test. They come from various academic programs such as computing, business, and humanities. The course is an elective language course worth credits, with a total of 52 contact hours for the semester (4 hours per week for 13 weeks) in a small group setting.

The study used a research tool consisting of two identical PIPTs, administered via Qualtrics at the beginning and end of the semester to assess learners' perceptions. Each survey utilized a 5-point Likert scale and took approximately 20 minutes to complete. Participation was voluntary, and participants received SGD10 for completing both surveys. In addition to the surveys, reflections were used to complement the survey results.

To analyze the survey results and reflections, a mixed-methods approach was employed: quantitative analysis was used to understand the survey data (e.g., pre- and post-surveys), and qualitative methods were applied to analyze the reflections.

3.4 Intervention

One method of integrating pedagogical translanguaging into a course is to enable students to draw on their linguistic resources for additional language learning. To effectively use these resources, learners must develop metacognitive awareness and apply metalinguistic knowledge from previously acquired languages. This approach enhances their understanding of crosslinguistic connections in morphological, lexical, and syntactic aspects of the target language.

For example, when introducing the Korean noun 독서 (*tokseo*, reading books), students often mistakenly pair it with the verb 읽다 (*ikda*, to read), forming the incorrect expression 독서를 읽다 (*tokseolul ikda*, to read reading books). To address this, pedagogical translanguaging is employed by explaining the Chinese origin of the word (读书, reading books) and demonstrating why 하다 (*hada*, to do) is the appropriate compound verb. This method helps learners internalize the correct usage by leveraging their prior linguistic knowledge.

Another intervention involves teaching Korean verb argument structures using English, an L1 for many learners and the university's instructional language. Direct translation between Korean and English can lead to errors in argument structures. For instance, the Korean verb 필요하다 (*pilyohada*, often translated as "to need") is a descriptive verb requiring only a nominative argument (*to be needed*), unlike the English transitive verb "to need," which requires both nominative and accusative arguments. Explicit instruction highlights these differences, addressing errors and fostering crosslinguistic awareness.

Lastly, students are encouraged to use contextual knowledge in individual and group tasks, supporting their development as emergent bilinguals. This approach maximizes their available linguistic resources, helping them solve tasks effectively and recognize the value of their bilingual abilities.

3.5 Analysis

The PIPT results are analysed using ANOVA with the time effect as an independent factor for continuous data while using categorical variable distributions for polychotomous nominal data.

To further unpack the reasons for the changes in participants' perceptions over the course of the semester and how they utilised multiple languages to aid their Korean learning, we analyse the reflection notes using thematic analysis (Braun & Clarke, 2006, 2021; Nowell et al., 2017).

4. Results and Discussion

The results from the pre- and post-semester surveys are presented together according to the four topics for greater convenience in reporting data from two time points. And the excerpts

4.1 Use of Language

Table 2. Summary of the results in language use

	Pre		Post	
Do you switch languages in class?	**N**	**%**	**N**	**%**
False	2	9%	2	9%
True	20	91%	20	91%
How often do you think you switch between languages – to teachers	**N**	**%**	**N**	**%**
not at all	2	10%	0	0%
20% of the time	15	75%	15	75%
40% of the time	1	5%	1	5%
	Pre		Post	
60% of the time	2	10%	3	15%
80% of the time	0	0%	1	5%
How often do you think you switch between languages – to peers	**N**	**%**	**N**	**%**
20% of the time	4	20%	2	10%
40% of the time	8	40%	6	30%
60% of the time	6	30%	5	25%
80% of the time	2	10%	6	30%
100% of the time	0	0%	1	5%
Do you switch purposefully or unconsciously in Korean class? (to Teachers)	**N**	**%**	**N**	**%**
Both	6	30%	6	30%
Purposefully	14	70%	14	70%
Do you switch purposefully or unconsciously in Korean class? (to Peers)	**N**	**%**	**N**	**%**
Both	11	55%	8	40%
Purposefully	6	30%	7	35%
Unconsciously	3	15%	5	25%

In terms of language use in class, most participants reported switching between Korean and other languages during the class, with 20 out of 22 indicating this behavior in the pre-semester survey: 20% of the time with teachers and 40% with peers. In the post-semester survey, the same number of participants (20 out of 22) continued to report language switching, although two individuals who initially indicated they did not switch languages in the pre-semester survey now marked this response. Since this is a perception survey, participants' responses are based on their own perceptions, which may not always reflect actual behavior.

The data shows that students tend to switch languages more frequently with peers than with teachers in both surveys. Over time, the frequency of switching languages with teachers has increased, and no participant reported never switching to a teacher. Moreover, over 50% (N=12) of participants in the post-semester survey reported switching languages with peers more than 60% of the time.

The results suggest that language switching with teachers occurs purposefully (30% of the time), or both purposefully and unconsciously (70%). In contrast, language switching with peers tends to happen unconsciously (15% in the pre-survey and 25% in the post-survey). This suggests that language switching, particularly with peers, serves to facilitate quick and effective communication, helping manage class time and space. Below are examples provided by participants demonstrating translanguaging in class:

"When they do not know how to express their thoughts in Korean during classroom discussions." [Post-019]
"I actually strongly dislike using other languages other than Korean in Korean class but for the sake of time, I do not have the luxury of time to slowly think and therefore I use English to quickly convey my thoughts." [Post-021]

4.2 The necessity and usefulness

The results under this topic are analysed quantitatively.

Table 3. Summary of the results in necessity and usefulness of translanguaging

Categ ory	Pre-semester	Post-semester	Significance	Question

A	2.51	2.44	none	Translanguaging is unnecessary
B	3.80	4.04	$t(6) = 2.4504$, $p = 0.0498$	Translanguaging is necessary
E	3.83	3.87	none	Translanguaging is useful for Teachers in class
F	3.78	3.80	none	Translanguaging is useful among students

There is a significant increase found only in question category B asking about the necessity of translanguaging in various aspects of learning. To compare a time-effect in categories A and B, two-factor ANOVA with repeated measures on one factor is employed. The results show that the question categories are significantly different from each other ($F(1, 13) = 73.05$, $p<.0001$), and the time-effect shows a reliable difference between the two question categories ($F(1, 14) = 5.33$, $p=.039571$). We performed a post-hoc analysis to understand the impact of each question in Category B.

Table 4. Post-hoc test results by time for each question in Category B

	To what extent do you agree with the following statements?	Pre-	Post-
B-1	Translanguaging IS necessary: - Using multiple languages is natural for bilinguals and/or multilinguals in Korean class	3.95	4.18
B-2	Translanguaging IS necessary: - Using multiple languages is essential for learning a new language like Korean	3.95	3.68
B-3	Translanguaging IS necessary: - Using multiple languages to study Korean in class develops my confidence in Korean	3.45	3.68
B-4	Translanguaging IS necessary: - If a teacher uses multiple languages in Korean class, it is helpful for bilingual and/or multilingual students (to conceptualise new grammar and/or to understand new vocabulary/to support cross-cultural views).	4.14	4.36
B-5	Translanguaging IS necessary: - Allowing multiple languages in Korean class is a way of using linguistic diversity as a resource for learning and teaching Korean	3.64	4.18
B-6	Translanguaging IS necessary: - Using multiple languages helps students to learn Korean better by capitalising on their knowledge of other language(s)	3.95	4.41
B-7	Translanguaging IS necessary: - Allowing students to use multiple languages in Korean class helps them to feel empowered about being a bilingual/multilingual	3.50	3.77

The participants increasingly agree with the statement "translanguaging is necessary" as they learn a third language (L3) in a higher education setting over a semester. The major impact is found in B-5 ($t(21) = 2.9823$, $p = .0071$) and B-6 ($t(21) = 3.1774$, $p = .0045$), both views change significantly positively over a semester. Both questions address metacognitive activities such as using linguistic diversity as a resource and encouraging learners to access the knowledge of other languages. It implies that Singapore learners perceive multiple languages as avenues to access the outer worlds in a learning context. Reading the translanguaging moments shared by the participants, their multilingual identity is also assured as a valuable asset to learn additional languages in translanguaging practices.

> "I remembered a moment in class when we had to decipher the meaning of a poem with a partner. It was difficult to interpret a text with many words we don't know so me and my partner tried to translate parts of the Korean poem to English to get a better grasp of the meaning." [Post-003]
> "Using English, a language we are all stronger in, to explain the meaning of new words and grammar helps me understand them better. When the teacher use Chinese, a language I know, to explain the Hanja of some of the new Korean words, it helps me form a better connection between the familiar Chinese and the new Korean word, helping me remember it better." [Post-022]

Even though the results from other categories (A, E and F) did not show statistical significant changes over time, they show interesting results from individual items.

Table 5. Summary of the results in Category E

E. To what extent do you agree with the following statements? It is useful for the TEACHERS to use multiple languages in the following situations in Korean class:		Pre	Post
E-1	- To explain Korean grammar	4.41	4.36
E-2	- To explain the meaning of Korean vocabulary	4.36	4.41
E-3	- To translate Korean terms/grammar to a language understood by peers	4.23	4.55
E-4	- To give feedback to students	3.77	3.77

E-5	- To praise students	2.86	2.86
E-6	- To build rapport with students	3.18	3.23
E-7	- To explain classroom activities	3.45	3.55
E-8	- To help students who learn Korean at a slower pace	4.27	4.41
E-9	- To ask students questions	3.00	3.09
E-10	- To communicate better with students	3.82	3.86
E-11	- To help students participate in class at specific moments when they cannot express certain ideas in Korean	4.77	4.50
F. To what extent to you agree with the following statements? **It is useful for STUDENTS to use multiple languages in the following situations in Korean class:**		**Pre**	**Post**
F-1	- To provide assistance to peers in classroom activities	4.05	4.18
F-2	- To brainstorm with peers during classroom activities	3.45	3.27
F-3	- To enable peers who learn Korean at a slower pace to participate	4.36	4.27
F-4	- To answer teacher's questions	2.45	2.82
F-5	- To correct peers' language use	4.00	3.82
F-6	- To explain to peers new vocabulary/grammar	4.45	4.32
F-7	- To provide translation for Korean terms/grammar	4.18	4.32
F-8	- To ask teachers questions in class	3.05	3.09
F-9	- To ask teachers questions outside class	3.36	3.55
F-10	- To ask their peers questions	3.82	3.64
F-11	- To generally communicate better with their peers and teacher in class	3.82	3.82
F-12	- To allow them to participate in class at specific moments when they are unable to express certain ideas in Korean	4.41	4.55

The participants showed a positive attitude towards the instrumental use of multiple languages by teachers such as to explain grammar, and vocabulary meaning, and help relatively low-performing students. However, the attitude towards communicational use is less positive such as asking questions and praising students. And this attitude is consistent towards the use of multiple languages by students. No significant difference between pre- and post-survey results may imply that the attitude is consistent and became one's belief. In other words, translanguaging is positively viewed to aid an instrumental purpose, while students prefer full immersion of Korean in an authentic conversation for teaching and learning an L3 in the context of limited target language exposure.

4.3   The belief

The survey results in belief of language switch in the class reveal that the students believe in higher exposure to the foreign language in class.

Table 6. Summary of the results in belief

	Pre		Post	
Ideally, how often should the TEACHERS switch languages in Korean class?	N	%	N	%
not at all	1	5%	1	5%
20% of the time	16	73%	16	73%
40% of the time	5	23%	4	18%
60% of the time	0	0%	0	0%
80% of the time	0	0%	1	5%
Ideally, how often should STUDENTS switch languages in Korean class?	N	%	N	%
not at all	0	0%	1	5%
60% of the time	0	0%	1	5%
40% of the time	7	32%	7	32%
20% of the time	15	68%	13	59%

Most students view 20% of the time as ideal for TEACHERS (73%) and STUDENTS (68%) switching between Korean and other languages in Korean class from the pre-semester survey. The trends do not change much at the post-semester survey, yet one student is found to strongly believe more frequent switch between languages would be beneficial. Still, 95% of the participants believe that both teachers and students should use multiple languages less than 50% of the time. It is evident that multilingual learners idealise language immersion for a constructive language learning environment.

As one participant shared, "It is easier for me to understand but if I would like to have a full immersion experience that forces my brain to accustom to the language and stop thinking in other language other than Korean. Full Korean conducted class is the best" [PreS_001].

4.4   The impact

To measure the perceived impact of simple language switching, we asked the question, "To what extent do you think your Korean teacher/peer/self's switching between languages helps you to learn Korean better?".

Table 7. Summary of the results in impact from translanguaging

	Teacher				Self				Peers			
	Pre		Post		Pre		Post		Pre		Post	
TRUE	20	91%	22	100%	21	95%	22	100%	21	95%	22	100%
FALSE	2	9%	0	0%	1	5%	0	0%	1	5%		0%
Extremely helpful	7	32%	6	27%	2	9%	2	9%	1	5%	1	5%
Considerably helpful	10	45%	11	50%	8	36%	12	55%	11	50%	12	55%
Neutral	0	0%	0	0%	4	18%	2	9%	5	23%	3	14%
Slightly helpful	3	14%	5	23%	7	32%	5	23%	4	18%	6	27%
Not at all helpful	0	0%	0	0%	0	0%	1	5%	0	0%	0	0%
(blank)	2	9%		0%	1	5%		0%	1	5%	0	0%

In the pre-semester survey, 91% of the participants recognise that the teachers switch between Korean and other languages in Korean class, while 95% perceive self's and peers' language switches in class. We continued asking them to rate the helpfulness of the language switch and the responses are converted as a continuous factor (1 to 5) to measure a significance quantitively. The mean score of helpfulness for the teacher's language switch was 4.05 in the pre-semester survey and 3.8 in the post-semester survey. In comparison, the language switches by students—both their own and their peers'—were perceived as less helpful, receiving ratings of 3.2 and 3.4 for self-switching, and 3.4 across the board for peer switching.

Even though the participants believe in fewer language switches for a better learning outcome, they view language switches as helpful to a certain extent. It may seem inconsistent across their views, but our interpretation is that learners recognise pedagogical translanguaging as a beneficial resource while unplanned translanguaging among learners is not as facilitative as a teacher's constructive translanguaging. In other words, the quality of translanguaging matters. This interpretation is supported by a few translanguaging examples shared by the participants in the survey.

We asked open-ended questions for specific examples for each stakeholder demonstrating translanguaging in class. One key observation from the examples of teachers effectively using multiple languages to teach Korean is their repeated mention of Sino-Korean vocabulary. Sino-Korean words are terms that originated from Classical Chinese and were incorporated into Korean during periods of cultural and linguistic influence from China. These words constitute a significant portion of the Korean lexicon, with roughly 60-70% of Korean vocabulary derived from Sino-Korean origins. Even though, the pronunciation and writing system is different from modern Korean, knowing Chinese characters (*Hanja*) corresponded to each Korean syllable is highly beneficial to Korean learners, especially in learning vocabulary.

> The usage of Chinese characters helped me to understand the Korean characters more and also develop more interest in it. [Post-020]
> When the teacher use Chinese, a language I know, to explain the Hanja of some of the new Korean words, it helps me form a better connection between the familiar Chinese and the new Korean word, helping me remember it better. [Post-022]

Interestingly, it is found that the teacher's explicit instruction about the meaningful connection between Korean and Chinese does not only support comprehension but also long-term memory of

new words backed up by Chinese. The instructor observed that the students gradually understood the logic of compounding words using *Hanja* and analysed the morphological information of compound words using context and *Hanja* knowledge. The reflections below reveal the experience more extensively.

On the other hand, the participants did not mention using Chinese under the examples of their own or peers' multiple language use as a useful resource. The use of multiple languages aids a fluid conversation among students as non-Korean languages support overcoming barriers in conveying messages to solve a task. At the same time, the participants practise translanguaging as a learning strategy.

> When I am unable to express my ideas entirely in Korean, I will express parts of it in English. In such cases. my peers or my teacher would help to translate my ideas to Korean. This way, I learn new ways of expressing my ideas in Korean. [Pre-013]
> When I am talking to my peers and I don't know how to express an idea in Korean. I don't want to change what I want to say so I mix in a bit of English with my Korean. [Pre-018]
> When my peers are unable to share their ideas with me, they use English and we can work together to understand it in Korean as well. [Post-017]

4.5   Concerns

In the PIPT, six out of 22 participants expressed concerns about the use of translanguaging in the classroom. They strongly believe that full exposure to the target language is facilitative and worry about the potential for incomplete language acquisition. One participant shared their experience of being fully immersed in the Korean language while studying in Korea, noting that the teacher was very strict and refused to speak or respond in English at all. Another participant highlighted the possibility of students resorting to English during group discussions with their peers. While, the same group of participants also mentioned how a teacher's language switch could be helpful in certain contexts such as in managing class time effectively, borrowing linguistic terminology to explain grammatical concepts, and explaining *Hanja* of Sino-Chinese words. It implies that their concern about translanguaging is limited to language switches to serve the conversational purpose among students.

4.6   Reflections

Weekly reflections offer valuable personal learning experiences regarding pedagogical translanguaging both in the classroom and in private settings. In this study, we present reflections that support the findings from the PIPT.

Firstly, several reflections illustrate the strategic use of translanguaging to analyse morphological information by utilising cross-linguistic knowledge. As shown below, many noted that cross-linguistic knowledge of *Hanja*(Chinese characters) in both Korean and Chinese is highly beneficial for learning Sino-Korean vocabulary.

> Korean and Chinese are more similar to each other than to English, so comparing Chinese characters makes it easier to understand vocabulary. Thank you for teaching us Chinese characters in class as well—it's truly helpful. [N, W2]

Learners noted that by deepening their understanding of the meanings of Sino-Korean affixes in Korean compound words through Chinese and English, they also discovered new ways to combine these suffixes with English loanwords. One learner reported that after studying the Sino-Korean morpheme '-*shil*' (실, 室) found in compound words such as '*boksashil*' (복사실, photocopy room), '*guallishil*' (관리실, security room), and '*hugeshil*' (휴게실, resting room, lounge), he/she was able to extend this knowledge to understand the English loanwords 'shower' and 'computer' when combined with '-*shil*' to form 'shower room' (샤워실) and 'computer room' (컴퓨터실).

Other participants presented that understanding linguistics in English has also helped them grasp the grammar rules more effectively.

> We also went through common mistakes when using "은/는 데다가" and realized that it can only be used if the first and second clause usually happen together or are in support of one another and it should be referring to only one subject. I was a bit confused at first because when I first learnt this grammar rule, it translated to "and also" or "on

top of that" in English which can be used regardless of these conditions. For example, between a couple fighting, a possible sentence could be "I am busy with my work schedule and on top of that, you are preparing for your school project". However, in Korean, it seems that this grammar rule can only be used if the two conditions mentioned above is met. I will try to keep this in mind when making sentences with this grammar rule. [S, W5]

I use English and Mandarin to help me make sense of a lot of the grammar. For example, I learnt to differentiate 동작동사 from 상태동사 by thinking that they are action verbs vs state verbs. State verbs are verbs that don't involve movements, conversely, action verbs are those that involve a movement. Learning vocabularies and linking them to its Mandarin counterpart definitely helped since I'm a lot more fluent in Mandarin than I am in Korean. [C, W3]

We also identified the reflections that demonstrate the students' strategic application of translanguaging to access knowledge and experiences acquired through previous languages for learning. L3 Korean learners do not approach the language as if they are starting from scratch. Instead, they bring with them concepts and practical knowledge of various natural, social, and cultural phenomena from the multiple languages they have previously acquired. Consequently, through translanguaging, they can effectively leverage this diverse knowledge in their learning of Korean.

I thought it would be easier to look up Korea-related information using Korean. But I learnt that I can use English is also helpful in searching some information. [A, W7]

By only directly translating the words to English, I often ignore the subtle context and usage of the words. This may lead me to misuse words and form phrases that make sense in English but not in Korean. I also realised that I often must think in English before translating it to Korean. Learning the meaning n Korean as well as some example sentences where it can be used will be much more beneficial in the long run." [J, W1]

Another example can be found when understanding proverbs. Some learners successfully grasped the meaning of Korean proverbs by comparing them to Chinese proverbs. One of the participants reflected that he/she understood Korean proverbs based on their prior knowledge of English and Chinese proverbs. Similarly, another participant noted in his/her reflection that the Korean proverb 'Frog in a well,' which means 'to learn nothing while isolated in one's own space and thoughts,' shares the same meaning as the Chinese proverb, 井底之蛙. This similarity made it easier for him/her to understand the Korean proverb

Interestingly we found the reflections show how pedagogical translanguaging enhances their cross-cultural awareness while learning a language. For example, one learner wrote a reflective journal with the following content after studying "*-ge doeda*(-게 되다)", which means "to just happen by the outside condition".

It was interesting that '-게 되다' is used when there is an external condition affecting the action I.e., just happened to be this way. It also serves as a form of humble speech! Which was very interesting to know. I feel like in Asian languages people tend to associate their success to external factors and rarely attribute it to their own hard work and talent... The more we know! [M, W12]

Another learner described how comparing Korean proverbs with their Chinese and English counterparts has heightened awareness of cultural similarities and differences.

While some Korean proverbs are similar to or even the same as Chinese or English proverbs, others uniquely reflect Korean culture. For instance, '가는 날이 장날' (The day you go is the market day) is better understood with knowledge of traditional Korean markets. Similarly, '금강산도 식후경' (Even Mount Geumgang looks better after a meal) can only be fully appreciated by recognizing the beauty of Geumgang Mountain." [A, W10]

Lastly, a number of reflections present the students' self-directed learning through translanguaging outside the classroom. Participants demonstrated proactive learning by using enhanced metacognitive skills through translanguaging to infer and remember the meanings of new vocabulary they encountered.

I often catch myself thinking more in English (like right now...) than Korean. Though, being trilingual (or TRYlingual, including Chinese), there are moments when I think in all three languages. One instance is when I am trying to memorise new Korean vocabulary. If the word doesn't stem from English (e.g. 샤워-shower), I would often compare

> it to Chinese to see if there are any similarities (e.g. 이용권-使用券-shi yong juan). That way, I can link the two common languages together and better improve my memorisation of the new word. [M, W 2]

Students also demonstrated this proactive learning alongside their classmates. They noted that they discussed the meanings of new vocabulary with one another and shared how each of them learned vocabulary in their own unique ways.

Moreover, in completing tasks that require critical and creative thinking, learners did not rely solely on their limited Korean. Instead, they enhanced their ability to independently seek out and restructure information by leveraging the diverse language resources they already possessed.

> By searching in other languages, I can access more information. From now until the presentation, I plan to continue gathering information in both English and Korean and organize it effectively. I will also aim to translate the English information into simpler terms using the grammar and vocabulary we learned in class. [A, W9]

Taken together, the reflections not only provide insights into supporting the results of PIPT but also present personal anecdotes that reveal how students approach learning from a pedagogical translanguaging perspective. The students' reflections provide more meaningful aspects of the learning experiences because they include their behaviour changes and the personal impact of translanguaging in the learning process. The students replicate the learning strategies introduced by the instructor and further evolve the methods to suit their individual goal.

5.   Pedagogical Implication

The responses indicate that students generally "somewhat" agree on the necessity of translanguaging before and after the course intervention, with means of 3.8 and 4.04, respectively. They also find it useful for teachers (M = 3.83 and 3.87) and for themselves (M = 3.78 and 3.8). Conversely, a few participants strongly believe that full immersion in the target language is the best environment for learning a foreign language.

However, the positive feedback from participants highlights that translanguaging fosters a constructive learning environment by addressing time and space constraints and supporting clear communication to complete tasks. Additionally, the participants reflected deeply on how they engaged in self-directed learning by strategically using pedagogical translanguaging.

In summary, learners recognise the benefits of pedagogical translanguaging and actively employ various learning strategies after being exposed to it in class. This suggests that thoughtfully designed pedagogical translanguaging—such as incorporating morphological analysis, etymology, and cross-linguistic approaches—enhances language learning for multilingual students. Furthermore, they are able to apply these skills effectively in their self-study.

The results of this study indicate that incorporating pedagogical translanguaging in course design can benefit multilingual learners by providing them with cross-linguistic knowledge, diverse learning strategies, cross-cultural perspectives, and fostering self-directed learning. Additionally, translanguaging improves instructional efficiency in classroom management. When multiple languages or resources are available, a well-structured pedagogical translanguaging approach leverages these assets to enhance learning outcomes. However, pedagogical translanguaging must be introduced as a strategy to embrace multilingual identity rather than a substitute for the target language of the course.

6.   Conclusion

This study explores learners' perceptions and their personal experiences in a third language (L3) course, in relation to pedagogical translanguaging. The course is designed to actively incorporate pedagogical translanguaging to support multilingual dynamics at a higher education setting. Participants generally hold a positive view of translanguaging, and this positive attitude remains consistent throughout the semester. Even, their attitude towards the necessity of translanguaging is significantly strengthened, especially as a way of using linguistic diversity as a resource for learning

and teaching Korean, and as a support to students to learn Korean better by capitalising on their knowledge of other languages. It includes metalinguistic knowledge and world knowledge through English and Sino-Korean vocabulary from Chinese background.

Conversely, survey results reveal concerns about translanguaging, stemming from the belief that there is a positive correlation between translanguaging and language deterioration. In sum, participants perceive translanguaging from mixed perspectives. They view it positively when it is involved in the process of learning by a teacher to aid their comprehension of the language, but they are more reserved about its use in the production during their conversations among peers.

The current study supports that the students in the class perceive one of the key functions of translanguaging, meaning-making multimodal practices (Garcia & Li, 2014) while learning L3 Korean. As Baker (2011) argued, the students are found to appreciate that translanguaging supports processing and digesting the subject matter. Additionally, the learners engage extensive resources through multiple languages to overcome cognitive challenges, and accumulated experiences enhance their autonomous use of the acquired skills in a more independent learning environment.

However, there are still areas to further explore. It is unclear if the positive perception of pedagogical translanguaging results from the intervention from the course, the impact of the perception, and if there are any behaviour changes in relation to the perception.

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Appendix A. Perception Survey: Language Use and Translanguaging in Korean Classes
PART I: Demographic Information
1. **Participant's Demographic Information**
   A. What is your age? Under 18 / 18–24 / 25–29 / 30–34 / 35–39 / 40–44 / 45–49 / 50 and above
   B. What is your gender? Male / Female
2. **Participant's Personal Language Learning Information**
   A. What language(s) do you feel most comfortable in? *(Open-ended)*
   B. What language(s) do you use at home? Please indicate the weightage of each (e.g., English 60%, Mandarin Chinese 20%, Hokkien 20%). *(Open-ended)*
   C. How would you describe your bilingual status? 1) monolingual 2) balanced bilingual (all the known languages are similarly proficient) or dominant bilingual (proficiency level of languages that you know vary) 3) multilingual
   D. How long have you studied Korean? ___ years ___ months
   E. In what context(s) have you studied Korean? Formal / Informal / Mixture of formal and informal
   F. What other language(s) have you learned? *(Open-ended)*
   G. In what context(s) did you study these languages? Choose one for each language: Formal / Informal / Mixture of formal and informal *(Please specify for each language)*
   H. For the languages mentioned above, rate the proficiency of each on a scale of 0 (none at all) to 100 (native-like). Language 1: ___ / Language 2: ___ / Language 3: ___
PART II: Translanguaging Practices and Beliefs
1. **Participant's Reported vs. Actual Use of Languages in Class**
   A. Do you switch between Korean and other languages in Korean class? Y/N
   B. If yes, what languages (other than Korean) do you switch to? *(Open-ended)*
   C. How often do you think you switch between languages in Korean class? Not at all / 20% of the time / 40% of the time / 60% of the time / 80% of the time / 100% of the time
   D. When switching languages in class, do you do so purposefully or unconsciously? Purposefully/ Unconsciously
2. **Views on Translanguaging**
   A. To what extent do you agree with the following statements? *(Strongly disagree, Disagree, Neutral, Agree, Strongly agree)*
      Translanguaging is not necessary:
      • Using multiple languages in Korean class indicates a lack of proficiency in Korean.
      • Teachers should avoid using multiple languages as it hinders proper Korean teaching.
      • Students should avoid using multiple languages as it hinders proper Korean learning.
      • Use of other languages in Korean class may lead to excessive reliance on them.
      • Korean class should be conducted purely in Korean.
      • Using multiple languages in class means the Korean used is not authentic.
      • Students may not know when to switch languages appropriately if multiple languages are allowed.
   B. Translanguaging is necessary:
      • Using multiple languages is natural for bilinguals/multilinguals in Korean class.
      • It is essential for learning new languages like Korean.
      • It builds confidence in learning Korean.
      • Teachers' use of multiple languages helps bilingual/multilingual students (e.g., understanding grammar, vocabulary, or cross-cultural views).
      • It uses linguistic diversity as a resource for teaching and learning.
      • It helps students learn Korean better by leveraging their knowledge of other languages.
      • Allowing multiple languages empowers students as bilinguals/multilinguals.
   C. Ideally, how often should teachers switch languages in Korean class?
      • Not at all / 20% of the time / 40% of the time / 60% of the time / 80% of the time / 100% of the time
   D. Ideally, how often should students switch languages in Korean class?
      • Not at all / 20% of the time / 40% of the time / 60% of the time / 80% of the time / 100% of the time
   E. To what extent do you agree with the following statements? *(Strongly disagree, Disagree, Neutral, Agree, Strongly agree)* Teacher's use of multiple languages is useful for:
      • Explaining grammar and vocabulary.
      • Providing direct translations.
      • Giving feedback or praise.
      • Building bonds with students.
      • Explaining classroom activities.
      • Helping slower learners.
      • Asking questions or improving communication.
      • Facilitating student participation during challenging moments.
   F. Students' use of multiple languages is useful for:
      • Assisting peers during activities.
      • Brainstorming or enabling slower learners.
      • Answering teacher questions or explaining vocabulary.
      • Providing translations or asking questions in and outside of class.
      • Communicating better and improving participation.
3. **Perceived Impact of Teacher's Translanguaging**
   A. Does your Korean teacher switch between languages? Y / N

B. If yes, how much does this help you learn Korean? *(Does not help, Helps slightly, Neutral, Helps considerably, Helps a lot)*
C. Provide examples of when your teacher's language switching helped you learn Korean. *(Open-ended)*

4. **Perceived Impact of Participant's Own Translanguaging**

A. Provide examples of when your own use of multiple languages helped you learn Korean. *(Open-ended)*

5. **Perceived Impact of Peers' Translanguaging**

A. Do your peers switch between languages in class? Y / N
B. If yes, how much does this help you learn Korean? *(Does not help, Helps slightly, Neutral, Helps considerably, Helps a lot)*
C. Provide examples of when your peers' language switching helped you learn Korean. *(Open-ended)*

6. **Participant's Translanguaging Outside of Lesson Time**

A. What language(s) do you use to communicate with your Korean teacher outside class? Korean / English / Mixture of Korean and English
B. In what situations do you communicate with your teacher outside class? *(Select all that apply)* Talking about Korean class / Discussing Korea in general / Asking personal questions / Casual interaction / Others (please specify: ____)
C. What language(s) do you use to communicate with peers outside class? *(Open-ended)*
D. In what situations do you communicate with peers outside class? *(Select all that apply)* Talking about Korean class / Discussing Korea in general / Asking personal questions / Casual interaction / Others (please specify: ____)

7. **Other views about translanguaging**

Do you have any other concerns or thoughts about switching between languages in Korean class? (Open-ended)

Appendix B. Reflection prompt

During e-Lecture	During Lecture	After Lecture
I learnt and noticed... I wonder ... I want to find out ... So, I did....	I can resolve (my doubts)... I can further find... I am not still clear about	Therefore, I want to ... I want to find out further of ... After the class, I did ....
What kind of information/resources do I rely on while trying to make sense of new information of Korean? Am I thinking in Korean or English or any other languages in conceptualising? Do I compare Korean with any other languages to make sense of new information?		

14 - Learning L2 Reading Strategies Through Cooperative English Reading Activities

Yuki Salvacion

gustoriku@gmail.com
Hyogo University of Teacher Education, Japan

Hiromasa Ohba

hohba@juen.ac.jp
Joetsu University of Education, Japan

Abstract

This study examines the effectiveness of teaching reading strategies through Cooperative English Reading Activity (CERA) (Salvacion & Ohba, 2023) to Japanese learners who have received approximately seven years of English instruction. CERA consists of two distinct phases: the Preparation Phase and the Activity Phase. In the Preparation Phase, 24 participants received explicit instruction in nine reading strategies and the use of graphic organizers. During the Activity Phase, participants engaged in cooperative text reading and summary writing, as well as discussion of the texts and the reading strategies employed. Participants were required to create portfolios to document their individual thinking processes. The results showed that CERA contributes to learners' acquisition of reading strategies. It also suggests the possibility that learners can change their reading processes deeper through CERA and achieve deeper comprehension.

Keywords: Reading strategies, Cooperative English Reading Activities (CERA), Reading comprehension, Higher-level processes, Metacognitive awareness

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1.   Introduction

The purpose of this study is to define learners' engagement in English reading comprehension through discussions incorporating the fundamental components of cooperative learning (Johnson, Johnson & Holubec, 2009) as "Cooperative English Reading Activities (CERA)" and clarify its impact on learners' use of reading strategies. Grabe (2009, p. 19) points out that difficulties learners face during classroom reading activities may stem not from a lack of reading ability, but from "a lack of awareness of the real goal for that reading task." This suggests that English reading instruction must cultivate abilities and elements that support the reading process. One such element is learners' use of reading strategies.

This study discusses reading processes, the role of reading strategies, and the theoretical background underpinning their instruction. It then identifies issues in prior reading strategy instruction, proposes Cooperative English Reading Activities (CERA), and examines its effects on Japanese high school students.

2.   Theoretical Background

2.1   Reading Processes

Khalifa and Weir (2009) present a model of reading that clearly refers to not only the processing of textual information leading to comprehension but also to the reader's prior knowledge and metacognition that influence it (Figure 1).

Figure 1. A model of reading (cited from Khalifa & Weir, 2009, p. 43)
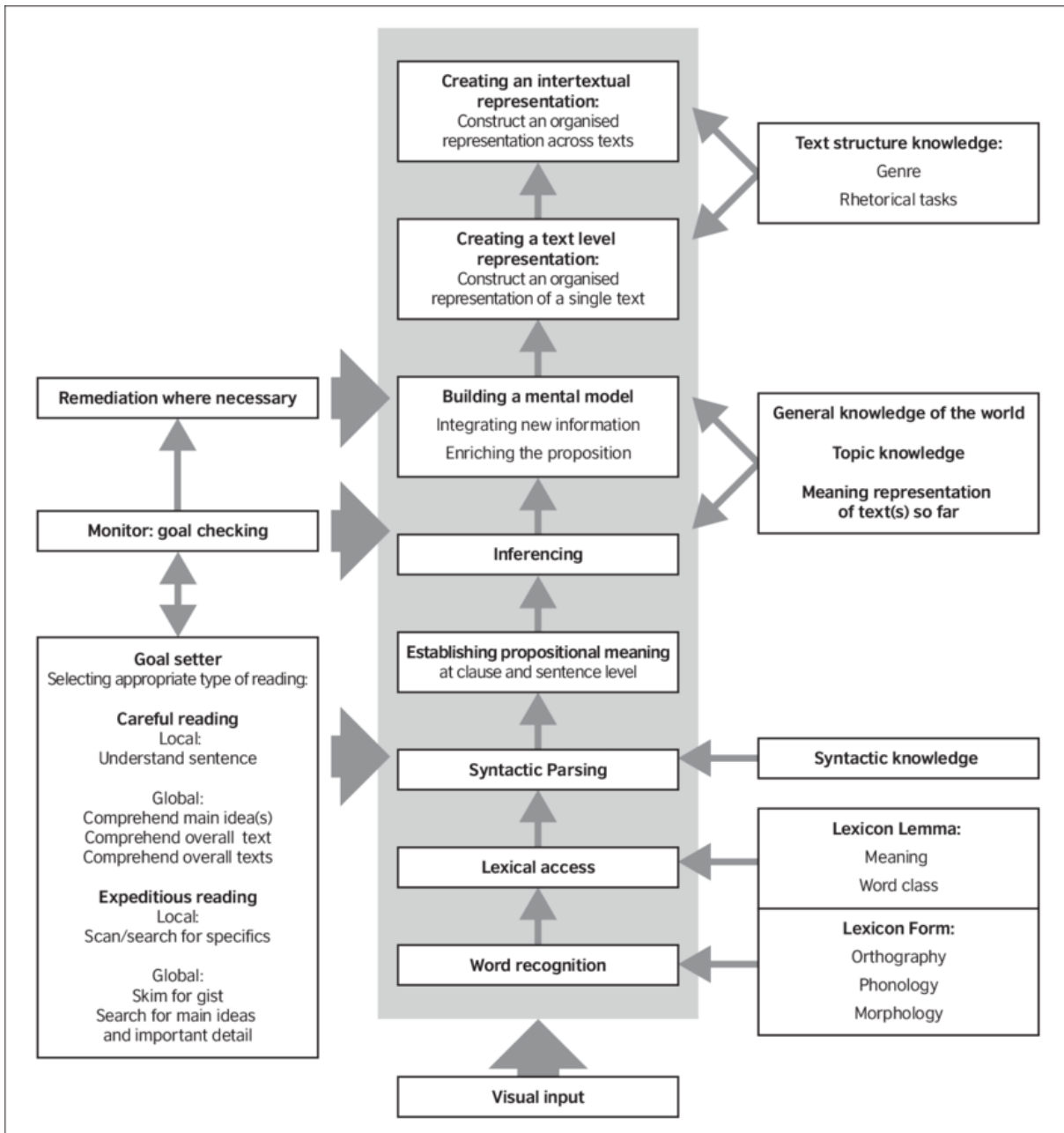
In this model, the core processes of reading are shown in the central column, while processing occurs utilizing the reader's prior knowledge presented in the right column. Textual information is processed in sequence at the word level, phrase level, and then sentence level, where the reader accesses their prior vocabulary and syntactic knowledge to retrieve necessary information and understand meaning at the sentence level. Grabe (2008) described these processes as lower-level processes. Following this, through inference, the reader comprehends what pronouns and demonstratives refer to and interprets based on their general knowledge, thus constructing mental representations in the form of images. As the final stage of comprehension, the reader understands the text at the paragraph level. They consider questions such as what the writer intends to convey throughout the text, what information is necessary to achieve the reading purpose, and what the main points of the text are, while also taking into account their prior knowledge about the structure of the text and its connections with other texts. These processes are higher-level processes, which good readers can use frequently.

The particular focus of this study is on the metacognitive activities shown in the left column of Figure 1. These activities are those that manage the core processes. Before reading, the reader confirms their goals and chooses appropriate reading strategies. During the execution of the core processes, they monitor their reading and assess their progress. If any problems arise, they provide remediation to overcome them. These corrective measures are what are referred to as reading strategies.

2.2 Reading Strategies and Reading Strategies Instruction

Reading strategies refer to the means that readers consciously use during reading, distinguishing them from reading skills, which are used unconsciously (Paris, Wasik, & Turner, 1991). Regardless of their proficiency, when readers face problems that hinder the reading process, they engage in consciously searching for strategies to overcome these challenges. Readers cannot utilize reading strategies they are not aware of (Barnett, 1988).

Mokhtari and Sheorey (2002) developed the Survey of Reading Strategies (SORS), a questionnaire concerning 30 reading strategies used in second language reading, allowing readers to objectively analyze their own reading strategies. The 30 reading strategies included in SORS are classified into three subcategories:

(a) Global Reading Strategies (GLOB): Strategies related to overall comprehension, such as "overviewing the text" and "connecting to prior knowledge."

(b) Problem-Solving Strategies (PROB): Specific strategies used when problems arise during the core reading process, such as "reading difficult parts slowly" and "guessing unknown words."

(c) Support Strategies (SUP): Strategies that assist the reader's understanding of the text, such as "taking notes" and "translating the text into the native language."

There is a correlation between readers' proficiency levels and their use of reading strategies, with more proficient readers tending to utilize GLOB strategies more frequently (Iwai, 2011).

Regarding the methods of teaching reading strategies and their effects, Ikeda and Takeuchi (2006) instructed Japanese university students in eight highly versatile reading strategies over eight weeks. As a result, it was shown that more proficient learners used a greater number of reading strategies than less proficient learners, effectively combining multiple strategies and evaluating their effectiveness while understanding the significance of reading strategy use. However, they suggest that for less proficient learners to acquire reading strategies, it is beneficial to have one-directional instruction from teachers and to learn from the reading strategies used by more proficient learners. This aligns with Grabe's assertion that peer support is effective in learning reading strategies (Grabe, 2009).

A representative example of strategy instruction using dialogue among peers is Collaborative Strategic Reading (CSR), developed by Klingner and Vaughn (2000). In CSR, learners work together in diverse small groups to understand text content while using four reading strategies. The strategies used by learners are:

(a) Preview: Predicting the text before reading.
(b) Click and Clunk: Understanding difficult vocabulary and concepts.
(c) Get the Gist: Summarizing the content of each paragraph.
(d) Wrap-up: Summarizing after reading and creating test questions.

Learners engage in text reading in small groups. As a result of CSR instruction, active use of reading strategies was reported within each small group, and pre- and post-test results confirmed effectiveness, particularly in terms of vocabulary acquisition. However, changes in individual learners' use of reading strategies were not reported. Furthermore, CSR only presents four reading strategies, making it difficult for learners to combine multiple strategies or acquire new ones. Consequently, this poses a challenge, as individual learners cannot effectively utilize their existing reading strategies, nor can opportunities for learners to actively acquire reading strategies be ensured.

To overcome the challenges presented by these two prior studies, it is necessary to set up reading activities that allow learners to utilize their existing reading strategies while cooperatively learning new strategies and their applications from peers.

2.3   Cooperative Learning

Johnson, Johnson, and Holubec (2009, p. 6) define cooperative learning as "the instructional use of small groups so that students work together to maximize their own and each other's learning." Students should recognize others as potential collaborators rather than as competitors, working together in the learning process. Cooperation is not only one method of learning but also one of the contents of learning (Jacobs, Power, & Low, 2002). Johnson, Johnson, and Holubec (2009) identify the following five basic components of cooperative learning: (1) Positive interdependence; (2) Individual accountability; (3) Face-to-face interaction; (4) Social skills training; (5) Group processing

This study proposes Cooperative English Reading Activities (CERA) as a form of reading activity that ensures these five basic components, allowing learners to read texts together with an awareness of learning from one another's use of reading strategies.

3.   Cooperative English Reading Activities (CERA)

Based on the theoretical background of reading and cooperative learning, this study defines Cooperative English Reading Activities (CERA) as activities in which "learners form small groups in an environment that ensures the basic components of cooperative learning, set shared objectives for reading comprehension, understand texts written in English through dialogue, and acquire reading strategies in the process." However, reading the text together in groups is a means, not the end itself. The ultimate goal is for each learner to be able to read English independently by acquiring reading strategies through repeated engagement in the reading process with their peers. Therefore, while the texts to be read are in English, the dialogue during the activities can be conducted in either Japanese or English, allowing them to choose the language that facilitates the learning activities.

CERA consists of the following two phases:

(1) The Preparation Phase
First, learners receive explicit instruction about the reading processes and reading strategies, and practice using specific reading strategies with peers. Following this, learners experience the significance of cooperative learning methods in a practical manner. Specifically, training includes "attentive listening" to positively receive peers' opinions, "round-robin", which is discussions where members take turns sharing their views and experiencing various roles during discussions.

(2) The Activity Phase
This phase has two activities; Individual Reading and Cooperative Reading. At first, learners are received the same English text, and read it individually without using dictionaries (Individual Reading). Then they are divided into small groups of three or four, and discuss within the small group to complete the text summary. At the beginning of the discussion, roles, such as facilitator, timekeeper, questioner, and recorder, are assigned randomly, and the discussion proceeds with members fulfilling their roles (Cooperative Reading). Cooperative Reading consists of the following three types of activities:

(a) Sharing Reading Strategies: After reading the text aloud in the group using "round-robin," each learner reflects on their Individual Reading and shares it with the other members, learning from each other's reading strategies within the small group. Members listening to the discussions are encouraged to provide feedback while being aware of their assigned roles, participating actively in the dialogue rather than merely listening.

(b) Completing the Summary Through Dialogue: The group shares parts they found difficult to understand in their Individual Readings, thereby deepening their comprehension and summarize the text they've read.

(c) Reflection: The group reflects on the discussion held and considers what they can do to improve the next Cooperative Reading session. The teacher refrains from intervening in the dialogue until the learners have reflected on their discussion. If necessary, the teacher can provide simple advice after the learners have completed their reflections.

The expected outcomes of CERA can be specifically summarized in two points. The first is the acquisition of second language reading strategies. In a small group, learners can share parts of the text they found difficult to understand and learn from their peers how to overcome those challenges,

thus gaining new reading strategies and way to apply them. Additionally, learners who explain their strategies also engage in metacognitive training by making explicit the reading skills they previously used unconsciously, which prepares them for more complex English texts. The second point is that as a result of the acquisition of reading strategies, the overall accuracy of the reading process improves, leading to the development of reading comprehension skills. To validate these two anticipated outcomes, research questions were established, and instruction using CERA was implemented.

4.   Research Questions

Building on the theoretical framework of reading strategies and cooperative learning, this study aims to investigate the effects of **Cooperative English Reading Activities (CERA)** on learners' reading comprehension and strategy awareness. Specifically, the research addresses the following questions: (1) What changes occur in learners' awareness of reading strategies with the implementation of CERA? And (2) How does the level of reading comprehension change for readers with the implementation of CERA?

5.   Methodology

5.1   Research Period and Participants

The implementation period was from April to September, 2024. However, there was no implementation in August due to summer vacation. The sessions were conducted almost once a week, totaling 10 sessions. The Preparation Phase consisted of 7 sessions until June 12, followed by 3 sessions during the Activity Phase. 24 female students in their third year of high school participated, all of whom had approximately seven years of English learning experience. Among them, 23 were native Japanese speakers and 1 was a native Chinese speaker. The analysis focused on the 23 participants who attended both the first and the 10th sessions.

5.2   Method

During the Preparation Phase, the participants were given a text in advance and asked to engage in 20-minute Individual Reading. The Preparation Phase began with four sessions, which provided instructions on reading strategies based on Grabe (2009). In the sessions, it was especially emphasized that using discourse markers and graphic organizers would deepen reading comprehension. Following this, three sessions were conducted to learn cooperative learning techniques through experiences.

When the Activity Phase started, each session started with 20-minute Individual Reading, followed by 20-minute Cooperative Reading. During Cooperative Reading, participants sat facing each other to engage in face-to-face interaction.

Before every session, participants received worksheets with the text printed on them. They used black pens to note their reading processes during Individual Reading. During Cooperative Reading, they used red pens to note what they learned from peers on the worksheets. The worksheets from the 10 sessions were saved as portfolios, allowing participants to reflect on their previous use of reading strategies at any time. While the groups for Cooperative Reading remained the same, the roles were randomly assigned, ensuring that no participant consistently fulfilled the same role.

5.3   Data Collection

Before and the implementation of CERA, SORS (Mokhtari & Sheorey, 2002) was administered to investigate participants' awareness of reading strategies. Additionally, among the portfolios, the Individual Reading records from the first and 10th sessions were analyzed to count the reading strategies used by each participant during Individual Reading.

6. Results

6.1 SORS

A paired *t*-test was conducted on the results of the two SORS assessments. Out of the 30 reading strategies, 8 showed changes before and after the implementation of CERA. The results of the paired *t*-test are shown in Table 1.

Table 1. Results of SORS assessments (n=23)

Categories	Strategies	pre M	SD	post M	SD	t-value
GLOB	1. Having a purpose when reading	3.65	1.15	4.17	1.06	2.31*
SUP	2. Taking notes while reading	3.39	1.70	4.04	1.13	2.81*
GLOB	3. Thinking about prior understanding the text	3.22	1.72	4.13	0.94	3.43**
GLOB	4. Taking an overall view before reading	3.52	2.17	3.91	1.26	1.52
SUP	5. Reading aloud when the text becomes hard	2.78	1.91	3.35	2.06	1.84*
GLOB	6. Thinking if the text fits the reading purpose	3.13	1.85	3.43	1.17	1.02
PROB	7. Reading slowly and carefully	4.52	0.53	4.43	0.35	0.49
GLOB	8. Reviewing the text first	3.22	1.91	3.61	2.70	1.99*
PROB	9. Trying to get back on track	3.78	1.36	4.04	1.50	0.75
SUP	10. Underlining or circling information	4.56	0.35	4.65	0.24	0.81
PROB	11. Adjusting reading speed	3.22	1.81	3.70	1.77	1.53
GLOB	12. Deciding whether to read closely or not	3.00	2.18	3.26	1.75	0.95
SUP	13. Using reference materials	4.26	0.93	3.91	1.26	1.40
PROB	14. Paying closer attention when text gets hard	3.70	2.13	4.39	0.89	1.97*
GLOB	15. Using tables, figures, and pictures in text	3.96	1.77	3.83	1.51	0.50
PROB	16. Stopping sometimes and think about the text	3.61	1.34	3.87	0.75	0.88
GLOB	17. Using context clues for understanding	3.87	0.85	4.17	0.70	1.37
SUP	18. Paraphrasing while reading	3.22	1.63	3.17	2.06	0.12
PROB	19. Trying to picture or visualize information	4.09	0.63	2.87	1.39	4.04**
GLOB	20. Using typographical features	4.09	0.63	4.39	0.98	1.19
GLOB	21. Analyzing and evaluating the information	1.91	1.26	2.52	1.62	2.37*
SUP	22. Going back and forth in the text	4.30	1.04	4.43	0.35	0.59
GLOB	23. Checking prior understanding	3.48	1.53	3.83	1.06	1.25
GLOB	24. Trying to guess the content of the text	4.48	0.62	4.30	0.95	1.00
PROB	25. Re-reading the text when the text gets hard	4.78	0.18	4.74	0.20	0.44
SUP	26. Asking themselves questions	2.83	2.97	2.70	2.40	0.35
GLOB	27. Checking if the guesses are right or not	3.74	1.66	3.78	1.72	0.14
PROB	28. Guessing the meaning of unknown words	4.17	1.33	4.39	0.43	1.10
SUP	29. Translating	4.30	0.95	4.35	0.60	0.22
SUP	30. Thinking in both English and mother tongue	3.61	1.61	3.96	1.50	1.00

*p<.05, **p<.005

The usage of 8 strategies out of 30 significantly changed. Among them, 4 strategies were categorized as GROB, 2 as PROB, and 2 as SUP. In GROB category, Strategy 1 "I have a purpose in mind when I read" significantly increased from the pre (M=3.65, SD=1.15) to the post (M=4.17, SD=1.06) (t(22)=2.31, p=.015). Likewise, Strategy 3 "I think about what I know to help me understand what I read" significantly increased from the pre (M=3.22, SD=1.72) to the post (M=4.13, SD=0.94) (t(22)=3.43, p=.001), Strategy 8 "I review the text first by noting its characteristics like length and organization" significantly increased from the pre (M=3.22, SD=1.91) to the post (M=3.61, SD=2.70) (t(22)=1.99, p=.029), and Strategy 21 "I critically analyze and evaluate the information presented in the text" significantly increased from the pre (M=1.92, SD=1.26) to the post (M=2.52, SD=1.62) (t(22)=2.37, p=.013).

In PROB category, Strategy 14 "When the text becomes difficult, I pay closer attention to what I am reading" significantly increased from the pre (M=3.70, SD=2.13) to the post (M=4.39, SD=0.89) (t(22)=1.97, p=.031). However, Strategy 19 "I try to picture or visualize information to help remember what I read" significantly decreased from the pre (M=4.09, SD=0.63) to the post (M=2.87, SD=1.39) (t(22)=4.04, p=.0002).

In SUP category, Strategy 2 "I take notes while reading to help me understand what I read" significantly increased from the pre (M=3.39, SD=1.70) to the post (M=4.04, SD=1.13) (t(22)=2.81,

p=.005), and Strategy 5 "When text becomes difficult, I read aloud to help me understand What I read" significantly increased from the pre (M=2.78, SD=1.91) to the post (M=3.35, SD=2.06) (t(22)=1.84, p=.040).

6.2   Portfolios

The notes found in the portfolios of the 23 participants before the implementation of CERA consisted of a total of 12 types, amounting to 45 notes in total. In contrast, after the implementation of CERA, the portfolios of the 23 participants contained 20 types of notes, with a total usage of 53. Table 2 shows the results of organizing the types and calculating the usage frequency of the notes.

Table 2 Usage frequency of the notes in portfolios

Reading processes		Notes	Pre	post
Higher-level	Creating text model representation	Structural summarizing by paragraphs in Japanese	2	5
		Structural summarizing by paragraphs in English	-	3
		Structural summarizing in Japanese	-	2
		Making timelines	-	2
		Giving headlines to each paragraph in Japanese	-	1
	Building a mental model	Summarizing by paragraphs in English	-	4
		Summarizing by paragraphs in Japanese	3	2
		Summarizing in Japanese	3	1
	Inferencing	Taking notes about bridging inferences	-	1
Lower-level	Establishing prepositional meaning	Bullet points (in Japanese)	7	4
		Translation	3	1
	Syntactic parsing	Slashed reading	9	4
	Lexical access	Checking sentence structures	9	3
	Word recognition	Checking unknown words	2	4
		Translation English words into Japanese	2	1
Reading Strategies		Checking discourse markers	-	8
		Drawing underlines or circles in text	3	3
		Guessing meanings of unknown words	-	2
		Taking notes about questions while reading	-	1
		Drawing pictures	1	1
		Taking notes about words and phrases	1	-
Total			45	53

The left column shows reading processes in the model of reading (Grabe, 2009; Khalifa & Weir, 2009). Comparing the note occurrence rate before and after the implementation of CERA, one can see the overall note occurrence rate is higher after CERA's implementation. Looking at the breakdown, there are more notes related to lower processes before the implementation of CERA, while after the implementation of CERA, there are more notes related to higher processes. Additionally, the number of reading strategies used also shows a significant difference, with 5 occurrences across 3 types before the implementation of CERA, as compared to 15 occurrences across 6 types after the implementation CERA.

7.   Discussion

In response to the research question (1) "What changes occur in learners' awareness of reading strategies with the implementation of CERA?", changes were observed in the reading strategies recognized by participants before and after the implementation of CERA. Notably, the proportion of GLOB strategies increased by 30.8%, which suggests an expected improvement in reading comprehension itself (Iwai, 2011).

It is believed that Strategy 1 and Strategy 3 have enhanced participants' ability to view their reading processes from a more reflective perspective. With Strategy 8, participants can grasp the

overall picture of the text before reading, and by using Strategy 21, they can approach the text as proactive readers. Becoming consciously able to use Strategy 14 allows them to control their concentration while comprehending the entire text. Interestingly, Strategy 19 decreased; this may be because participants became capable of leaving structured notes using graphic organizers without needing to draw pictures, which could be a faster processing method for 18-year-old females. The conscious use of Strategy 2 and Strategy 5 is believed to be a result of CERA. To create summaries through discussion in small groups, it becomes necessary to share their understanding with peers and to leave notes about the content comprehended. Furthermore, CERA requires verbal communication with peers, which includes repeatedly reading the text aloud. Therefore, it is thought that the very implementation of CERA will help in the acquisition of some reading strategies that specifically support reading comprehension.

In response to the research question (2) "How does the level of reading comprehension change for readers with the implementation of CERA?", significant differences were observed before and after the implementation of CERA. Before the implementation of CERA, many notes related to lower-level processes of the reading model were left, whereas after the implementation of CERA, notes related to higher-level processes of the reading model were also recorded. This suggests that participants were able to engage higher-level processes and achieve deeper comprehension while reading independently. Furthermore, the reading strategies used were greater in both number and variety after the implementation of CERA compared to before. Therefore, the implementation of CERA suggests that readers are capable of improving their reading comprehension.

8. Conclusion

This study has clarified that CERA contributes to learners' acquisition of reading strategies. It also suggests the possibility that learners can change their reading processes through CERA and achieve deeper comprehension. However, while the changes in learners before and after CERA are evident, the specific processes through which CERA contributed to these changes remain unclear. By analyzing the dialogues that participants engaged in during the group discussions, it may be possible to elucidate the processes through which learners grow as a result of CERA.

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15 - Fostering Students' Feedback Literacy Through Collaborative Feedback Training

Hiyori Asagoe
gr0584kx@ed.ritsumei.ac.jp
Ritsumeikan University, Japan

Aiko Sano
aikosano@fc.ritsumei.ac.jp
Ritsumeikan University, Japan

Abstract

The implementation of Japan's new Course of Study (MEXT, 2017) places significant emphasis on integrating writing instruction throughout education, including English language learning. This initiative underscores the value of peer feedback, aligning with research advocating collaborative learning and effective writing pedagogy (Hyland, 2022). In order to provide more effective peer feedback, Sutton (2012) conceptualized Feedback Literacy (FL), which has been further developed in the subsequent studies (Carless & Boud, 2018; Molloy et al., 2020; Zhan, 2022). Synthesizing these studies the authors remodelled FL into a framework encompassing *Appreciation, Reception, Production, and Metacognition* dimensions. Of these, this study focuses on the dimension of *Production*, with a special attention on how to support learners to produce more quality feedback, that is, more global rather than local feedback to a writing exemplar. Six Japanese learners of English (CEFR A2 level, aged 13-15) participated in eight sessions designed for enhancing feedback literacy; five sessions involving explicit instructions on providing FL and the other three for observations on learners' behaviors without scaffolding from the instructor. Collaborative dialogues were transcribed and analyzed, focusing on episodes related to text comprehension and feedback provision, each further categorized into three subcategories of vocabulary, grammar, and discourse. Findings demonstrated a notable shift from local issues (grammar, vocabulary) to more global feedback on the overall qualities of discourse, suggesting the series of intervention effectively supported the participants' abilities to provide more global feedback to writing samples. The study highlights the positive impact of structured collaborative feedback activities on enhancing students' abilities to provide meaningful and constructive feedback to each other.

Keywords: Feedback literacy, peer feedback, L2 writing, collaborative learning, global feedback

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1. Introduction

Feedback has long been recognized as an essential element for learners' growth and success, and particular attention has been paid to the ability to receive, understand and utilize effective feedback in recent years following Sutton (2012) who was one of the earliest to conceptualize 'feedback literacy' followed by a number of researchers to further refining the concept. The purpose of the present study is to observe the nature of students' feedback literacy through collaborative feedback trainings using writing samples, and to investigate how such an intervention can actually improve their L2 writing skills. By examining the nature of collaborative peer feedback, this study seeks to provide practical insights into how learners can effectively engage in giving and receiving feedback, thereby promoting a supportive and interactive learning environment. Ultimately, this research aims to contribute to the development of more effective writing instruction methods that emphasize the importance of feedback literacy in L2 learning.

2.   Literature Review

In this review, the evolution of the conceptualization of feedback literacy is provided in a chronological order first, followed by an overview of the quality of peer feedback, and the research questions that guided the present study will be presented.

2.1   Evolution of the concept of feedback literacy

Sutton (2012) was one of the earliest to underscore the importance of fostering students' feedback literacy. Viewing feedback literacy as a series of situated learning practices, Sutton proposed the concept of 'feedback literacy' as consisting of three dimensions: 1) **the Epistemological** (acquiring academic knowledge), 2) **the Ontological** (investment of identity in academic work), and 3) **the Practical** (acting upon feedback). Sutton's conceptualization of feedback literacy is based on his study on students' and teachers' views on feedback at a university setting, and was aimed at exploring the nature of productive feedback on academic experiences of university students in general. In relation to fostering students' feedback literacy in the context of peer-feedback for L2 writing, the third dimension of the three stated above is of particular focus of our interest, which Sutton clarified as ability to read, interpret and use written feedback.

Carless and Boud (2018) further refined developed Sutton's (2012) conceptualization for feedback literacy by outlining four features of feedback literacy: **1) Appreciating Feedback, 2) Making Judgments, 3) Managing Affect,** and **4) Taking Action.** The fist feature, **Appreciating Feedback** refers to "both students recognising the value of feedback and understanding their active role in its processes (p. 1316)" and "demands that learners acquire the academic language necessary for understanding, interpreting and thinking with complex ideas (p. 1317)" as Sutton (2012) claimed. The second feature, **Making Judgments**, refers to students' capability "to make decisions about the quality of work of oneself and others (p. 1317)" which is vital for them to make most of the feedback processes. The third feature, **Managing Affect**, refers to "how students manage their emotional equilibrium [that] impacts on their engagement with critical commentary (pp. 1317-1318)" which is related to what Sutton (2012) emphasized in his conceptualization of **the Ontological** dimension of feedback literacy. Finally, the fourth feature, **Taking Action**, refers to taking action in response to feedback, which is more or less the same conceptualization to the **Practical** dimension in Sutton (2012). Each of the four features of feedback literacy conceptualized by Carless and Boud (2018) has three subcategories as presented in table 1. Having conceputualized feedback literacy as consisting of the four above-mentioned features, Carless and Boud (2018) propose the following two activities namely, peer feedback and analyzing exemplars, as sound pedagogical interventions to foster students' feedback literacy. They also underscore the importance of teacher roles in the process and note:

Enabling activities are only likely to be successful in developing student feedback literacy if teachers create suitable curriculum environments for active learner participation, and also provide related guidance, coaching and modelling (p. 1321).

Further building on the line of research in the field of feedback literacy, Molloy et al. (2020) attempted to clarify how learners understand and use feedback by analyzing the feedback process of learners at two universities. The analysis of their study lead to 31 categories in seven groupings: **1) Commits to Feedback as Improvement, 2) Appreciates Feedback as an Active Process, 3) Elicits Information to Improve Learning, 4) Processes Feedback Information, 5) Acknowledges and Works with Emotions, 6) Acknowledges Feedback as a Reciprocal Process, 7) Enacts Outcomes of Processing Feedback.** In the study of Molloy et al (2022), there was a clear shift in focus on the learners' active roles in the process of feedback, both as receivers and providers of feedback, while the original conceptualization of feedback literacy in relation to managing the affective equilibrium in receiving feedback found in Sutton (2012) and Carless and Boud (2018) is maintained. Another new dimension added to the conceptualizations of feedback literacy in **Enacts Outcomes of Processing Feedback**.

In response to Molloy et al. (2020)'s call for a quantitative study to investigate the nature of feedback literacy, Zhan (2022) conducted a study involving 555 universities in China and devised the following six categories in feedback literacy: **1) Eliciting,** which refers to the students' ability to "solicit information from different resources to improve their learning (p. 1090)", **2) Processing,** which is to

"comprehend and judge the feedback received (p. 1090)", *3) Enacting*, which refers to the students' ability to "set goals, plan and monitor their actions to close the feedback loop (p. 1090)", *4) Appreciation,* or learners' disposition to "acknowledge the value of feedback in their learning (p. 1090)" , as well as to "regulate their emotions to positively engage with negative and critical feedback (p. 1090)" *which is conceptualized as 5) Readiness,* and *6) Commitment, which refers to the learners' disposition to* "enthusiastically engage with feedback by investing their time and effort in continuous improvement (p. 1090)".

Zhang and Mao's study in 2023 is, to our best knowledge, one of the earliest empirical studies that has investigated the effects of teaching on students' feedback literacy in L2 writing. In the experiment, pre-study questionnaires and post-study questionnaires, as well as interviews, teaching slides, course outlines, assessment rubrics, and writing materials were collected, and the research was conducted from both qualitative and quantitative perspectives. The questionnaire was developed by referring to Zhan (2022)'s 'the scale of students' feedback literacy' with minor modifications to suit L2 writing. It consists of 5 dimensions and a total of 20 items: *1) Eliciting, 2) Making Judgment, 3) Appreciating Feedback, 4) Taking Action, and 5) Managing Affect*. The results revealed that through the teacher's systematic approach to foster student feedback literacy, the students "reported enhanced capacities to elicit feedback, make judgments, and take actions, as well as strengthened dispositions to appreciate feedback and manage affect (p. 1)".

The literature review lead us to re-organizing the conceptualization of feedback literacy to consist of the following four dimensions: *1) Appreciation* (emotional engagement), *2) Reception* (understanding feedback), *3) Production* (providing relevant feedback), and *4) Metacognition* (reflecting on the feedback process). Of the four above-mentioned dimensions, the third dimension of the *Production* is the focus of the present study. It is because the leading cause of failure in peer-review activities in writing classes has been pointed out the incapabilities of producing meaningful and constructive feedback during peer-review sessions. In the following section, the construct of quality feedback will be explored.

2.2   The Quality of Feedback in L2 Writing

Research indicates that providing 'global feedback,' which addresses the overall structure and logical flow of a text, is often the most challenging aspect for L2 learners (Leki, Cumming, & Silva, 2008; Sasaki, 2000). Unlike local feedback, with primary focus on the grammatical, lexical, as well as conventional, global feedback requires learners to have a comprehensive understanding of how to organize ideas, maintain coherence, and ensure that the writing aligns with its intended purpose. Storch (2013) and Yang and Zhang (2010) claim that learners often struggle with this type of feedback because it requires higher-order thinking skills and a deep understanding of textual coherence. Hyland likewise (2006) illustrates the challenges L2 writers face in providing global feedback because it involves recognizing complex discourse patterns, while L2 learners who tend not to be familiar with the conventions and organizational structures prevalent in English academic writing.

In contrast, L2 writers often focus on local issues like grammar and vocabulary when providing feedback, as they find it easier to identify surface-level errors compared to more abstract, structural elements (Ferris, 2003).

Taken together, it seems valid to aim at supporting students to focus more on global issues rather than local issues only, as inexperienced writers tend to do, while supporting to enhance their feedback literacy, and the following research questions were set for this study.
   1. Does collaborative feedback training using exemplars enhance students' ability to provide global feedback?
   2. If so, does enhanced ability to provide global feedback lead to better quality in the production of writing?

3.   Method

In order to investigate the above stated research questions, a series of intervention to enhance feedback literacy was devised targeting six students taking a class to enhance their L2 English writing

skills at a private after-school class in Japan. They were 13-15 of age, and their English proficiencies were from beginner (Eiken Grade 3[#]to Eiken Grade pre-2[#]).

The intervention was designed based on Eiken writing materials available on its official website, because Eiken is one of the most recognized English tests in Japan, and all of the students were studying for that test. There were 5 interventions in total, each of which consisted of peer-feedback session using sample student writing followed by teacher feedback to the sample. More specifically, the students first read the sample writing in five minutes individually. They were then given 10 minutes to discuss with a partner and collaboratively give "feedback" to the sample writing (peer feedback: PFB). The instructor (the first author) then gave the teacher feedback (TFB) to make sure the students came to realize the main point of the feedback to be given to the sample writing. The students then revised the sample writing individually (Figure 1).
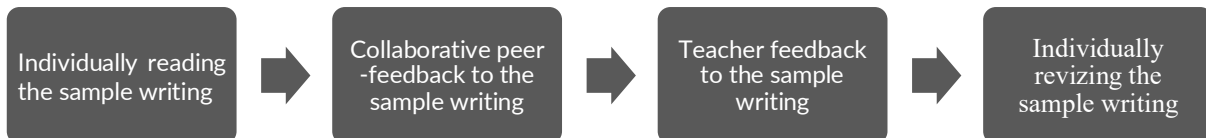
Figure 1 - *The Process of the Intervention for Fostering Feedback Literacy Devised for the Present Study*

Two types of data were collected for this study. The students' interactions during the feedback sessions were audio-recorded with written consents, and later transcribed. The individually produced revised writings were also collected each time[#]. The students also gave feedback to writing samples individually before and after the interventions to allow authors to investigate the students' progress on their feedback literacy. All of the sessions took place with one-week intervals on average (from 2023/12/6 to 2024/2/7).

The writing samples to be given feedback by the students collaboratively in the sessions were taken from Eiken websites for Eiken Grade 2 writing tests. This material was thought to be at the appropriate level for the participants of the present study and relevant as it is a high-stake proficiency test in Japan. All of the five materials were written in response to the following prompt: *Today some companies allow their employees to wear casual clothes like jeans or T-shirts. Do you think the number of such companies will increase in the future?* They were created by the first author so that they would have problems that correspond to the key points noted on Eiken websites namely, "No relevance for the topic", "Coherence in the argument", "No relevant support to the argument", "Not enough information for the readers provided", and "Vocabularies that are not usually used in English". The actual samples used for the interventions are presented in table 1.

Table 1 - *The Writing Samples Used for the Interventions and Their Foci*

Writing Sample Used for Intervention 1
1. More companies might let employees wear casual clothes like jeans and T-shirts.
2. I have two reasons to support my opinion.
3. First, 1) <u>there are lots of different types of jeans, like damaged ones or tight ones.</u>
I only mentioned two, but there are various designs. Hence, workers have various choices of jeans.
Second, 2) <u>jeans go well with many other clothes.</u> T-shirts, coats, and jackets are adjusting to jeans.
Thus, jeans must be practical for employees.
For these reasons, more companies will let people wear casual clothes at work.

The main focus of FB for Intervention 1: No relevant argument for the topic

Writing Sample Used for Intervention 2
I think more companies will let their employees wear casual clothes.
I have two reasons to support my opinion.
First, 1) <u>companies do not want their employees to feel a lot of stress at work.</u>
<u>2) If employees are allowed to wear casual clothes in the office, they will feel more comfortable.</u>
Second, 3) <u>wearing suits makes employees look more formal and gives a good impression.</u>
Suits make it possible for workers to look smart and neat. Thus, it is sometimes better to wear suits.
For these reasons, more companies will let people wear casual clothes at work.

The main focus of FB for Intervention 2: Coherence in the argument

Writing Sample Used for Intervention 3
I think more companies will let their employees wear casual clothes.
I have two reasons to support my opinion.

First, people will need to buy lots of new clothes. Buying lots of clothes will cost a lot of money.
1) My father has lots of jeans. He likes fashion and my mother likes it, too. If the companies think that their employees will not do it. I want to wear suits, but my friends don't want to. Also, T-shirts and jeans are much cheaper.
Second, 2) wearing suits makes employees look more formal. People who visit the company might feel impressed by this. For these reasons, more companies will let people wear casual clothes at work.

The main focus of FB for Intervention 3: No relevant support to the argument

Writing Sample Used for Intervention 4

I do not think that more companies will allow their employees to wear casual clothes like jeans or T-shirts.
I have two reasons why I think so.
1) The first reason is that if employees wear casual clothes, they will look less formal.
2) The second reason is because employees will feel too relaxed.
For these two reasons, I do not think that more companies will allow their employees to wear casual clothes like jeans or T-shirts.

The main focus of FB for Intervention 4: Not enough information for readers provided

Writing Sample Used for Intervention 5

More companies will allow casual clothes in the future.
I have two reasons to support my opinion. One reason is that it is comfortable for 1) salary men who work for the company. If they can wear jeans or T-shirts, they can be more relaxed.
Also, wearing suits makes people look all the same.   It is like wearing 2) seifuku, which means workers do not express their personalities and their fashion cannot be stylish.
For these reasons, more companies will let people wear casual clothes at work.

The main focus of FB for Intervention 5: Vocabularies that are not usually used in English

The transcribed interactions of each pair were first segmented based on the contents, and then divided into two categories; *Feedback* or *Reading Comprehension.* Our initial intention was to investigate the students' interactions for giving feedback only, but *Reading Comprehension* was added to the coding scheme because there were so many instances where the students were working together to understand what the writing samples actually meant. Both *Feedback* and *Reading Comprehension* were further divided into the three subcategories: *Vocabulary, Grammar,* and *Discourse*.

There were 198 segments in total. In order to check the interrater reliability of two raters in coding categories of the six types of collaborative dialogue between the participants (Feedback-Vocabulary, Feedback-Grammar, Feedback-Discourse, Reading Comprehension-Vocabulary, Reading Conprehension-Grammar, Reading Conmprehension-Discourse), the autors asked a rater who is not part of the study to code 86 segements (43.4% of the total; 3 randomely chosen sessions out of the total of 8 sessions) after a brief explanation of the coding scheme. The rate of agreement was found to be accepptable ($κ=.682$, $p<.001$), and the rest of the coding was conducted by the first author, with consultation to the second author where necessary.

Of these, *Vocabulary* and *Grammar* were defined as part of *Local feedback* in this study, which are feedback that focuses on specific, smaller aspects of the text, such as word choice, sentence structure, and grammatical accuracy. In contrast, *Discourse* was constructed as *Global feedback* in this study, which is feedback that addresses the overall structure of the text, including the logical flow, coherence, and the effectiveness of the writing's intent and message.

4.   Results

Table 2 presents that Group A initially focused more on *Reading Comprehension* than on *Feedback*. In the pretest of the first writing session, there were 13 mentions related to *Reading Comprehension*, while there were only 6 segments of *Feedback*, showing that 68% of the focus was on *Reading Comprehension,* with only 32% on *Feedback*. However, as interventions progressed, the proportion of *Feedback* mentions increased. For example, in Intervention 4 and Post-test 2, *Feedback* accounted for 100% of the focus for this group.

Another significant change found in this goup is that *Feedback on Discourse,* categorized as global feedback, initially accounted for only 17% of all feedback, but by the final stage, it had increased to 100%. This indicates that the focus shifted from *Local Feedback* on Vocabulary and Grammar to *Global Feedback* on the overall structure and meaning of the text.

Table 2 - Number of Segments in Each Category in Group A Interactions

A	Turn	Seg	Feedback			Reading Comprehension		
			Vocabulary	Grammar	Discourse	Vocabulary	Grammar	Discourse
Pre	121	21	3	2	1	10	1	2
Intervention/ 1	129	18	1	1	1	12	0	2
Intervention/ 2	68	10	0	2	3	4	1	0
Intervention/ 3	65	9	0	0	8	0	1	0
Intervention/ 4	54	5	0	0	5	0	0	0
Intervention/ 5	78	14	1	0	8	4	0	1
Post1	38	6	1	0	4	0	0	1
Post2	41	6	0	0	5	0	0	0
Total	594	89	6	5	35	30	3	6

Table 3 presents that, in the same way as Group A, Group B also had a ratio of 57% for *Feedback* and 43% for *Reading Comprehension* in the first test, but that the ratio of *Feedback* increased to 100% in the fifth intervention, Post 1, and Post 2, indicating a decrease in the degree of *Reading Comprehension*. However, when examining the types of *Feedback*, there was no significant transition from *Local Feedback* (feedback on vocabulary and grammar) to *Global Feedback* (feedback on discourse) in Group B. The average number of times *Global Feedback* was given from Pre-Test to Post 2 was 5, but in the first test, it was 6. This shows that Group B was able to give *Global Feedback* from the start.

Table 3 - Number of Segments in Each Category in Group B Interactions

B	Turn	Seg	Feedback			Reading Comprehension		
			Vocabulary	Grammar	Discourse	Vocabulary	Grammar	Discourse
Pre	79	13	2	0	6	6	0	0
Intervention/ 1	47	8	1	0	4	2	0	1
Intervention/ 2	45	12	0	0	5	5	0	1
Intervention/ 3	48	12	0	0	8	3	0	1
Intervention/ 4	26	5	0	0	4	0	0	1
Intervention/ 5	19	4	0	0	4	0	0	0
Post1	28	6	1	0	4	0	0	0
Post2	37	8	1	2	5	0	0	0
Total	329	68	5	2	40	16	0	4

Table 4 shows that, similar to Groups A and B, the ratio of *Feedback* and *Reading Comprehension* in Group C was 44% and 56%, respectively, in the first test, and *Post-test 1* consisted of 100% *Feedback*, while *Post-test 2* consisted of 75% *Feedback*, showing that the number of *Feedback* questions had increased since the first test, and the proportion of *Reading Comprehension* questions had decreased. However, for Group C, one student was absent from each of the first and second tests, so a separate group was formed from the third test onwards, and sufficient data could not be collected. As a result, there were no trends specific to this group, but looking at the details of the *Feedback*, the percentage of *Global Feedback* was 100% for the first three of the six sessions, so it can be seen that, like Group B, *Global Feedback* was given from the first session.

Table 4 - Number of Segments in Each Category in Group C Interactions

C	Turn	Seg	Feedback			Reading Comprehension		
			Vocabulary	Grammar	Discourse	Vocabulary	Grammar	Discourse
Pre	32	9	0	0	4	3	0	2
Intervention/ 1	38	6	0	0	4	2	0	0
Intervention/ 2	25	6	0	0	4	0	0	1
Intervention/ 3	59	7	1	0	2	4	0	0
Intervention/ 4	47	4	2	0	2	0	0	0
Intervention/ 5	66	9	2	0	4	2	0	0
Post1	267	41	5	0	20	11	0	3
Post2	37	8	1	2	5	0	0	0
Total	329	68	5	2	40	16	0	4

6. Discussion

The results indicate a shift across all groups from an initial emphasis on ***Reading Comprehension*** to ***Feedback***. In Group A, the pretest revealed a 68% focus on ***Reading Comprehension***, with only 32% on ***Feedback***. As interventions progressed, ***Feedback*** mentions rose steadily, reaching 100% by Post-test 2. Initially, Group A's ***Feedback*** primarily addressed ***Vocabulary*** and ***Grammar*** (***Local Feedback***), but by the final stages, ***Global Feedback*** on discourse increased from 17% to 100%, marking a clear shift toward discourse-level considerations.

In Group B, the first test showed a 57% focus on ***Feedback*** and 43% on ***Reading Comprehension***. This group similarly achieved 100% ***Feedback*** mentions by the fifth intervention, maintaining this focus in both Post-test 1 and Post-test 2. Unlike Group A, Group B consistently provided ***Global Feedback*** from the beginning, with an average of 5 of those per session, indicating readiness to address discourse-level elements from the outset.

Group C initially allocated 44% of its focus to ***Feedback*** and 56% to ***Reading Comprehension***. By Post-test 1, instances of ***Feedback*** increased to 100%, though they declined to 75% in Post-test 2, with a proportional decrease in ***Reading Comprehension*** mentions. Due to attendance issues, a separate group was formed after the second session, limiting consistent data collection for Group C. Nonetheless, Group C showed an early capacity for ***Global Feedback***, with 100% global feedback noted in three of the six sessions, similar to Group B's trend.

In sum, these results illustrate a general shift from ***Reading Comprehension*** to ***Feedback*** across all groups. Group A, in particular, demonstrated an increase in ***Global Feedback***, from 17% initially to 100% by the final stages. We will explore the impact of these shifts on students' revisions as well as the nature of discussions related to group dynamics and its influence on the development of feedback literacy.

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16 - Corrective feedback in face-to-face and synchronous computer-mediated communication grammar instruction

Mei-Chun Chen
chench@dragon.nchu.edu.tw
National Chung Hsing University, Taiwan

Abstract

This study investigated teachers' practices and perceptions of verbal corrective feedback (CF) in teaching grammar in synchronous computer-assisted communication (SCMC) and face-to-face communication (FTF) contexts for intermediate L2 Chinese learners. The classroom instructional data are based on audio recordings of teacher-student interactions during grammar instruction on simple and complex tasks, CF interventions, pre-tests and post-tests, and instances of CF from teachers' stimulated recall interviews. Three experienced teachers and 36 learners with multilingual background participated in the study. The results showed that oral recast was most frequently used to facilitate Chinese learners' modified output in both FTF and SCMC contexts, while explicit CF was used the least in grammar instruction in the SCMC context. In addition, verbal CF that provided visual support and contextual examples frequently triggered learners' uptake on complex tasks in the grammar instruction. Teachers' perceptions of CF in FTF and SCMC L2 Chinese grammar instruction indicated that confirmed verbal CF provided more than they estimated, and that the CF interaction process was subject to an integrated repertoire across oral, visual, and contextual modalities.

Keywords: Corrective Feedback (CF), Face-to-Face (FTF), Synchronous Computer-Mediated Communication (SCMC), Grammar Instruction, Learner Uptake.

1. Introduction

This study investigates how more explicit and more implicit prompts, also types of interactional corrective feedback (CF), can enhance grammar accuracy of L2 Chinese learners in face-to-face communication (FTF) and synchronous computer-mediated communication (SCMC) context, presents an original study of feedback modalities and task complexity in online and Face-to-Modalities such as synchronous or asynchronous online instruction have different cognitive loads on students (Payne, 2020), students' age, motivation, and learning strategies affect the effectiveness of online instruction (Cooperman, 2018), and students' tasks also have an impact on oral skills and writing ability of second language (L2) learners (Abrams and Byrd, 2016). Although research on various modalities of communication in online teaching and learning has shown different outcomes (Hampel & Stickler, 2012; Liu & Chao, 2018), it has been suggested that the modalities of communication in online interaction should be considered as the most influential and effective in teaching and learning L2 Chinese. However, most of the research focuses on comparing learning outcomes or on specific online teaching techniques, and so far, there is not enough research or discussion related to the gains and feedback in online teaching to address the communication and practices faced by Chinese as a second language (CSL) teachers and learners.

In terms of the implementation of a meaningful modality in L2 Chinese classrooms, teaching L2 Chinese in a virtual environment should be based on the issues and teaching practices that are of substantial concern. Online teaching interaction modalities and collaborative teaching tasks are issues of concern in the field of L2 Chinese teaching and learning, providing the language teaching community with concerned actions in the context of the epidemic, presenting research-based methodologies, addressing pressing issues faced by L2 Chinese teachers and learners, and providing meaningful research and teaching resources. Thus far, in the field of research on teaching L2 Chinese,

there is limited understanding of the interaction patterns in online and FTF Chinese classrooms, not to mention the effectiveness of the teaching tasks, the benefits of the language input provided by the L2 Chinese teachers, the acquisition of linguistic competence by the L2 Chinese learners in the online teaching and learning environments, as well as the complexity of the tasks of the online and FTF classrooms. The project aims to examine the correlation between feedback modalities, task complexity, and the effectiveness of beginning and intermediate-level instruction in online and FTF L2 Chinese classrooms.

Corrective feedback (CF) on collaborative tasks in L2 Chinese classrooms has been less studied, not to mention face-to-face (FTF) and online input in interactive classroom contexts. The frequency and resolution of language-related episodes (LREs) (Swain & Lapkin, 2000) in synchronous computer-mediated communication (SCMC) and modified output from the learners correcting the language use remain unexplored in the L2 Chinese context. This research project investigates the effect of interactional corrective feedback in face-to-face and online modalities on the pronunciation and grammar gains of L2 Chinese learners. On the other hand, the project also investigates how task complexity affect collaborative oral tasks in the synchronous computer-mediated communication (SCMC) context. Storch (2002) identified four peer interaction patterns in L2 writing work, including collaborative, expert/novice, dominant/dominant, and dominant/passive, based on different degrees of equality and mutuality, and found that L2 learners in pairs exhibited a collaborative stance and produced better texts. Previous studies (Sato and Ballinger, 2016; Li and Zhu, 2017) also verified that tasks play an essential role in web-based L2 collaborative writing. Thus far, studies on collaboration patterns have focused on the effects of different types of tasks on writing rather than different complexity levels of tasks and oral tasks. Previous studies have also demonstrated that learner collaboration facilitates L2 acquisition (Storch, 2011; Sato, 2016; Sato & Viveros, 2016). However, there is still a relative lack of research on the effects of task complexity and corrective feedback on group collaboration of L2 Chinese learners in SCMC interaction. The study also discusses pedagogical implications based on corrective feedback and task complexity in L2 Chinese oral interactions. The present study fills this gap and identifies patterns of teachers' practices and perceptions of verbal corrective feedback (CF) in teaching grammar interaction in collaborative tasks in the SCMC context.

2. Conceptual framework

Corrective feedback (CF) is defined as 'responses to learner utterances containing an error' (Ellis, 2006: 28). It refers to the responses to a learner's errors or non-target-like second language (L2) production. CF feedback has generally been found to be beneficial to second language acquisition (Gass, 1997; Gass & Selinker, 2001; Gass, 2003; Li, 2010), and the "feedback" to be investigated in this research project mainly involves input from teachers in both online (SCMC) and physical (FTF) classrooms. In the early stages, the project focuses on oral recasts, one of the most exerted CF in beginner classrooms (Chen, 2020) and recasts with other visual inputs, and then adjust whether other types of CF should be included to integrate with written (cf. Chen, 2021), multimodal, or contextual inputs after the investigation of the significant types of feedback in both the SCMC and FTF L2 Chinese classrooms. CF modalities, online or physical, synchronous or asynchronous interaction and feedback can affect the effectiveness of L2 Chinese. According to Payne's (2020) categorization of the cognitive load continuum of online learning activity tasks, learners' cognitive load is heaviest when performing online synchronous oral chats, and lightest when performing non-synchronous online discussion or long-term writing tasks. Therefore, while L2 Chinese teachers continue to experiment with tasks of different cognitive complexity, they should also adjust the sequencing of online and physical classroom speaking and writing tasks and CF provision to ensure language development (Robinson, 2011).

Corrective feedback (CF) has been an essential practice in second language classrooms. Teachers used six different feedback moves: recasts, elicitation, clarification requests, metalinguistic feedback, explicit correction, and repetition of error; recasts were the most widely used technique (Lyster & Ranta, 1997). Oral CF moves that withhold correct forms in response to students' errors were categorized into prompts (Lyster & Saito 2010). Prompts were more significant than recasts for increasing accuracy of regular past tense forms, whereas prompts and recasts had similar effects on

improving irregular past tense forms (Yang & Lyster, 2010). Some researchers argue that recasts are the most effective type of corrective feedback in facilitating L2 learning (Long, 2007). Yet, other researchers claim that CF types that withhold the correct form are most likely to contribute to development by pushing learners to stretch their interlanguages (Ammar & Spada, 2006; Lyster, 2004). Recast is a well-formed reformulation of a learner's non-target utterance (Lyster & Ranta, 1997) and has been found to occur most frequently in classroom contexts (Lyster et al., 2013). Additionally, teacher-student and learner-learner interactions have been believed to be beneficial to language development (Philp, Adams, & Iwashita, 2014; Sato & Ballinger, 2016). Recent studies carried out further investigation on the levels of L2 proficiency and paired task performance (Basterrechea & Gallardo-del-Puerto, 2020; Storch & Aldosari, 2013). Timely interactional feedback is an essential component in the virtual environment concerning L2 learning. Oliver and Mackey (2003) reported that their classroom learners noticed recasts to a greater extent in an explicit language lesson than in contexts that involved conversational interaction. Explicit corrective feedback or elicitations are most likely to contribute to development (Lyster, 2004). It is unknown as to if face-to-face (FTF) CF is more beneficial to the pronunciation tasks in pronunciation tasks of L2 Chinese learners than online CF.

Recasts, defined as the reformulation of a learner's utterance, have been argued to be the most effective type of CF in facilitating learning (Long, 2007). Additional or alternative explicit CF practices include a metalinguistic explanation with the provision of rules and examples. Studies have shown that recasts are the most frequently occurring oral CF type in language classrooms (Sheen, 2004; Ellis, 2001; Panova & Lyster, 2002). Grammar instruction has been a critical issue in second language acquisition (SLA), and its practice and effectiveness are related to the development of L2 learners' communicative competence. The development of L2 learners' communicative competence is supported by Sociocultural Theory (SCT), and the classroom language helps teachers transform their thoughts into artifacts (Vygotsky, 1986, 1987) and being the most prominent in the learning activity. Accordingly, the use of language by teachers in grammar instruction should reflect abundant "comprehensible input" (Larsen-Freeman, 2015) to optimize L2 learning. In terms of teaching practices, oral corrective feedback (CF) has been recognized as an instructional strategy and language use that motivates language teachers to communicate with students (Long, 2015; Lyster, 2015), as well as to identify specific skills for accessible input. Although technology-assisted language instructional methods have been employed to promote L2 production (Knight et al., 2018) and listening outcomes (Kam et al., 2020), coupled with a growing interest in the instructional use of multimodal resources such as combining images and sounds (Hafner, 2014, 2015), multimodal instruction in Chinese as a second language (L2 Chinese) classrooms has yet to be explored. Against this background, this study examines CF practices and perceptions in multimodal Chinese grammar teaching.

Previous studies have shown that CF affects specific language forms to varying degrees. Explicit and implicit CF can be linked to feedback mechanisms and performance assessment in L2 classrooms. Various feedback strategies have been adapted in teacher-student interactions. Elicitations refer to feedback that does not correctly reformulate the learner's error pushes the learner to reformulate it (Loewen & Philp, 2006; Lyster, 2004; Nassaji, 2007). Elicitation strategies include self-repair, promoting and providing learners with opportunities to test and revise their hypotheses about the target language (Lyster, 2002, 2004; Lyster & Ranta, 1997). Additionally, elicitations also provide opportunities for negotiation through various forms of requests for clarification and correction (Lyster & Ranta, 1997; Lyster, 1998). On the other hand, prompts were more significant than recasts for increasing accuracy of regular past tense forms, whereas prompts and recasts had similar effects on improving irregular past tense forms (Yang & Lyster, 2010). Additionally, interactional feedback, featuring multiple opportunities to confirm, modify, or reject the hypothesis of L2 learners (Ziegler & Mackey, 2017), has been found to have positive effects on learners' vocabulary and grammar (Akiyama & Saito, 2016) by encouraging negotiation, noticing, and the production of modified output. CF has been proven effective in connecting interaction to L2 development for various linguistic features (Lyster & Saito 2010; Lyster, Saito and Sato, 2013; Nassaji 2016). Elements to be explored in this project include oral prompts in task-based language teaching (TBLT), where oral CF moves that withhold correct forms in response to students' errors were categorized into prompts (Lyster & Saito 2010). Existing research suggests that recasts can have a positive effect on second language

acquisition (SLA), as demonstrated by Mackey and Goo (2007). However, Ellis and Sheen (2006) and Long (2007) point out that the effect of recasts varies according to conditional factors. These factors can be categorized into internal and external variables. Internal factors are related to the learners themselves and include age, ability, working memory and development. On the other hand, external factors are environmental or situational factors, including the learning environment, the specific linguistic features targeted and the recast method. In essence, although recasts facilitate learners' language acquisition, their effectiveness is influenced by the complex interplay of learners' own characteristics and contextual factors.

CF modality could affect individual language development. Rassaei (2019) investigated the effects of computer-mediated, text-based and audio-based corrective feedback (CF) and the moderating role of participants' preferred perceptual styles on the development of English as a foreign language (EFL) learners' English article system. Based on the participants' responses, it was also determined whether their preferred perceptual style was reading/writing or listening. During the course of the treatment, subjects in the experimental group completed several written production tasks and received error correction from either asynchronous text or audio CFs depending on their treatment condition. Oral and written task were used in his study to measure learners' progress after completing the treatment tasks. He found that both text-based and audio-based CF were effective in learners' L2 development, while audio-based CF was more effective than text-based CF. In addition, matching the computer-assisted learning model with the learners' perceptual styles can further improve the effectiveness of computer-assisted learning. It remains to be explored whether audio-based and text-based CF have different impacts on L2 learning, specifically, gains and perspectives of L2 learners and teachers in L2 Chinese classrooms, including SCMC and FTF conditions.

3. Method

The data collection was conducted in an intensive L2 Chinese program. The classes were delivered for five hours per week. Three teachers and their 36 students participated in the investigation, and they were divided into three groups, Class A and Class B constituted the experimental group with oral CF, in contrast to Class C in the control group without oral recast in instruction of phonetic pronunciation. In the experimental group, Class A utilized the oral CF and task-based interaction in the phonetic instruction in the FTF modality, whereas the instruction intervention of Class B was conducted in the SCMC modality. The participating teachers were highly experienced, with a mean experience of 10.8 years. The class size was the same, with 12 students per class, and the students were beginner L2 learners of Chinese from linguistically diverse backgrounds. None were heritage learners, and they began learning Mandarin in adulthood. The mean age for the L2 Chinese learners was 26.5 years (ranged 18-36), and they reported no history of hearing impairments or speech disorders at the time of the investigation.

The study evaluated the complexity of the tasks in intermediate-level Chinese language classroom from the analysis of the classroom corpus and observation, especially the comparison of the oral tasks in the SCMC and FTF classrooms, and the assessment of the writing tasks, although some studies have used the time used by the learner as an estimation to measure the complexity of the cognitive tasks (Baralt, 2013). This study utilized time and space factors to complete the tasks, the amount of information, and the teacher's assessment of the complexity of the task in the early stages of the project, as well as identifying the resource-directing factors in both the SCMC and FTF Chinese classrooms, or the resource-dispersal factors. Resource-dispersing factors were identified for both the SCMC and FTF elementary Chinese language classrooms to observe which resource-directing components directed resources such as attention and memory to the necessary target language features for successful task completion, and which resource-dispersing factors increased implementation or procedural requirements.

Classroom data were compiled based on the interaction in intermediate L2 Chinese classrooms. The experiment was conducted to examine the effect of corrective feedback modalities on L2 learners' grammar patterns in task-based instruction classrooms. The content of the curriculum in the classrooms was controlled. L2 Chinese learners in experimental (with face-to-face or SCMC corrective feedback) and control groups (without corrective feedback) completed task-based

production and elicitation over six weeks, and comprehensibility is measured through listener judgments. Tokens of CF were collected from task-based assessments (EIT), and communicative interactions (paired dialogue) in FTF and online L2 Mandarin classrooms. Language instructors' corrective feedback and the L2 learners' output were compared.

Three language instructors exerted corrective feedback moves or refrained from CF during activities from Week 1 to Week 6 in FTF and SCMC L2 Chinese classrooms. In each treatment session, the researcher sat at the back of the classrooms or joined the online class and took detailed notes of classroom activities and the behavior of the participants. Pre-test was conducted in Week 2. In Week 6, the participants were asked to finish a post-test, a questionnaire survey, followed by a brief personal interview. The pretests and posttests consisted of timed elicited imitation test (EIT) and paired dialogue task. Timed EIT and untimed paired dialogue were administrated separately as part of the oral assessments required for the course; instructions and samples were given prior to the implementation of the tasks. Elicited imitation test (EITs) have been used to assess different dimensions that demand real-time, integrative oral linguistic skills, and the technique of elicited imitation requires participants to listen and then repeat as precisely as possible. Empirical studies suggest that EITs offer a good estimate of learners' global oral L2 proficiency levels (Cox and Davies, 2012).

Recast, more explicit (metalinguistic feedback + elicitation), and more implicit prompts (elicitation, repetition, clarification request) were provided when learners made errors during the oral collaborative tasks in the SCMC context. Synchronous computer-mediated communication (SCMC) in the language classroom is multimodal by nature. Both teachers and students deployed a variety of semiotic resources to organize their actions in classroom interactions in the investigation. The collected data reflected teacher-student and student-student interaction speech in L2 Chinese classrooms in the online or SCMC modality.

The interaction patterns of the L2 Chinese learners and communicative strategies were coded and analyzed in Storch's (2002) model, with the indices of equality and mutuality. More explicit (metalinguistic feedback + elicitation) and more implicit prompts (elicitation, repetition, clarification request), and no CF (control group) were provided when learners made errors. The collected data reflect teacher-student and student-student interaction speech in L2 Chinese classrooms in the online modality. L2 learners in experimental (with more explicit or more implicit prompt feedback) and control groups (without prompt feedback) completed the tasks over six weeks. Three language instructors exerted more explicit, more implicit prompt moves or refrained from CF during activities from Week 1 to Week 6 in the SCMC L2 Chinese classrooms.

To measure the CF types and the tokens in each classroom and L2 Chinese learners' responses, the CF incidences the teachers provided was examined to confirm the CF provision in each group. Both colloquial and word-by-word translations were used (Chen, 2020), depending on their significance to show the meanings and the target grammatical structures. Interrater reliability among the three coders was 95%. Oral prompt moves with metalinguistic visual or written input were coded and marked as more explicit prompts. The learners received corrective feedback in the form of elicitation or self-repair. The learners who made errors received commands of repetition or self-repair from the instructors, such as or *zài shuō yí cì* 'say that again', and the correct form was not provided. Elicitation is the instructor's strategic pause in the middle of an utterance to elicit a learner's completion. Practices of elicitation were illustrated by use of a partial repetition of the learner's erroneous utterance, asking questions to elicit the learner's reformulation. Such practices rely on the recordings through communicative interactions in L2 Chinese classrooms.

Tokens of CF were collected from task-based assessments (timed EIT and untimed sentence completion, and picture prompt tests), focus-on-form treatments (CF provision), and communicative interactions (paired dialogue). Language instructors' feedback provision and the L2 learners' output were compared, and language socialization of the L2 Chinese learners was assessed. Some studies have suggested metalinguistic information was provided before form-focused instruction (FFI) lessons (Spada, Lightbown, & White, 2005). Other studies have argued that students produce the target structure accurately in FFI tasks for communicative purposes (Swain, 2005). CF moves aimed at students' errors can be utilized in FFI and push students to practice the target feature in communicative and authentic contexts (Lyster, 2007). The assessment consisted of timed elicited

imitation test (EIT), untimed sentence completion, and picture prompts. Timed EIT and untimed grammar tasks were administrated separately as part of the assessments required for the course; instructions and samples were given prior to the implementation of the oral tasks. Both implicit and explicit knowledge of L2 learners were considered in the timed and untimed testing.

Note that the production tokens in the collaborative tasks were collected and rated. The purpose of the rating task was to investigate the effects of prompts on L2 learners' grammar accuracy of L2 Chinese learners' oral tasks. The oral tasks in the pretest and posttest were analyzed in terms of the accuracy rate of the target structures. In the scoring of the testing materials, the numbers of obligatory uses in the students' answers were counted (cf. Chen, 2021). Consequently, the number of correct instances was divided by the number of obligatory uses. In the ratings procedure of collaboration, minor tone or pronunciation errors in the oral responses did not affect the scoring when the production of the target structures was comprehensible. The oral task was correlated significantly with the tests ($r = .86$), and the factor analysis revealed that all testing scores loading on the same factor accounted for 82% of the variance. The relationship between the tasks indicates that the tests measured the same construct.

4.   Results and Discussion

In the intermediate-level classrooms, a mixed ANOVA tested for a significant interaction effect ($\alpha = 0.05$) between groups and testing time, followed by calculations of significance testing and effect sizes (Cohen's *d*). Results showed no statistically significant differences between the experimental and control groups in the pretest, $p = 0.1$. The ANOVA showed a significant main effect for testing time, $F(2, 82) = 7.12$, $p < 0.001$, eta squared (η^2) = 0.08, indicating a medium effect size ($d = .76$). Table 1 summaries the gains of SCMC CF on the grammar tasks.

Table 1 - Summary of CF in the SCMC context

CF Types	Pretest (Time `)		Posttest (Time 2)	
	Mean	SD	Mean	SD
FTF Recast	0.53	0.14	0.88	0.02
SCMC Recast	0.51	0.11	0.83	0.05
Control Group	0.52	0.12	0.76	0.03

In the FTF condition, pairs with more explicit prompts had significantly higher accuracy rate than the group with more implicit prompts and the control group. Additionally, form-focused instruction with illustrations of concrete grammatical structures and metalinguistic feedback with online visual assets are proven effective. Explicit and implicit prompts affected the collaboration stances in learners' oral tasks regardless of the task complexity. Specifically, intensive form-focused instruction allows L2 learners of Chinese to compare their errors with the target forms and identify features of grammatical structures and increases the accuracy in paired oral interaction.

Findings in this study contribute to our understanding of the CF input and TBLT with group collaboration tasks. The findings verified the effectiveness of interactional prompts on the grammatical gains of beginner L2 learners in the SCMC classroom. Oral prompts were effective when used with other visual assets and written CF in SCMC interaction on the grammar instruction and collaborative tasks. When language learners actively participate in authentic and intentional classroom activities, and visual cues provide constructive feedback, the classroom discourse itself is the meaningful learning. Integration of visual cues (metalinguistic knowledge of the target grammatical structure) can bridge the gaps in classroom communication among the L2 learners in the SCMC context. Interactional prompts can enhance learners' awareness of their errors and the target grammatical structures, and the appropriate application in their grammar tasks, regardless of their linguistic backgrounds.

It is also noteworthy that L2 learners receiving more explicit prompts in form-focused instruction outperformed those without prompts in terms of grammatical gains. Evidently, modalities of corrective feedback, classroom interactions, and the task design could be relevant to the grammar

accuracy and the uptake of L2 learners in beginner Chinese classrooms. Interactional prompts have positive effects on learners' grammar accuracy in beginner L2 Chinese classrooms, and classroom (teacher-student and student-student) interactions, in both FTF created opportunities for language socialization of L2 learners of Mandarin Chinese. L2 learners made errors in the process of language learning, and findings suggest that instructors' CF provision in grammar instruction facilitating L2 grammar acquisition. L2 learners' performing grammar tasks with metalinguistic feedback could be effective in improving their grammar accuracy, and picture prompt and paired dialogue as part of a focus-on-forms task improved L2 learners' communicative strategies. Additionally, exerting prompts in paired dialogue with picture prompts or visual assets has a link with L2 learners' language socialization in the SCMC context. Prompts with metalinguistic clues created more opportunities for meaning negotiation and classroom socialization in the SCMC context.

The dynamics of CF provision in intermediate classes can be found in the instructional process. To investigate the differences of oral CF moves, a one-way ANOVA was performed. The results showed statistically significant differences in oral CF moves, $F_{(2, 69)} = 103.71$, $p < 0.01$, indicating that the incidence of recasts, explicit CFs, and prompts differed in the L2 Chinese grammar instruction. The participating teachers most frequently exerted oral recasts to facilitate L2 learners' uptake, and explicit CFs were least utilized. Bonferroni's post-hoc comparison showed significant differences between (a) recasts and explicit CF ($p < 0.01$), and (b) between recasts and prompts ($p < 0.01$). The difference between explicit CF and prompts was not significant. Overall, the participating teachers in the grammar instruction most frequently exerted oral recasts, but some variations between experimental groups in the SCMC context and control groups in the FTF context have been attested in the exertion of oral CF. In the exertion of oral CFs, teachers in the experimental group used fewer oral recasts, higher incidence of explicit CF, and higher incidences of prompts. The CF incidence differences between the experimental and control groups were significant ($p < 0.01$) in Bonferroni's post-hoc comparison, indicating different oral CF exertion patterns along with multimodal resources in the experimental group.

In analyzing the CF variation, Weeks 3–4, Weeks 5–6, and Weeks 7–8 were identified as Stage 1, Stage 2, and Stage 3, respectively, and the directional complement (DC) and resultative complement (RC) target structures were instructed in all the stages. The experimental group teachers used higher incidences of prompts (26% in Stage 1, 25% in Stage 2, and 31% in Stage 3) than the control group teachers in grammar instruction with multimodal resources accessible to L2 learners. They elaborated that oral CF moves with visual support and contextual exemplification facilitate L2 learners' successful and partial uptake. Additionally, teachers in the control group utilized oral recasts extensively (more than 80% in all stages), and they confirmed the efficacy and affordances of oral recasts within time constraints in their stimulated recall interviews. Table 3 illustrates the summary of teachers' practices of oral CF moves in grammar instruction with equal hours of recordings (20 hours) from each class.

Table 2 - Summary of teachers' oral CF instances and students' uptake in grammar instruction

Groups	Recast Instances		Explicit CF Instances		Prompt Instances	
	n	(%)	nn	(%)		(%)
Experimental (n=307)	143	(47%)	80	(26%)	84	(27%)
Uptake (Successful and partial incidence)	123	(86%)	63	(79%)	75	(89%)
Control (n=489)	394	(80%)	38	(8%)	57	(12%)
Uptake (Successful and partial incidence)	239	(61%)	21	(55%)	32	(56%)
Total (N=796)	537	(67%)	118	(15%)	141	(18%)

In addition to demonstrating the effectiveness of CF in FTF and SCMC conditions on L2 development, the results showed that CF provision in the FTF condition was significantly more effective than the same type of CF in the SCMC condition in promoting L2 pronunciation

development. This is an important finding of this project because previous research on SCMC L2 learning has usually examined the effects of asynchronous CF effect, and little is known about the CF effects of SCMC L2 Chinese learning. It is recommended that L2 Chinese teachers provide both oral, written, and multimodal CF in addition to FTF language learning opportunities in the classroom. Given the flexibility of CF provision in the SCMC condition in terms of time and place, it is also recommended that L2 Chinese language teachers provide asynchronous and synchronous CF in their classrooms. The findings also provide evidence that teachers should be aware that individual differences in language learners, such as their preferences, may affect their learning outcomes upon receiving CF. Different learners may derive different benefits from different CF modalities in their L2 Chinese learning.

Comparing the types of feedback on grammar instruction, the FTF context provided L2 learners with more opportunities to collaborate in learning to write Chinese characters. For example, when the teacher assigns students to recognize a reading, students will respond directly if they do not know how to read, whereas in FTF contexts, L2 learners tend to ask the classmates next to them or the classmates next to them take the initiative to help. One weakness of the SCMC context relates to pronunciation correction in grammar instruction because students may not always pay attention to the teacher's gestures and facial expressions in the SCMC context. In addition, pronunciation errors in SCMC contextualized grammar instruction classes often involved non-verbal feedback, and all participating teachers agreed that body language such as lip-syncing, hand gestures, head raising, head lowering, and foot stomping would be present in the SCMC classroom. Task-based grammar interactions require resource-directed dimensions such as spatial reasoning and here and now/there elements. The participating teachers were reported to utilize orientation words such as "in front, behind, above, below, etc. to help students memorize the movements similar to the Chinese character shapes in both FTF and SCMC condition, along with verbal CF.

It should be noted that verbal modeling and visual aids are equally important in teaching L2 Chinese grammar. In addition to modeling and instruction of grammatical structures, it is necessary to explain the sequence and gradually approach the requirements of the target task in two dimensions: resource-directing and dispersing. Increasing task complexity does not increase the output of complex structures when students are not focused at that time. Intermediate-level learners were usually able to correct errors after the teachers provided CF. When repeated errors occurred, the teachers supplemented the verbal CF with visual aids. Of particular interest is the interaction of differences in attitudes and engagement of Chinese second language learners in completing the task, which affected their grammatical accuracy. The most significant difference in the performance of L2 Chinese learners in the FTF and SCMC conditions was the level of engagement, which is a challenge for all participating teachers involved in an online classroom, where they must keep track of the level of student engagement. Additionally, the degree of completeness in "oral expression" varied. Oral recasts in FTF condition on complex tasks seemed worked better compared to simpler tasks in such group collaboration. In SCMC classrooms, gains in L2 Chinese learners' grammatical accuracy were associated with interactive and prompt CF provision. Form-focused instruction through illustrations of grammatical structures and metalinguistic feedback through FTF and SCMC visual assets proved effective.

5.   Conclusion

This study investigates how more explicit and more implicit prompts, also types of interactional corrective feedback, can enhance grammar accuracy of L2 Chinese learners in synchronous computer-mediated communication (SCMC) context. Pretests and posttests were conducted to examine the effect of more explicit and more implicit prompts on L2 learners' grammatical gains in classrooms with learners from different linguistic backgrounds. The findings verified the effectiveness of interactional prompts on the grammatical gains of beginner and intermediate-level L2 learners in the SCMC classroom. The group with more explicit prompts had significantly higher accuracy rate than the group with more implicit prompts and the control group, and groups with more implicit prompts in the SCMC classroom outperformed the control group. Evidently, form-focused instruction with illustrations of concrete grammatical structures and metalinguistic feedback with online visual

assets are proven effective. Interactional prompts can enhance L2 Chinese learners' awareness of their errors and the target grammatical structures, and the appropriate application in their grammar tasks, regardless of their linguistic backgrounds. Modalities of corrective feedback, classroom interactions, and the task design could be relevant to the grammar accuracy and the uptake of L2 learners in Chinese classrooms. Classroom interactions, including teacher-student and student-student interactions, created opportunities for language socialization of L2 learners of Mandarin Chinese. Exerting prompts in paired dialogue with picture prompts or visual assets has a link with L2 learners' language socialization in the SCMC context.

It can be seen that L2 learners made errors during the language learning process and the CF provided by the participating teachers during grammar instruction facilitated the acquisition of L2 Chinese grammar. L2 learners' collaborative tasks with metalinguistic feedback could be effective in improving their grammar accuracy, and picture prompt and paired dialogue as part of a focus-on-forms task improved their communicative strategies. Prompts with metalinguistic clues created more opportunities for classroom socialization and learning in progress in the SCMC condition. In summary, the effectiveness of more explicit and more explicit prompts in the SCMC classroom was verified, and more explicit prompts in the SCMC classroom outperformed the control group. These findings shed light on prompt feedback and grammar instruction in beginner L2 Chinese classrooms. It is noteworthy that grammatical gains of L2 learners could be associated with modalities of prompts, target grammatical structures, and the design of the grammar tasks in the SCMC context.

Additionally, intensive form-focused grammar instruction allows L2 learners of Chinese to compare their errors with the target forms and identify features of grammatical structures and increases the accuracy in paired oral interaction. It can be seen that increased task complexity did not affect in classroom interaction patterns and grammar accuracy, suggesting that manipulating task complexity might not work for L2 Chinese learners' interactions. CF treatments, on the other hand, affected the grammar and pronunciation accuracy in both FTF and SCMC. L2 Chinese learners' perception of CF may have affected their l group interaction. Additionally, forms and functions produced by L2 Chinese learners during CF treatment contributed to the collaborative stances of paired dialogue in the SCMC context. The interactive demands and peer feedback in collaborative tasks may have moderated the effect of task complexity in the oral and grammar tasks.

The results showed that oral recast was most frequently used to facilitate Chinese learners' modified output in both FTF and SCMC contexts, while explicit CF was used the least in grammar instruction in the SCMC context. In addition, verbal CF that provided visual support and contextual examples frequently triggered learners' uptake on complex tasks in the grammar instruction. Teachers' perceptions of CF in FTF and SCMC L2 Chinese grammar instruction indicated that confirmed verbal CF provided more than they estimated, and that the CF interaction process was subject to an integrated repertoire across oral, visual, and contextual modalities Findings in this study contribute to our understanding of the corrective feedback input, engagement in negotiations for meaning in L2 Chinese learning, task complexity and group collaboration. The study sheds light on the dynamics of oral tasks and pedagogical implications for L2 Chinese teaching and learning. In particular, well-designed tasks in FTF and SCMC classrooms may induce L2 Chinese learners to enhance monitoring behaviors, to engage in more in-depth collaboration with language learning, and to increase opportunities for interactive language learning. L2 Chinese teachers can increase learners' attention to form-meaning mapping in task-based planning by designing and sequencing instructional tasks, with adequate CF provision in both FTF and SCMC classrooms.

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17 - An Ecological Perspective Case Study: The Role of Emotion in the Identity Construction of Young Learner English Language Teachers

Restu Santyarini
restu.santyarini-2023@fib.unair.ac.id
Airlangga University, Indonesia

Abstract

This study explores the relation between emotions and identity construction among EYL teachers in Indonesia. It applied an ecological perspective to examine the emotional experiences that shape their professional identities. This research conducted at a private primary school in Bangkalan, Indonesia. It focused on how English teaching is integrated from the first grade and reflects the institution's commitment to second language mastery. Two female and one male English teacher, responsible for 17 classes, participated in this study. Data were gathered through unstructured interviews and analysed using a narrative framework within grounded theory approach from Corbin and Strauss (2015). The results revealed complex dynamics across the classroom (micro), institutional (meso), and societal (macro) levels influencing teachers' emotions and identities. At the classroom level, the distribution of students' gender and the heavy workload underscore the need for flexibility and classroom management abilities. Institutional challenges include lack of professional development opportunities, inadequate learning tools, and frequent parental intervention. Teachers' emotion and identity are further impacted by societal issues, such as lack of professional recognition, heavy administrative responsibilities, and unstable educational policies. Practical recommendations include increased governmental and institutional support for professional development, a more efficient of administrative responsibilities, and consistent educational policies to foster a stable supportive environment. These findings provide valuable insights for policymakers and educational institutions aiming to support EYL teachers in their professional growth and emotional resilience.

Keywords: Teacher Identity, Emotions, Ecological Perspective, English for Young Learners (EYL), Professional Development.

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1. Introduction

Research on the emotions experienced by language teachers has gained increasing attention among applied linguistics researchers (Nazari & Karimpour, 2022; Nazari et al., 2023; Song & Park, 2021). This interest aligns with the recognition that language teaching and learning involve not only cognitive and methodological aspects but also emotional components (Shao et al., 2020). Benesch (2017) argues that emotions are not merely internal states or universal reactions; instead, they are deeply shaped by the environment, cultural norms, intersecting social factors, and power dynamics. This view highlights the complexity of emotions, which are intertwined with social structures and interactions (Bericat, 2016; Zhang et al., 2024). Studies in this area investigate how teachers' emotions—both positive and negative—influence their teaching practices, interactions with students, and the development of their professional identity (Richards, 2022).

In the context of teaching, Benesch (2017) introduces the concept of "emotion labour," which describes how teaching English connects affect and intellect, body and work, and passion and rationality, all while being profoundly influenced by power relations. Emotion labour refers to how teachers regulate their emotions to meet institutional expectations (Nazari et al., 2023). Song (2021) expands on this concept, noting that emotion labour also involves teachers managing their emotions both in and outside the classroom. This process allows them to recognize and counteract negative attitudes toward students, fostering greater introspection and emotional reflection. In turn, this

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introspection contributes to teachers' emotional and professional growth, aiding in the development of their professional identity.

Teacher identity, as Yazan (2018) explains, encompasses teachers' dynamic self-perception and their understanding of their role within diverse communities. This identity is shaped through collaboration, engagement with various social groups, and reflection on their place in the educational landscape (Xing et al., 2024). Teacher identity is multifaceted, incorporating self-perception, external perceptions within the educational environment, and societal expectations. Crucially, this identity is not static but evolves through social interactions, professional experiences, and self-reflection. Understanding teacher identity is vital because it directly impacts how teachers teach, engage with students, respond to educational policies, and contribute to their school community (O'Keeffe & Skerritt, 2021).

English language learning at a young age (EYL) has also become a prominent area of research (Trent & Nguyen, 2021; Nazari et al., 2023; Tavakol & Tavakoli, 2022; Nguyen, 2019). Young learners face unique challenges, including limited opportunities to use the target language in real-life social contexts. Consequently, syllabus designers and textbook authors often emphasize teaching language chunks, structures, and sentence patterns, particularly in the context of Teaching English to Young Learners (TEYL) (Nguyen, 2018). EYL teachers need to move beyond basic teaching methodologies by acquiring specialized knowledge and skills tailored to young learners (Zein & Butler, 2023). This includes understanding child development and learning theories to create engaging and effective lessons, as well as employing strategies to foster a supportive classroom environment. Such an environment encourages exploration through play, storytelling, songs, and interactive activities (Roland, 2020).

Previous research has underscored the relationship between emotions and the formation of teacher identity in language education. For example, Nazari et al. (2023) examined this dynamic in the context of teaching English to Young Learners (EYL) in Iran, focusing specifically on female teachers through an ecological lens. Their findings highlight the need for teacher educators to better prepare EYL teachers for the realities of the school environment, where emotions play a critical role in teaching. Similarly, Syahnaz et al. (2023) conducted a narrative inquiry study in Indonesia, focusing on an English teacher who also served as a vice principal. Their research revealed how the teacher's fundamental beliefs and emotions interacted to shape their professional identity.

Building on these insights, the present study aims to explore how emotions shape the professional identities of Indonesian EYL teachers. Unlike prior research, this study adopts an ecological perspective to examine the experiences of both male and female teachers. This approach provides a deeper understanding of how ecological factors influence teachers' emotions and their professional identity construction. Accordingly, this study addresses the following research questions:

1. How are the emotions of EYL teachers affected by the classroom (micro), institutional (meso), and social (macro) ecology in Indonesia?
2. What role do emotions play in the identity construction of EYL teachers?

2. Literature review

2.1 Role of (English young learners) teachers' emotions and teachers' identity construction

Teaching young learners is fundamentally different from teaching adults. Psychological knowledge is vital for developing a deep understanding of children, which is essential for fostering positive personality traits in teachers, such as care, patience, and love for children (Zein, 2023). Education for teaching young learners requires a specialized approach that addresses emotional, pedagogical, and interpersonal aspects to effectively support this unique learner demographic (Pourhassan & Nazari, 2023). Young learners exhibit emotional dynamics that differ significantly from those of adult learners, often characterized by greater volatility (Zheng et al., 2023). Effective learning in young learners is heavily influenced by their emotional state, making interpersonal skills essential for EYL teachers to harness these emotional aspects and enhance the learning experience.

The emotional dynamics between teachers and young learners play a critical role in shaping teachers' professional identity (Zembylas, 2003). Emotions are central to the teaching process,

influencing how teachers perceive themselves, interact with students, and implement educational practices (Brown et al., 2023). Positive emotions—such as joy, satisfaction, and pride—can strengthen a teacher's sense of professional identity, foster deeper engagement with students, and provide a more fulfilling teaching experience (Burić & Moè, 2020; Auliah et al., 2021). Conversely, negative emotions—such as frustration, anxiety, or burnout—may challenge a teacher's identity, potentially leading to disengagement and a re-evaluation of their role in the classroom. For instance, teachers dealing with family or workplace issues may find their emotions negatively impacted, resulting in suboptimal teaching performance and, ultimately, frustration (Lavy & Eshet, 2018).

The process of identity construction for teachers of young learners is inherently tied to the emotional experiences they encounter throughout their professional journey (Chen et al., 2022). These experiences are shaped by emotional connections with students, the emotional climate of their classrooms, and the emotional support provided by the broader educational community. Positive traits and emotions—such as patience, empathy, confidence, and enthusiasm—are crucial for fostering constructive emotional experiences in language learning environments (Shao et al., 2020). Teachers who embody these qualities are better equipped to create and sustain productive and engaging learning atmospheres. This, in turn, influences their identity construction, which evolves as they navigate the emotional landscapes of their profession. Teachers' identities integrate their personal values, professional knowledge and skills, and emotional experiences (Chen et al., 2022; Dewi & Fajri, 2023).

Research by Hong et al. (2024) highlights three key factors influencing teacher identity. First, teacher identity is part of a continuous, goal-focused, and agentic self-regulation process. It develops over time as teachers actively regulate and direct themselves to achieve specific professional goals—what they aim for determines what they achieve. Second, teacher identity intersects with other identities, including gender, ethnicity, and social identities, within a cultural-historical context. This perspective emphasizes that teacher identity is inseparable from the socio-cultural and historical environment in which it exists. Third, teacher identity is shaped by professional experiences, including adherence to professional community standards. A teacher's interactions and adjustments to these standards significantly influence the construction of their identity.

Zembylas (2003), using a poststructuralist approach, examined the relationship between teacher identity and emotions. He argued that teacher identity is in a continuous state of negotiation, shaped by power dynamics, ideologies, and social factors. He proposed two main theories: first, that power and individual organization play a critical role in shaping teachers' identity, making it an inherently emotional process; and second, that a deeper understanding of teacher identity emerges when its emotional aspects are explored. Power, as a key element, both forms identity and influences its evolution.

Chen et al. (2022) also emphasized that teachers' emotions are not random but are deeply influenced by their professional goals. These emotions, in turn, shape the development of their identity. For example, teachers who feel happy and satisfied with their teaching outcomes are likely to be more motivated and confident in their abilities. On the other hand, teachers who experience frustration or dissatisfaction may struggle to develop their professional identity.

2.2 *(English young learners) teachers' emotions and identity construction in ecological perspective*

Lier (2004) argued that ecology represents a contextualized or situated form of research. Ecological research considers the complex interactions and relationships within environments or contexts where phenomena occur. In this sense, "ecology" is utilized to describe research approaches that consider how various elements within a system (such as an educational setting) interact and influence each other. This perspective emphasizes the importance of understanding the setting, participants, social standards, and other relevant variables that affect the subject of study. Essentially, it implies that research is not disconnected or confined, but deeply embedded in and influenced by its surrounding environment and conditions (Holland, 2020)

An ecological approach explains the elements that influence teacher identity formation from various contexts. An ecological perspective on teacher professional development emphasizes the interconnectedness, scope, and temporality of learning experiences, enhancing teacher identity

formation within diverse contexts (Ehrenfeld, 2022). This approach suggests that teachers' development is strongly influenced by their interactions with their environment, whether with students, fellow teachers or the wider community. In addition, teachers' learning experiences outside the school environment are also recognized as one of the factors that influence the formation of their professional identity, as Masry (2021) argues that ecological factors, along with intrapersonal and interpersonal aspects, significantly influence the construction of language teachers' professional identity. Thus, the combination of these factors-ecological, intrapersonal, and interpersonal-together form a complex framework within which a language teacher's professional identity is formed and continues to develop throughout his or her career. By understanding the importance of the interactions between these factors, teachers' education and professional development can be designed to more effectively support their professional growth and well-being.

Ecological perspective in other studies also highlight other factors that influence the construction of teacher identity. An ecological perspective of teacher identity emphasizes that the teacher's self is formed through interaction with the subject matter, focusing on a thing-centered approach (Vlieghe & Zamojski, 2020). This finding revealed that teacher identity is not only influenced by external factors but also by how the teacher interacts with the learning material he teaches. The emotions felt by the teacher will play a role in this time. The level of confidence teachers has in their teaching material will make them easier to form their identity. an ecological perspective on teacher identity underscores the importance of understanding how interactions with subject matter affect the formation and development of their professional identity. It emphasizes that the process of teacher identity is not only limited to external or social factors, but also involves a deep interaction with the substance or subject matter being taught.

By emphasizing the sociopolitical and contextual aspects of teaching, the ecological approach to language learning has looked into the effects of sociocultural and ideological influences on teachers' emotions (Nazari et al., 2023). Besides, to completely understand the complicated layers influencing language teacher emotions, it is essential to reveal how various individual and contextual factors affect these emotions across different levels. These levels included the classroom (micro) level, the institution (meso) level, and the society (macro) level. Wolff & De Costa (2017) investigated how the emotions of a non-native English-speaking teacher were influenced by personal (micro), institutional (meso), and societal (macro) levels. These three factors have a complex, interdependent relationship. Institutions are impacted by societal attitudes, which caused teachers to feel different degrees of pressure or support (Blake & Dewaele, 2023). According to Zhao, et al. (2022), institutions are influenced by public sentiments, which cause teachers to encounter differing degrees of support or pressure. This suggested that teachers' emotions are influenced by social variables, which may have an impact on how they create their identities. For these reasons, the researcher in this study discussed on how emotions of EYL teachers affected the construction of identity from an ecological perspective.

3. Materials and Methods

3.1 Research Approach

This study is a qualitative study. According to Creswell (2014) qualitative researchers usually collect data directly from participants as they experience the problem or issue under study in their natural environment, without giving any treatments or interventions. By using this approach, researchers can gain a deeper understanding of the setting and surroundings in which participants carry out their activities as well as more comprehensive and in-depth insights into their experiences. Qualitative research prioritizes naturalistic observation of the interactions and behaviors exhibited by participants. This type of approach is highly effective for exploring complex social phenomena and generating comprehensive data (Denny & Weckesser, 2022).

3.2 Context and Participants of The Study

Since the onset of the Fourth Industrial Revolution in 2011, there is a pressing require for English teachers to update their professional and pedagogical abilities to keep pace with technological

advancements (Prayogo, 2022). This period characterized mainly by innovation, automation, and enhanced information transfer. In the context of English language education in Indonesia, the need for curriculum updates aims at adjusting with student needs is becoming crucial. This need reflects a broader global trend towards educational change driven by innovative progression and evolving learner needs. By revising curriculum to join advanced education abilities and align with industry demands, teachers can better prepare students with the students' skills required for future. This condition will influence on how teachers manage their emotions.

This current research conducted in a private primary school located in Bangkalan, Indonesia. This location is ideal for examining how English language teaching is integrated from the beginning of primary education. The school implements a specific policy where English is taught starting from the first grade. It demonstrates the institution's commitment to master a second language among its students. In this context, two female and one male English teachers are responsible for teaching across 17 classes. It indicates a significant workload and demands for having good classroom management skills and high adaptability.

The research setting offered a unique chance to investigate the various factors influencing teachers' emotions. The purpose of this research was to comprehend how the ecology of teachers' emotions is shaped and influenced by factors at the classroom (micro), institutional (meso), and social (macro) levels in relation to the construction of their identities. Micro factors might include daily interactions between teachers and students or dynamics within the classroom, while meso factors related to school policies or support from colleagues, and macro factors involved the influence of the national education system and global trends in English language education. This study focused on identity construction as a field where teachers can develop strategies to manage work stress, enhance pedagogical skills, and ultimately improve the learning experience for their students. It also explored how the school's professional development programs assist teachers in addressing the challenges they face and support their overall identity construction in professional growth.

3.3 Design and Data Collection

This study aimed to explore the role of teachers' perceived emotions in shaping their professional identities. A case study approach, as described by Yin (2018), was adopted. According to Yin, a case study is conducted in a real-life context, enabling researchers to answer how certain phenomena occur. Rose et al. (2017) further emphasized that case studies provide a comprehensive analysis of specific cases, allowing for detailed and in-depth exploration of particular subjects or situations.

Data for this study were collected through unstructured interviews and narrative frames. Unstructured interviews facilitated a holistic understanding of the participants' perspectives (Dawson, 2007) and were conducted in an informal, conversational manner (Rose et al., 2017). While the interviews were unstructured, the researcher prepared key points in advance to maintain focus on the relevant data needed during the discussions.

The study involved one male and two female English teachers from an elementary school in Bangkalan, examining their emotions and identities as Early Years Language (EYL) teachers. The interviews explored how these teachers managed their emotions and professional identities while interacting with students and colleagues. Additionally, the study investigated the influence of institutional and societal factors on the teachers' emotional management and identity construction. Questions also addressed the historical-cultural aspects of teacher identity and emotion, drawing on insights from Benesch (2017).

In addition to the unstructured interviews, data were gathered using narrative frames created by the three teachers. Narrative frames provided a structured yet flexible framework for understanding and analyzing the teachers' experiences (Kayi-Aydar, 2021). The teachers were asked to narrate their teaching experiences in EYL settings and describe how these experiences affected them emotionally and shaped their professional identities.

Both the unstructured interviews and narrative frames were conducted in Indonesian, allowing participants to express themselves more comfortably and share their experiences in greater depth. This bilingual approach ensured a richer and more authentic dataset for analysis.

3.4   Data Analysis

The stages of data analysis in this research used the concept of the grounded theory approach from Corbin and Strauss (2015). Grounded theory is a form of qualitative research. There are three stages in this theory, including open coding, axial coding and selective coding (Ndame, 2023). At the first stage, open coding stage, researchers collected the data from the results of the unstructured interview and the narrative frame. After collecting the data, the researcher determined the initial code of sentences or phrases that consider to be important and relate to emotions and teacher identity construction. Then the labelling process was carried out on relevant data while providing notes on the data.

Then results of the data were analysed at the axial code stage. During axial coding, the researcher seeks to establish connections between the initial codes identified during the open coding phase. This involved organizing these codes around central categories (Riazi, 2016). In this study, researchers grouped codes, such as "students' gender" and "learning facilities", based on broader categories. This stage was to get the main themes from all the data that has been obtained. In the final stage, namely selective code, the researcher integrated the findings of these categories into narratives. The narratives explained how emotion and teacher identity are related to each other.

4.   Results

The results of the study indicated that classroom (micro), institutional (meso), and social (macro) ecology gave some impacts to the emotion and identity construction of the EYL teachers, as shown in Figure 1.

Figure 1. The ecology of emotion and identity construction in Indonesian EYL teachers
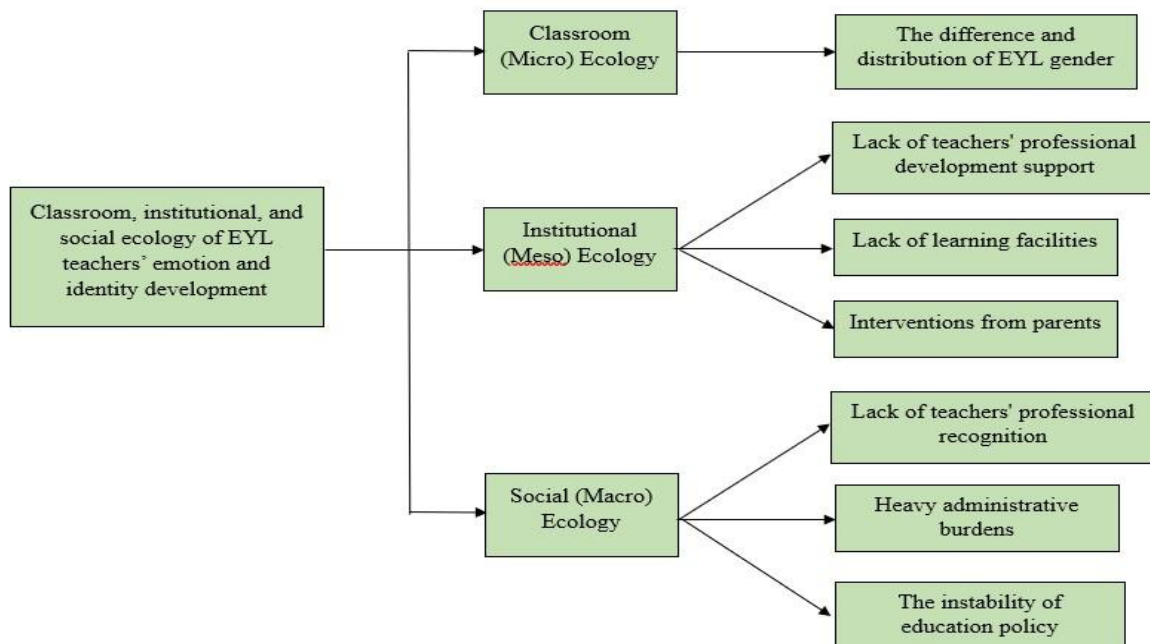
4.1   Classroom (micro)ecology

One of the factors affecting teachers' emotions in the classroom was the difference and distribution of EYL gender. There were about 25-27 students in each class taught by one English teacher. The percentage of male and female was 50%:50%. This gender distribution in a class greatly affected the conduciveness of learning. As stated by Teacher 1 (T1): "Male students tend to sit at the back of the class while female students sit at the front. When I teach, some male students will make noise by talking to their friends" (T1, unstructured interview). T1 faced her own challenges in classroom management. T1 had to think about how to prevent male students from disturbing other students during the learning process.

Teacher 2 (T2) provided almost the same information: "When learning activities are conducted with group discussions, students tend to group according to their gender" (T2, unstructured interview). This showed that even though students were placed in the same class, they still formed groups based on their gender. This could affect the effectiveness of group work and collaborative learning during the lesson. T2 also added a note, "When I find something like this, I usually need a special approach to ensure that each group gets equal attention and all students are actively involved in the discussion" (T2, narrative frame). Teacher 3 (T3) stated, "Most of the students who scored below the minimum score were boys. I feel that I have explained all the material but there are still many students, especially boys, who cannot exceed the minimum score" (T3, narrative frame). The information showed that in addition to challenges in classroom management, T3 also faced disparities in students' academic achievement. This could indicate that T3 was experiencing emotional problems. Although T3 had given the same explanation to students, many male students' learning outcomes were still below the minimum passing score.

In addition, this difference in students' gender also affected the way teachers interact with them. T1 stated "Male students often need a firmer approach and more frequent interventions to maintain their discipline during the lesson, while female students usually follow more easily when given verbal instructions and emotional support" (T1, unstructured interview). This emotional support could be in the form of praise, reprimands or small talk about certain topics (T2, narrative frame). To be able to do all these things, teachers needed to be more flexible and adapt to the students they teach so that classroom management can run more effectively.

4.2   Institutional (meso)ecology

At the meso-level, the three teachers gave almost the same information. The school did not provide enough support for teachers' professional development activities, especially workshops or training on the latest English language teaching. T1 explained, "The school organizes training quite often, but not specifically to help me teach English more interactively" (T1, unstructured interview). T3 gave a similar account, "Every time I go to class, this student often says that English is a difficult subject. One level with Math" (T3, unstructured interview). The existence of English as a foreign language in Indonesia certainly provided little space for EYL to interact using English in activities outside the classroom. T1 explained further, "English lesson is only taught once a week. The duration of the lesson is only 90 minutes. I think after finishing the lesson, students would have forgotten the material that I have taught. And I also feel that my teaching method is not developing. I am a little confused about what to use so that students can better understand the subject matter" (T1, unstructured interviewed). Lack of time allocation was also a challenge for EYL teachers in this school.

Regarding the lack of student skill development activities, T2 added "To get ideas for interactive teaching methods, I usually look at videos on YouTube or other social media. Unfortunately, sometimes the method cannot be applied optimally because the background of the students is also different from those in the video" (T2, narrative frame). This statement showed that although the teacher tried to find inspiration from outside, the implementation of these methods was not always successful because of differences in context and student background. T3 argued "hopefully the school will include us in English teaching training so that we can teach more properly" (T3, unstructured interview).

In addition to these problems, the lack of learning facilities and interventions from parents also greatly affected teachers' emotions and identities. T1 explained that there were parts of listening skills in the student book. However, the school has not been able to provide facilities that support this condition. "When teaching listening, I usually read the questions and then students will answer. Because the school does not provide speakers for listening" (T1, unstructured interview). T2 added, "Especially if I want to teach using video, it definitely cannot be. The supporting media for this is not available. So, I teach using traditional methods only" (T2, narrative frame). In terms of parents' intervention, T3 explained, "Sometimes parents complain when their children do not get good scores. Some of them asked me the way I teach their children". This would certainly affect the emotions felt by teachers. These problems faced by teachers needed greater support from the school. Teachers

would feel helped to improve their competence and relieve their emotion with better support from the school. Finally, they would be able to provide better learning experiences for students

4.3   Social (macro)ecology

Social factors were also among the key influences on teachers' emotions in developing their professional identity. Based on the accounts of the three teachers, it was found that EYL teachers were often considered inferior compared to those teaching at higher levels. T2 explained, "If I meet colleagues who teach at the junior or senior high school level, they will underestimate my job. This is very annoying" (T2, narrative frame). T1 added, "My friends often told me that my job is easier because I teach young children. So, I have more free time compared to them" (T1, unstructured interview). This perspective reflects a bias in Indonesian society, where teaching young children is seen as a simpler task than teaching at higher levels. Such perceptions can demotivate teachers, making them feel less valued in their profession and affecting their professional identity.

In addition to these challenges, T3 highlighted another issue related to the evolving dynamics of education policy. "The leader changes means the curriculum will also change, and the policy will change too. The latest is Merdeka curriculum. The students are free, but the teachers are dizzy" (T3, unstructured interview). Frequent changes in policy and curriculum were an additional burden for teachers. Each change required significant time and effort to understand and implement, creating new stressors. This concern was echoed by T2, who stated, "Besides the teaching duties, we as teachers also have much heavier administrative duties. There are so many administrative files that we have to fulfil" (T2, narrative frame). The heavy administrative workload often reduced the time teachers could dedicate to planning and implementing effective teaching strategies.

T3 further emphasized the difficulties caused by frequent curriculum changes. "The curriculum should not be changed too often. Because if there is a new curriculum, then we as teachers have to adapt again. We as teachers have those kinds of difficulties, the students will absolutely have too. And I still have one more problem. I teach English which is a foreign language. It is rarely used by children in their neighbourhood, so it will be difficult for them to master English" (T3, unstructured interview). Policy instability not only increased the pressure on teachers but also negatively impacted the quality of teaching and learning. The challenges were particularly pronounced in English language teaching, where students often lacked opportunities to use the language outside the classroom.

Disparaging social perceptions, heavy administrative burdens, and the instability of education policy posed significant challenges for teachers in building their professional identity. Support from the government and educational institutions is essential to address these issues. This support could include professional recognition, training, continuous development workshops, and the establishment of more consistent and well-planned policies.

5.   Discussion and Conclusions

The findings highlighted the multifaceted challenges faced by EYL teachers in Indonesia, encompassing classroom (micro), institution (meso), and society (macro) levels of their professional ecology. These challenges significantly impacted their emotions and the construction of their professional identity.

Zein & Butler (2023) argued that young learners have unique needs that teachers need to facilitate. At the classroom (micro) level, classroom dynamics, particularly gender distribution, played an important role in shaping the emotional experiences and management strategies of EYL teachers. The equal distribution of male and female students (50% each) in the classroom created a distinctive environment in which gendered patterns of behavior emerge. These gender dynamics did not only give challenges for classroom management but also affect teachers' emotional well-being, as they attempted to balance discipline with effective teaching strategies.

In addition, the need for different interaction styles based on gender, as described by T1, highlighted the emotional burden involved in teaching. Female students generally responded better to verbal instruction and emotional support, whereas male students required a more assertive approach. The dynamics of how the fundamental beliefs and feelings of the focused participant

interacted with one another formed the identity of the teacher (Syahnaz et al., 2023). This required a high degree of flexibility and adaptability from the teacher, which contributed to emotional distress and affected their sense of efficacy and satisfaction.

At the institutional (meso) level, institutional support for professional development and teaching resources was a significant concern. Professional development would help teachers to address their immediate problems that arise during their teaching (Pourhassan & Nazari, 2023). Teachers reported inadequate training opportunities. This was needed to improve interactive English language teaching. This lack of targeted professional development limited their ability to innovate and improve their teaching methods, as described by T1 and T3. In addition, the effort to access other learning resources from YouTube showed the teachers' proactive efforts to improve their pedagogy despite institutional shortcomings. This affected how the emotions they face during teaching (Brown et al., 2023). In practice, contextual differences between their students and those depicted in online resources often hinder the effective implementation of these methods. This mismatch emphasized the need for localized, context-relevant training and resources to better support teachers. The lack of such support created bad emotions that lead to the frustrations faced by EYL teachers (Lavy & Eshet, 2018).

Furthermore, the study also explained that the lack of adequate facilities, such as listening equipment and video support, severely limited the scope of teaching methods. As highlighted by T1 and T2, the absence of these resources forced teachers to rely on traditional methods, which might not be as effective in engaging students or improving their language skills. Support from the institution is necessary as EYL teachers could not stand alone (Hong et al., 2024). In addition, parental intervention, particularly in response to students' low grades, added an emotional burden to teachers, affecting their confidence and professional identity. As stated by Chen et al. (2022) that the process of identity construction for teachers of young learners was intrinsically linked to the emotional experiences they undergo in their professional journey.

At the macro level, social factors and community perceptions significantly influence EYL teachers' professional identity and emotional well-being. Positive emotion could enhance a teacher's sense of professional identity, giving a more fulfilling teaching experience (Auliah et al., 2021). Societal biases that trivialize teaching at the primary level, as experienced by T2 and T1, undermined their professional status and could lead to feelings of inferiority and demotivation. Negative emotion potentially lead to a disengagement and re-evaluation of their role and approach in the classroom (Burić & Moè, 2020). The perception that teaching young children was easier and less important than teaching at a higher level reflected society's general low valuation of early childhood education. It could negatively impact teachers' self-esteem and professional identity.

Meanwhile, frequent changes in education policy and curriculum, as noted by T3, presented additional challenges. The constant need to adapt to new policies and curricula created a sense of instability and increased the workload for teachers, leading to stress and emotional exhaustion. The heavy administrative burden, highlighted by T2, further reduced the time and energy that could be used to improve teaching practices and student engagement. This administrative overload, coupled with policy instability, exacerbates the emotional and professional challenges faced by EYL teachers in Indonesia.

The results of the study demonstrated the intricate interplay between classroom (micro), institution (meso), and social (macro) levels that influence the emotional experiences and professional identities of EYL teachers in Indonesia. Governments and educational institutions had to provide comprehensive support in order to address these issues. To facilitate efficient language instruction, schools needed to offer chances for targeted professional development, sufficient teaching resources, and facilities. In addition, consistent and well-planned educational procedures were required to lessen the administrative strain on teachers and established a stable learning environment. Finally, for EYL teachers to be valued and acknowledged for their vital role in forming the foundational phases of education, society attitudes of them had to change. With this kind of comprehensive support, EYL teachers might strengthen their sense of self as professionals, improved their emotional well-being, and eventually gave their students greater educational opportunities.

While this study provided valuable insights into the emotional experiences and professional identity of EYL teachers in Indonesia, it had limitations that need to be noted. One of the main

limitations was the number of subjects used in this study, which was only three EYL teachers. This limited number of subjects might affect the generalizability of the research findings and might not fully represent the experiences of EYL teachers in different contexts and regions. Future research could improve the validity and reliability of the findings by using a larger and more diverse sample. By involving more teachers from different backgrounds, schools and regions, future research might provide a more comprehensive analysis of the factors that influence EYL teachers' emotional experiences and professional identity.

Future research could also consider using mixed methods to obtain richer and more in-depth data. For example, a combination of in-depth interviews, surveys and classroom observations could provide a more holistic perspective on the dynamics of teaching and teachers' emotional experiences. With this approach, researchers would further explore the contextual factors that influence teachers' experiences and evaluate the effectiveness of various interventions and supports provided to EYL teachers. Overall, while this study provided valuable preliminary insights, further research with more subjects and a more comprehensive approach was needed to deepen the understanding of EYL teachers' emotional experiences and professional identity in Indonesia. Thus, the research findings could be used to design more effective policies and interventions to support teachers in their important role in early childhood education.

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18 - Enjoyed or Bored? Learners' Experiences of Flow and Anti-Flow in Material Tasks Engagement

Ting Huang

tingkelly@126.com

Xi'An Jiaotong University, China

Abstract

Flow provides learners with an optimal experience during English as a Foreign Language (EFL) material task engagement, while anti-flow can lead to boredom and hinder task completion. Despite its importance, the role of flow in single learning situations, such as materials use, remains underexplored. To address these gaps, this mixed-methods study employed Flow Theory to investigate the flow and anti-flow experiences of 287 non-English major Chinese college students during material task engagement. Quantitative data analyzed with SPSS and AMOS offered a holistic view, while semi-structured interviews with 8 participants provided in-depth qualitative insights through reflexive thematic analysis. Key findings include: (a) Approximately one-third of learners reported experiencing flow during material tasks, while others encountered anti-flow states such as boredom or anxiety. (b) Learners' perceptions of tasks significantly influenced flow and anti-flow experiences. (c) Teachers' academic and emotional material instruction and the classroom environment played pivotal roles in shaping these experiences. (d) These factors interact dynamically, forming a reciprocal network influencing learner engagement. These insights inform interventions in material design and pedagogy to foster enjoyable, engaging material learning experiences and enhance task completion.

Keywords: Flow theory, anti-flow, task engagement, EFL learners, material design, learner engagement, positive psychology, classroom environment, creativity in education, academic instruction.

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1. Introduction

Flow, a state of optimal human experience characterized by complete absorption, focused attention, and heightened enjoyment during challenging activities (Csikszentmihalyi & Rathunde, 1993), has received increasing attention in task-based flow research (e.g., Czimmermann & Piniel, 2016; Egbert, 2003). However, what remains under-explored in the flow in English as Foreign Language (EFL) learning literature is the nature of flow with a single situational source factor, such as teaching materials, within the context of classroom instruction. Materials are crucial in classroom teaching and learning (Matsumoto, 2019). Despite the expansive literature on material development and evaluation, there needs to be more research on materials use within the realities of language classrooms (Guerrettaz et al., 2022). The few existing studies on materials use mainly focused on teachers rather than learners (e.g., Li et al. 2023). Moreover, most previous research on materials tends to focus on the development of the cognitive domain (knowledge, skills, analysis) without the emotional/affective domain (e.g., feelings, emotions, interest) being engaged. As learning cannot be explained by purely rational cognitive factors rather than affective variables, the latter also play a critical role in knowledge acquisition (Hidi, 2000). For learners, completing material tasks may generate anxiety and stress (Kusiak-Pisowacka, 2016). Hence, there is a call for investigating learners' affective experiences during materials use.

In response to this call, this study attempts to add a positive psychological perspective to the existing materials literature. Drawing on flow theory, this study conducted a mixed-methods study to investigate learners' materials use experiences, particularly during task engagement. The findings of this study could have important practical implications for materials design and instruction that aim to

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enhance learners' academic success and well-being by reducing anti-flow experiences and promoting enjoyment during materials use.

2. Literature review

2.1 Flow and anti-flow

Flow, as one of the foundational areas of positive psychology (Czimmermann & Piniel, 2016), is widely recognized as an optimal emotional state characterized by deep engagement in an activity, leading to enhanced performance (Csikszentmihalyi, 2008). Flow theory encompasses various interrelated variables, with the original components of flow identified as (a) merging action and awareness, (b) centrering attention, (c) losing self-consciousness, (d) feeling in control, (e) experiencing a sense of coherence, and (f) engaging in autotelic or intrinsically motivating activities (Csikszentmihalyi, 2000).

Flow models are primarily based on the fundamental concept of balancing challenges and skills in an optimal manner, which has evolved into the Four Channel Flow Model. This model includes components such as interest, attention, control, and the balance between challenges and skills as indicators of flow experiences, as well as apathy, anxiety, and boredom as indicators of anti-flow experiences (Csikszentmihalyi, 2004). The Four Channel Flow Model helps identify the psychological state one experiences during task engagement based on the relationship between skills and challenges (Lambert et al., 2013). High skill and low challenge levels are associated with boredom, while low levels of both skills and challenges result in apathy. Anxiety can arise when challenges surpass one's skills, whereas the optimal combination of medium-high skills and challenges leads to the flow state. Within the framework of flow theory, there exists a "learning spiral" (Csikszentmihalyi, 2004) whereby the intrinsically rewarding experience of flow motivates individuals to strive for higher levels of performance (Csíkszentmihályi, 2008).

Although flow has been argued to be a culturally universal phenomenon (Csikszentmihalyi, 1997b), the specific activities that elicit flow may vary across cultures and contexts (Egbert, 2003). For instance, interest, as a key component of flow, has been extensively studied and emphasized in the educational domain, with the recognition that interest, particularly situational interest, is dynamic and context-dependent (Dao & Sato, 2021). Flow and positive emotions are found to align well with learner characteristics such as learning motivations, self-efficacy, and gender (Dewaele & MacIntyre, 2016; Wu et al., 2024). While most previous research on flow has been conducted within Western contexts, there is a dearth of studies conducted in non-Western cultures, where cultural and linguistic differences may come into play (Nisbett et al., 2001). Moreover, existing analyses of flow research focused on online gamification (e.g., Zhang et al., 2022), there have been very few studies on flow's roles in EFL learning (Dewaele & MacIntyre, 2014).

2.2 Flow/anti-flow and task engagement in foreign language learning

In recent years, the area of EFL learning has been influenced by the emergence of positive psychology (PP), which focuses on the promotion of human flourishing and well-being (Seligman & Csikszentmihalyi, 2000; Wu et al., 2024). Positive psychologists often see humanistic psychology as one among several historical foundations leading to the creation of PP (Waterman, 2013). Given the potential benefits of flow, researchers started exploring the relationship between flow and task engagement. Engagement was "a state of heightened attention and involvement, in which participation is reflected not only in the cognitive dimension, but in social, behavioral, and affective dimensions as well" (Philp & Duchesne, 2016, p. 3). Informed by PP, engagement is vital for effective learning (Pan et al., 2023; Wu et al., 2024).

Flow has been suggested to occur during task engagement in foreign language learning (Schmidt et al., 1996). However, despite its potential significance, flow experiences have not been extensively studied in the context of foreign language education (Czimmermann & Piniel, 2016). Although scholars recently started to pay attention to flow-related studies (e.g., Dao & Sato 2021; Jin & Qin, 2024), the whole analysis of flow and anti-flow remains substantially lacking, as PP strives to achieve a balance between positive and negative emotions (Seligman & Csikszentmihalyi, 2000; Wu et al.,

2024). The few existing studies like Egbert (2003) examined the role of flow in foreign language learning and determined that four task conditions operate to facilitate flow: (a) a perceived balance of task challenge and participant skills, (b) opportunities for learners to focus their attention, (c) an intrinsic interest in doing the task, and (d) an ability to exercise control over the task process and outcome. Czimmermann and Piniel (2016) extended Egbert's (2003) study to investigate whether the general level and task-specific level of Hungarian EFL learners' classroom experiences can be characterized by peak moments of flow and to what extent. Their study indicates that learners' perception correlates with flow and anti-flow experiences. Aubrey (2016) added a cultural viewpoint to study flow and task engagement in language use when learners perform oral, collaborative tasks under inter-cultural and intra-cultural conditions.

Despite the significance of existing flow research in EFL learning, most of them are quasi-experimental studies, and applications of a mixed-methods approach are rare. What remains under-explored in the flow literature is the nature of flow with a single situational source factor, such as teaching materials, within the context of natural classroom instruction.

2.3   Materials in language teaching

Materials play a vital role in foreign language classrooms, with teachers often relying heavily on their use (Guerrettaz & Johnston, 2013). However, academic research needs to look more into the actual utilization of textbooks (Matsumoto, 2019). Most previous research on EFL materials tends to neglect the emotional/affective domain (e.g., feelings, emotions, interest) (Pham & Tin, 2022). The few existing materials use research often focused on teachers' material instruction (e.g., Li et al., 2023). It neglects the important issue of learners' completion and engagement with material tasks. Informed by flow theory, exploring how learners actually utilize materials can provide humanistic and valuable insights that inform the development process of these instructional materials (Pham & Tin, 2022; Tomlinson, 2012).

The existing materials use research suggests an ecological relationship among material stakeholders such as designers, teachers, and learners (Shu et al., 2023). Guerrettaz and Johnston (2013) proposed that materials serve as the primary source for curriculum organization, with teachers and learners being integral participants in classroom activities. The study of material is considered a problem-solving task that involves both internal factors, such as learners' learning style, and external factors, such as the content of textbooks or teachers' instructions (Beishuizen et al., 1994). To the best of our knowledge, few material studies conducted flow-related research. The few existing studies of material flow research like Pham and Tin (2022) explored learner interest in EFL teaching materials by comparing material activities and humanistic activities. However, such studies often neglect learners' task perceptions (Czimmermann & Piniel (2016), whole flow components and materials use ecological factors (Li et al., 2023; Shu et al., 2023). Moreover, there exists a warrant to investigate learners' flow and anti-flow experiences within a single material use environment, which were often based on specific unit topics (Beishuizen et al., 1994).

In summary, existing literature shows a positive link between flow and learners' task engagement, influenced by their characteristics and task perceptions. However, several gaps remain: (1) most flow studies focus on Western contexts, with limited research in Eastern settings; (2) flow research in EFL is scarce; (3) existing EFL flow studies mainly use quasi-experimental methods, lacking mixed-methods approaches; (4) the role of specific situational factors, like material use, in flow is unclear; (5) EFL material research mostly focuses on language, with limited exploration of material use; and (6) research on material use tends to focus on teachers, neglecting the learner's perspective and positive psychology.

Investigating a situated and nuanced understanding of learners' task engagement during materials use is crucial not only for improving our understanding of the complexity of the flow phenomenon. It also serves to ensure the pedagogical value of task-based material design and instruction. Moreover, it gives the existing research on materials use a humanistic layer. Therefore, within the Chinese context and adopting flow theory, this study aims to bridge these research gaps by employing a mixed-methods approach to address the following research questions:

RQ1: What are the learners' experiences of flow and anti-flow during materials task engagement?

RQ2: What are the antecedents of Chinese learners' flow and anti-flow experiences during materials task engagement?

3. Research design

This research employed a mixed-methods approach, utilizing questionnaires and interviews to gain a comprehensive and in-depth understanding of learners' flow and anti-flow experiences during EFL material task engagement.

3.1 Participants and settings

This study was based in mainland China, where English is treated as a foreign language in universities. Task-based language teaching (TBLT) is implemented by China's policy (Butler et al., 2018). Using convenience sampling (Dörnyei, 2007), we selected 287 non-English major college students from three technological universities in Xi'an, Shaanxi province as the sample for the quantitative study. There were 161 (56%) males and 126 (44%) females. Their age ranged from 18 to 23 years (*M*=19.1, *SD*=0.91). The grades of participants were from the first (58.53%) and second (41.72%) grades, corresponding to Chinese universities' English teaching spans. The English learning experiences of participants ranged from six to twelve years (*M*=10.12, *SD*=0.99). Most of them reported their English proficiency at an average level.

For the qualitative study, we interviewed eight participants (male = 4, female = 4; age range = 18-21, mean = 18.8; SD = 0,9) who had completed our questionnaire survey. Before the research, participants were required to carefully read the informed consent form, which detailed the purpose, procedure, and confidentiality of the study. Then we obtained from each participant a signed consent form and kept these forms on file confidentially. We made the participants feel at ease when being interviewed. For the study's trustworthiness, we drew upon our reflexivity as key to a successful audit trail in the data analysis. We kept a self-critical account of the research process (Braun & Clarke, 2021).

3.2 Instruments

3.2.1 Flow

The flow questionnaire was adapted from Czimmermann and Piniel (2016) and Egbert (2003). Krosnick and Presser (2010) argued that reverse-worded items are cognitively burdensome and result in measurement error and respondent fatigue. We removed the reversed items, leaving 13 flow items, including interest (3 items), control (4 items), attention (3 items), and challenge-skills balance (3 items). The participants responded to each item on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). Higher total scores indicate higher flow levels. We adapted items for specific materials use situations. For example, one item was "Completing material tasks was exciting, I enjoyed the experience of task engagement". The Cronbach's alpha coefficient was 0.846 for the flow subscale.

3.2.2 Anti-flow

To measure participants' anti-flow experiences. We partially adapted scales from Czimmermann and Piniel (2016) and Egbert (2003), particularly for boredom (4 items) and apathy (4 items). The items of anxiety were adapted from Dewaele and MacIntyre (2014). After deleting reversed items, we got 3 anxiety items. We used a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Higher total scores indicate higher anti-flow levels. The items were adapted to the specific context of materials use. For instance, one item was "I was bored during material task completion". The Cronbach's alpha coefficient was 0.867 for the anti-flow subscale.

3.2.3   Learners' task perception

Learners' perception of material tasks was adapted from Czimmermann and Piniel (2016). It measured participants' perceived abilities levels required by the task, perceived task difficulty, and perceived level of creativity required by the task. The students were asked to respond by circling one of the five choices, i.e., 1 (not at all), 2 (to a certain extent), 3 (at an average level), 4 (rather), and 5 (absolutely).

The whole questionnaire also involved demographic information, including participants' gender, age, English language learning years, and self-reported level of English proficiency.

3.2.4. Interview guideline questions

The questions explored learners' flow and anti-flow experience in material task engagement. The researchers developed and refined the following questions based on quantitative results, and after piloting them with three students:

(1) Have you ever experienced flow or anti-flow during material task engagement?

(2) Describe one specific event in completing material tasks that you enjoyed/bored. Please describe your feelings in as much detail as possible.

(3) What factors do you think may influence your flow and anti-flow experiences during material task engagement?

(4) What are your suggestions for material designers regarding task design?

Follow-up questions were then based on learners' responses to gain a deeper understanding of the "How" and "Why" behind their flow or anti-flow experiences.

3.3   Data collection

This study employed a mixed-methods sequential explanatory design with two phases. In the first phase, quantitative data was collected through convenience sampling. All questionnaire items were translated into Chinese and underwent a rigorous review process by three experienced college teachers. Problematic items, such as those with confusing expressions or rarely used words, were rephrased, and the final translated version was agreed upon through discussions between the language experts and researchers. Participants' English teachers were invited to take part as assistants responsible for coordinating the administration of the instruments. These teachers were responsible for explaining the project's purpose to the students based on the instrument guide, distributing the questionnaires immediately after task completion, and collecting the students' answer scripts. Before data collection, the teachers received comprehensive training to ensure a thorough understanding of the project's objectives, the constructs being measured by the instruments, as well as the implementation procedures and requirements. Participants accessed the Wenjuanxing. Wenjuanxing was a tool to launch questionnaires through online social networking apps such as WeChat. Through Wenjuanxing, participants started completing the questionnaires within the allotted time. Then the researchers gathered all eligible questionnaires and extracted the data.

In the second phase, eight participants were selected from the abovementioned participants to conduct semi-structured interviews. To promote a comfortable environment for participants to express their thoughts, all interviews were conducted in Mandarin. Before the interviews, relevant concepts were explained to the participants. Guided by the research questions, the researchers asked the participants to provide detailed evidence regarding their experiences of flow and anti-flow during task completion. Specifically, researchers focused on understanding the reasons behind the participants' choices in the questionnaires. Participants were prompted to explore the elements that may influence their experiences of flow and anti-flow.

Throughout the study, we strictly adhered to research ethics. Consent forms were provided to every participant and reviewee, clearly explaining the voluntary nature of their participation and their ability to withdraw from the study at any time. To protect confidentiality, all participants' identities were anonymized and coded using alphanumeric symbols.

3.4   Data analysis

To answer RQ1, we used SPSS version 26.0 and AMOS 21.0 to gain a comprehensive view of learners' flow and anti-flow experiences during material task engagement. Through employing Structural Equation Modelling (SEM) and functions such as descriptive statistics and correlation analysis, the researchers analysed the obtained data. First, the whole data was pre-processed to ensure the suitability of the data. The validity of the data was measured. Second, the construct validity and reliability indices of the scales were measured. Third, descriptive statistics was used to gain a holistic insight into learners' flow and anti-flow experiences during material task engagement. Lastly, correlation analysis was used to examine the associations among learners' task perceptions, flow experiences, and anti-flow experiences.

We used a bottom-up approach to answer RQ2 and obtain an in-depth insight into learners' flow and anti-flow experiences. First, we recorded and transcribed the interviews. Second, we translated the original Chinese text into English with the help of two linguistic professors. Third, the transcribed and translated data from interviews was coded by NVivo 11. Fourth, we used reflexive thematic analysis (Braun & Clarke, 2021) to identify themes and patterns of meaning. Reflexive thematic analysis aims to identify and make sense of patterns of meaning across a dataset (ibid.), which aligns well with our qualitative study's purpose of investigating "How" and "Why" behind learners' flow and anti-flow experiences during material task engagement. We conducted qualitative data analysis in six recursive stages: familiarization, initial coding, searching for themes, reviewing themes, defining themes, and reporting (Braun & Clarke, 2021; Wu et al. 2024). For example, the data describing the awkwardness of participating in material interactive tasks in front of classmates were coded as "classmates," serving as evidence supporting the theme of "classroom environment".

Reflexivity is essential for maintaining transparency and rigor in qualitative research, especially in reflexive thematic analysis (Braun & Clarke, 2021). We addressed our positionality by acknowledging our prior experiences in research and teaching. We kept reflective throughout the research. We also bracketed ourselves and used audit trialing to avoid imposing our own views on the interviewees' answers. We did our utmost to remain transparent throughout the whole data analysis. All those efforts ensured valid and reliable findings.

4.   Results

4.1   The comprehensive analysis

4.1.1   Confirmatory factor analysis

A confirmatory factor analysis (CFA) was performed to measure the goodness-of-fit indices to ensure construct validity. Fig. 1 illustrates the validated CFA model for learners' flow experiences scale by utilizing AMOS 21.0. Researchers should primarily look at several indicators such as the chi-square value, significance, and RMSEA to determine whether the model achieves an overall level of fitness (Hoyle, 2013). This study reported the CMIN/DF, RMSEA, GFI, and CFI to evaluate the model's goodness of fit. Adopting Hu and Bentler's (1999) criteria, the goodness of fit of the flow model was reported in Table 1, which indicates excellent goodness of fit for the learners' flow model.

Likewise, we also evaluated the validity of the anti-flow model by employing the CFA. The validated CFA model for learners' anti-flow experiences scale is illustrated in Fig. 2. Evaluated by the same criteria mentioned above, Table 2 shows the results of the goodness of fit of the anti-flow model. The data in Table 2 clearly show that learners' anti-flow scale has a high acceptance level and robust validity.

Table 1 - The goodness of fit indices for learners' flow

	CMIN/DF	RMSEA	CFI	GFI
Standard values	<3	<0.08	>0.9	>0.9
Revised model	2.396	0.70	0.910	0.930

Table 2 - The goodness of fit indices for learners' anti-flow

	CMIN/DF	RMSEA	CFI	GFI
Standard values	<3	<0.08	>0.9	>0.9
Revised model	2.215	0.65	0.956	0.945
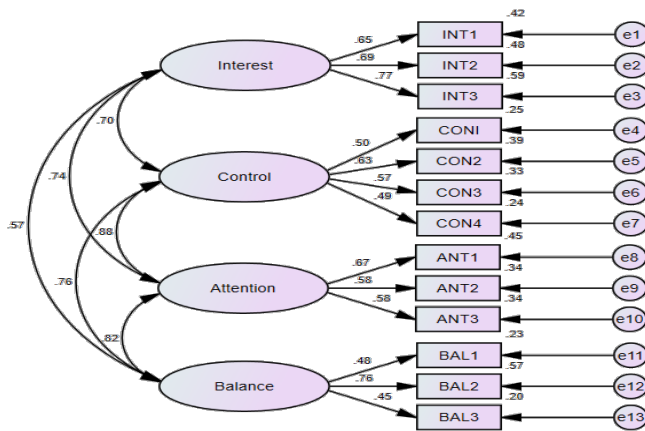
Figure 1. CFA model of learners' flow experiences during material task engagement.
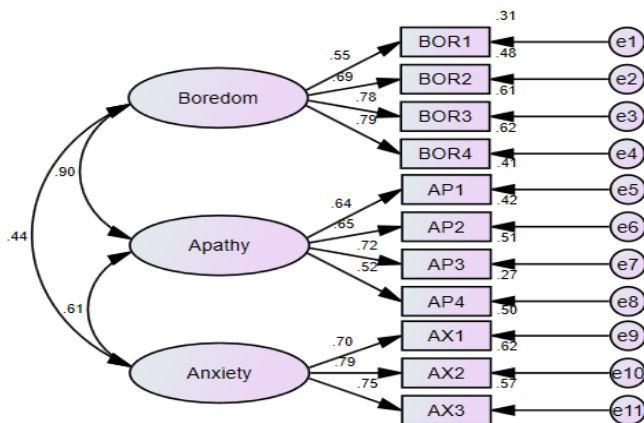
Figure 2. CFA model of learners' anti-flow experiences during material task engagement.

4.1.2 Descriptive statistics for learners' flow experiences

Descriptive statistics for students' flow experiences were summarized in Table 3. Following Egbert's (2003) guidelines, for 5-point Likert flow scales, participants with an average score of 3.5 or above are considered to have experienced flow. Our data indicate that 29% (N = 83) of the participants experienced flow during material task completion, while 71% (N = 204) did not have flow experiences.

Table 3 - Descriptive statistics of students' flow experiences

	N	Min	Max	Mean	SD
Total	287	1.73	4.67	3.28	0.49
Flow scores ≥ 3.5	83	3.53	4.67	3.87	0.32
Flow scores < 3.5	204	1.73	3.47	3.04	0.33

4.1.3 Descriptive statistics and correlations between flow, anti-flow, and their components

Table 4 presents the descriptive statistics and correlations between flow, anti-flow, and their respective components. We also conducted a comprehensive analysis of the components of flow and anti-flow. The results reveal significant positive correlations between flow and its components such

as interest, control, attention, and challenge-skill balance. Conversely, flow demonstrates significant negative correlations with boredom, apathy, and anxiety. On the other hand, anti-flow exhibits contrasting patterns of correlations. Notably, learners' interest and control emerge as the most influential factors in facilitating flow experiences. Moreover, the Pearson correlation analysis reveals a moderate positive relationship between challenge-skill balance and flow. This result is consistent with the significantly negative correlations observed between boredom, apathy, and flow.

Table 4 - Descriptive statistics and correlations between flow, anti-flow, and their components.

	Mean	SD	1	2	3	4	5	6	7	8	9
1. Flow	3.87	.32	-								
2. Anti-flow	2.85	.68	-.559**	-							
3. Interest	3.27	.74	.834**	-.444**	-						
4. Control	3.39	.69	.815**	-.427**	.537**	-					
5. Attention	3.63	.68	.782**	-.621**	.556**	.537**	-				
6. Challenge-skills balance	2.92	.27	.599**	-.209**	.330**	.331**	.340**	-			
7. Boredom	2.72	.79	-.602**	.844**	-.578**	-.419**	-.616**	-.183**	-		
8. Apathy	2.73	.77	-.524**	.883**	-.368**	-.425**	-.596**	-.223**	.695**	-	
9. State anxiety	3.17	.97	-.239**	.735**	-.133*	-.202**	-.308**	-.106	.364**	.474**	-

*** $P<.01$ * $P<.05$*

4.1.4   Correlations between task perceptions and experiences of flow and anti-flow and their components

Table 5 presents the Pearson correlation between learners' perception of tasks, flow, anti-flow, and their components. The results unveil a significant positive relationship between learners' perception of creativity and flow. The correlation values between creativity and the components of flow, listed in descending order, were as follows: interest, attention, control, and challenge-skills balance. Furthermore, learners' perception of creativity exhibits a negative correlation with anti-flow. One thing worth mentioning is that the required level of abilities exhibits a weak positive correlation with the flow, no significant correlation with challenge-skills balance, and a weak negative correlation with boredom. On the other hand, difficulty shows a weak negative correlation with challenge-skills balance, and weak positive correlations with boredom, apathy, and anxiety.

Table 5 - Correlations between task perceptions and experiences of flow and anti-flow and their components.

	Required level of abilities	Difficulty	Creativity
Flow	0.149*	-0.242**	0.454**
Interest	0.170**	-0.124*	0.467**
Control	0.125*	-0.173**	0.359**
Attention	0.155**	-0.219**	0.369**
Challenge-skills balance	-0.030	-0.272**	0.131*
Anti-flow	-0.071	0.231**	-0.341**
Boredom	-0.134*	0.140*	-0.414**
Apathy	-0.054	0.213**	-0.333**
State anxiety	0.020	0.129**	-0.081

*** $P<0.01$ * $P<0.05$*

4.2. The in-depth analysis of the antecedents

Reflexive thematic analysis revealed that learners' flow and anti-flow experiences during material task engagement were implicit emotional experiences and influenced the efficiency and quality of material task completion. Underpinning the core theme of "learners' flow and anti-flow experience in material task engagement" are the 2 main themes: (a) Teachers' academic or emotional material instruction, and (b) Classroom environment (Table 6).

Table 6 - Reflexive thematic analysis of learners' flow and anti-flow experiences during material task engagement.

Theme	Description	Subthemes
Teachers' academic or emotional material instruction	Teachers' academic or emotional support during material instruction helps learners' flow experiences for task engagement	Teachers' academic material instruction Teachers' emotional material instruction
Classroom environment	Building a positive and active classroom learning environment supports learners' flow experiences during material task engagement	Classmates Learning environment

4.2.1. Flow: the unknowing emotional experiences during material task engagement

The feature of flow experiences during material task engagement was described by participants as the unknowing situations which beyond their awareness. Most of the participants admitted that they had never heard of flow before the interview. After the flow-related conception was explained, they noted that their flow experiences during material task engagement were "unusual" and "unnoticed". Such statements echoed our quantitative findings that only a few proportions of participants experienced flow within the Chinese context.

> I am never aware of the so-called flow situation during material task engagement. Sometimes I did forget the existence of time and spaces when I immersed myself in the task completion, but such moments were quite rare. (T3, Interview)

4.2.2 Theme 1: Teachers' academic/emotional material instruction

As teachers play a pivotal role in materials use (Li et al., 2023; Shu et al., 2023), our qualitative data indicated that teachers' academic or emotional material instruction were elements influencing learners' flow and anti-flow experiences during material task engagement.

Subtheme: Teachers' academic material instruction. Participants noted that teachers' timely and appropriate academic material instruction could enhance their flow experiences. As one student noted: "There is a substantial portion of tasks in teachers' material instruction that focus on linguistic points we have recently learned. Such review-oriented tasks enhance my sense of control over the material tasks". (T2, Interview) This statement suggests that teachers' inclusion of review tasks targeting recently acquired language knowledge can enhance learners' perceived control and, consequently, contribute to their flow experiences during task engagement.

However, teachers' academic material instruction may also trigger learners' anti-flow experiences during material task engagement. This phenomenon may be attributed to China's teacher-centered learning style, as explained by one student:

> Most of the material tasks are teacher-directed in the classroom, with the right answers provided by the teachers regardless of whether our answers are correct or not. To be honest, these direct-given correct answers without students' engagement make the material tasks unchallenging. (T4, Interview)

Moreover, the lack of teachers' task selection led learners to experience anti-flow, because several material tasks were beyond learners' personal experiences. They felt a loss of control over the content of the task because they didn't know what to talk about. As one participant stated:

> Take the task of sharing a personal story about cross-cultural communication, which is based on the topic of the material unit. The lack of studying or traveling abroad makes me feel that I lose control over the content of the task for I don't know what to talk about. (T5, Interview)

Also, a lack of self-regulated guiding and linguistic teaching resulted in unclear goals for learners. As one participant expressed, "In most cases, completing tasks from the materials felt more like a requirement imposed by the teacher rather than being driven by personal motivation" (T7, Interview).

Furthermore, some learners struggled to comprehend the questions posed in the materials, while teachers assumed they were simple and neglected to provide further explanations (T4, Interview).

Subtheme: Teachers' emotional material instruction. The analyses of the interview revealed that teachers' emotions about different tasks influence learners' flow experiences. As one participant stated:

> We can sense teachers' emotions about different tasks. Teachers normally pay special attention to tasks centered around linguistic points in materials. However, as someone who easily forgets such information, this overemphasizing of recitation-oriented tasks makes me feel anxious. While those tasks aim to lead students to know the unit topic, teachers' emotions are usually happy and relaxed. It is their light emotions that make me feel comfortable and arouse my interest. (T8, Interview)

Furthermore, teachers' emotions about students' wrong answers impact learners' flow and anti-flow experiences. As one participant said:

> "My anxiety towards material task engagement partially due to teachers' harsh comments when I get the wrong answer." (T6, Interview)

> Teachers' harsh attitude toward tasks also impact learners' task perception, because "Anxiety makes me feel the tasks are too difficult to handle." (T6, Interview)

4.2.3   Theme 2: Classroom environment

Our qualitative data revealed that classmates and the learning environment composed the theme of the classroom environment.

Subtheme: Classmates. Our data revealed that the prevailing atmosphere of intense competition and utilitarian educational values (Wei & Johnstone, 2019) influenced learners' anxiety (Zhang et al., 2022). A participant from an academically excellent university expressed this emotion, stating:

> "Although my English proficiency is not bad, many of my classmates have exceptional English skills, which makes me feel that others will outperform me". (T2, Interview)

Moreover, the lack of an English-speaking environment made students reluctant to speak English in front of their classmates for fear of embarrassment. (T8, Interview) Such a fear of embarrassment when answering teachers' questions in English hindered the enjoyment of flow during task completion.

Our interviews also revealed that some tasks that required classmate cooperation were too challenging for learners, which hindered their self-efficacy and engagement in task completion. Moreover, for learners with low English proficiency, the inability to retrieve appropriate vocabulary or grammar to express their ideas resulted in a loss of confidence in completing the tasks. Consequently, they tended to take a passive role as information collectors rather than active contributors. Furthermore, one participant stated that they were too familiar with their classmates to feel the need to actively cooperate to complete tasks. (T6, Interview)

Subtheme: Learning environment. First, learners' flow and anti-flow experiences during material task engagement were influenced by their majors. As mentioned earlier, all participants were from technology-oriented universities. Their focus was on completing scientific and technological tasks rather than memorizing linguistic elements such as vocabulary or grammar. The differing thinking patterns and learning styles between scientific and language learning contributed to their feelings of anxiety. These different thinking modes also impact their task perception, as they perceived English learning as challenging and hindered their interest in the subject. (T6, Interview)

Second, learners' sense of control was hindered by the limited instructional time. Due to the demanding teaching schedule, teachers often had to restrict classroom task engagement to ensure they could cover the necessary material within the allotted time. As a result, teachers were inclined to abruptly halt classroom tasks such as group discussions and provide students with reference answers, thereby impeding the students' engagement and flow experience. (T7, Interview)

Third, the large size of the classroom became a barrier to learners' flow experiences, because "teachers can't give personal feedback according to each student's learning features". (T3, Interview)

5. Discussion

By employing a mixed-methods approach, the research purposes of this study were twofold: first, to gain a holistic insight into learners' flow and anti-flow experiences during material task engagement by applying the quantitative method. Second, to obtain an in-depth understanding of the antecedents of learners' flow or anti-flow experiences by using the qualitative method. For theoretical implications, by adopting a mixed-methods approach, this study combined a holistic and in-depth view of flow studies and aimed to extend the understanding of flow investigated in previous studies (e.g., Egbert, 2003) into the area of material development research. Moreover, through the lens of flow theory, this study gave the existing materials use research a humanistic layer. For practical implications, the findings of this study endeavor to make learners' implicit flow experiences more explicit and shed light on material designers and practitioners regarding flow-related factors that can hinder or foster learners' material task engagement.

These results offer several points for discussion, which are illustrated as follows:

5.1 The comprehensive analysis

For Descriptive statistics for learners' flow experiences, compared to previous studies, our finding was higher than Egbert's (2003) result of 25% experiencing flow. However, it was considerably lower than Czimmermann and Piniel's (2016) finding, which reported 74% experiencing classroom flow and 71% experiencing task-specific flow.

Several factors may account for these differences. First, different questionnaire constructs yield different results. Researchers design various items to address diverse aspects leading to results variations. Second, the criteria for judging flow differ. While our questionnaire items primarily drew from Czimmermann and Piniel (2016), the standard of flow judgments was differentiated. Since Csikszentmihalyi (1997a) indicated that it was a very liberal definition of the flow experience, this study defined a flow score of 3.5 or higher as indicative of flow experience. This standard, like Egbert's (2003) study, was also comparable to that of previous research that captured above-average levels of skill and challenge, as well as a range of intensities crucial for understanding flow during textbook task completion. Third, task characteristics play a crucial role in the generation of flow experiences. In our study, according to interviewees, the material tasks were diverse, encompassing both in-class and post-class activities, as well as group and individual work. Classroom tasks, characterized by frequent interruptions from teachers and high levels of learners' participation, often hinder focused attention, making it more challenging to achieve a state of flow. Conversely, individual tasks provide students with greater control and are more conducive to generating flow (ibid.). In comparison to studies focusing solely on classroom tasks (e.g., Egbert, 2003), it is plausible that our findings of flow experiences were higher than Egbert's (2003) findings. Lastly, these results are consistent with previous reports indicating regional differences in foreign language enjoyment, with data from Asian respondents showing the lowest scores on language learning enjoyment (Dewaele & MacIntyre, 2016).

For the descriptive statistics and correlations between flow, anti-flow, and their components, the overall state of learners' anti-flow in our study was found to be higher than Czimmermann and Piniel's (2016) result, with a mean value of 2.85. There are two reasons that may account for these findings. First, the English proficiencies of selected participants are different. Compared with the participants with moderate English proficiency in this study, it is important to note that Czimmermann and Piniel (2016) conducted their study with advanced Hungarian EFL learners, whose academic achievement was positively associated with a high level of self-efficacy (Bai et al., 2019). Self-efficacy, as defined by Bandura (1986), refers to an individual's self-evaluation of their ability to successfully perform specific tasks based on their perceived skills. Advanced students with high self-efficacy are more likely to have greater control over specific tasks, making it easier for them to experience flow. Second, the gender proportions of selected participants are different. Czimmermann and Piniel (2016) had a higher proportion of female participants compared to males, which differs from the participants'

gender composition in our study. As Dewaele and MacIntyre (2016) indicated females tend to experience higher levels of language learning enjoyment than males, the higher proportion of males might lead to a lower rate of flow experiences.

Moreover, this study revealed that learners' interest and control emerge as the most influential factors in facilitating flow experiences. Such a finding underscores the importance for material designers to align tasks with learners' interests and offer greater flexibility in task styles for learners to choose from. Notably, there was a weak negative correlation between the state of anxiety and flow. This finding aligns with previous research indicating that anxiety does not strongly contribute to emotional engagement with tasks (Dao & Sato, 2021). Moreover, it supports the notion that the experience of flow acts as a protective factor against anxiety (Boudreau et al., 2018). Regarding the relationship between anti-flow and subconstructs, boredom and apathy demonstrate a strong positive correlation, while attention shows a strong negative correlation. These results emphasize the importance of teachers guiding learners to maintain focus on their tasks by creating situational interests that align with task completion (Dao & Sato, 2021).

For the Pearson correlation between learners' perception of tasks, flow, anti-flow, and their components. Our finding aligns with Czimmermann and Piniel's (2016) research, which suggests that language learners tend to find creative tasks more interesting and devote greater attention to such activities compared to tasks that do not require creativity. According to the broaden-and-build theory, positive emotions appear to broaden peoples' momentary thought-action repertoires and build their enduring personal resources (Fredrickson, 2001). Hence, the incorporation of novel tasks should be a priority for material designers.

One thing worth mentioning is that the required level of abilities exhibits a weak positive correlation with flow, no significant correlation with challenge-skills balance, and a weak negative correlation with boredom. Difficulty shows a weak negative correlation with challenge-skills balance, and weak positive correlations with boredom, apathy, and anxiety. These findings indicate that the experience of anti-flow is not solely determined by the actual difficulty level of the task but is also influenced by learners' perceptions. This aligns with Bandura's theory of self-efficacy (1986), which suggests that even if the task's difficulty is moderate, learners who perceive themselves as lacking competence are more likely to feel bored and apathetic. Therefore, during material task engagement, teachers must provide active and timely feedback, as well as impart suitable learning strategies to enhance learners' motivation.

5.2 The in-depth analysis of the antecedents

According to the Four Channel Flow Model, boredom and apathy both stem from a lack of challenge. Our qualitative data indicated that teacher-centered material instruction makes learners get the right answers too easily to be challenged. Additionally, the demanding teaching schedule was one of the reasons that made answers too easy to get for learners. This finding echoed Javaid et al.'s (2024) discovery that the heavy academic load hindered students' learning enjoyment. Hence, teachers must consider learners' sense of responsibility toward task completion during material instruction. This suggested that within a teacher-centered environment, teachers should avoid providing reference answers too readily and instead allow more autonomy for learners to select their topics and determine the timing. By doing so, learners are encouraged to engage in tasks that offer an appropriate level of challenge. This could foster their interest in the activity, as it aligned with the novelty and authenticity of the tasks presented in the materials (Egbert, 2003).

Learners' characteristics such as gender or major are related to their task perception, which aligns with the participants selected from universities exhibiting diverse academic performance. This finding echoed Wu et al.'s (2024) discovery that the profiles of learner engagement were associated with demographic characteristics. According to Individual Differences Theory, it is the kind of knowledge, skills, and traits that are associated with task performance and different from the kinds that are associated with contextual performance (Motowidlo et al., 2014). Given this perspective, EFL textbook designers need to consider incorporating tasks that align with learners' interests and concerns. Additionally, teachers should provide instruction and adapt tasks based on the specific context and individual characteristics of the students. Furthermore, teachers' positive emotions

would create a light atmosphere and alleviate learners' anxiety toward task engagement during materials use.

Furthermore, as noted by Dörnyei and Kormos (2000), participants in tasks who are socially familiar with each other, such as tasks that require a classmate's cooperation in this study, may not feel the need to actively participate. Moreover, the lack of awareness among students about effective interactional strategies could contribute to apathy in cooperative tasks. Thus, providing explicit instruction on employing interactional moves may be beneficial (Aubrey, 2016). Given the importance of goal clarity in fostering flow (Csikszentmihalyi, 1997b), teachers must guide learners in setting their own goals and provide clear explanations of task requirements.

Lastly, given the large size of the classroom, it becomes impractical for teachers to individually assess each learner's situation and give them suitable advice, which could otherwise help guide learners in responding to failures effectively and prevent negative emotions (Bandura, 1986). In this regard, reducing the number of students in a classroom should become a concern for school management.

5.3   The overall analysis

Using a mixed-methods approach, this study investigated learners' flow and anti-flow experiences during materials use. The quantitative data gave a holistic insight. The qualitative data shed light on the reasons behind the quantitative results and gave an in-depth insight. Combining the quantitative and qualitative results, three elements emerged as influencing factors of learners' flow and anti-flow experiences during material task engagement (Fig. 3). Within the social educational context, the in-depth analysis of qualitative data indicates that all these elements reciprocally interact with each other, contributing to the formation of a dynamic flow co-creation network. As Shu et al. (2023) and Li et al. (2023) observed, materials use, and material development are ecosystemic, this study echoed their findings and enriched existing research from a positive psychological perspective. Therefore, a collaborative mindset is necessary for material stakeholders such as designers, teachers, and students. The material stakeholders should timely exchange their knowledge, thoughts, and emotions to nurture a productive and enjoyable environment for material task engagement.
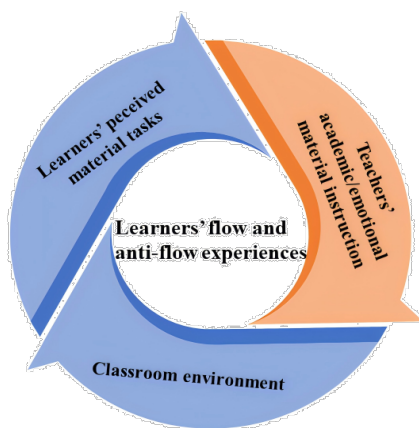
Figure 3. Elements influencing learners' flow and anti-flow experiences during material task engagement.

6.   Conclusion and implications

Drawing upon Flow Theory, this study investigated learners' experiences of flow and anti-flow while engaging with material tasks. Employing a mixed-methods approach, this paper examines the relationships between learners' perceptions, flow, and anti-flow. The findings derived from the quantitative data demonstrate that within the context of materials use, nearly one-third of participants experience flow during task engagement. In terms of learners' perceptions, when students perceive tasks as creative and within their control, they exhibit heightened interest and motivation to complete material tasks. The qualitative data found that the appropriate teachers' academic and emotional material instruction, as well as a positive classroom environment, can

improve learners' material engagement flow experiences. All the quantitative and qualitative data gave a holistic and in-depth insight into learners' flow experiences and discovered the learners perceived material tasks, teachers' academic and emotional material instruction and the classroom environment were elements influencing learners' flow experiences during material task engagement.

Theoretically, this study contributes to the field of EFL learning in several original ways. First, it applies a mixed-methods approach to offer a holistic and in-depth perspective to understand learners' flow during task engagement, and methodologically enriched flow study. Second, it extends the existing flow study to a single situational source, particularly in material research. Third, the flow perspective provides a novel understanding of materials use research as well as the TBLT studies. Furthermore, this investigation adds valuable insights into the flow dynamics within Asian contexts and the processes that support foreign language learning. Lastly, this study explores the reasons behind the quantitative data, which provides valuable references for future flow intervention studies.

Practically, this study has several important implications for material development and EFL pedagogies. This study showed collaborative material development as an effective venue for learners' flow experiences during material task engagement. Material stakeholders should crystallize their expertise and knowledge to create a positive environment for learners' flow experiences. It contributes to promoting more motivated language instruction and assisting teachers in guiding learners to persevere in their material instructions. Based on the findings and discussions, several suggestions can be made:

For material designers, they should break away from the inherent and outdated style of task design. Tasks should be crafted not only with linguistic considerations but also from a flow perspective, aiming to cultivate learners' enjoyment of task engagement. One potential approach is to introduce novelty tasks that increase the sense of gamification in task completion. EFL materials should incorporate more learner-generated content, including tasks that reflect the learners' own lives and experiences (Lambert et al., 2017). Therefore, designers should consider tailoring tasks to suit the needs and preferences of different types of learners.

For teachers, they can benefit from training on flow-related concepts. They should also prioritize a student-centered approach to material instruction, as learner-generated tasks are more likely to increase students' personal interest in the tasks. This means teachers should provide suitable advice and guidance based on learners' characteristics and language proficiency. Moreover, it is beneficial for teachers to allocate in-class time for students to immerse themselves in task completion rather than hastily providing reference answers. This approach enhances learners' sense of responsibility and control over their tasks. Previous studies have also shown that discussing the tasks can support flow experiences (e.g., Egbert, 2003). Therefore, it is essential for teachers to clearly communicate the demands and goals of the tasks.

For learners, it is valuable to acquire knowledge related to flow, as it enables them to enhance their positive experiences during materials use. This knowledge also guides them in setting appropriate and challenging goals based on their individual learning features. Furthermore, armed with this knowledge, learners can adjust their learning strategies and effectively attribute failures.

This study has limitations. First, it is important to note that all the research subjects in this study were from the same province in China, which may limit the diversity of the sample. Universities in different regions have distinct curricula and student demographics, which could potentially influence the research outcomes. Therefore, future studies should include participants from various regions to obtain a more comprehensive understanding. Second, there are inherent limitations associated with self-reporting and cross-sectional analysis. These methods may not fully capture the breadth of perspectives that could be observed through third-party viewpoints. Future research could consider incorporating additional data collection techniques, such as direct classroom observations, to provide a more nuanced understanding of the flow phenomena.

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19 - Exploring factors impacting university beginners' motivation to continue language learning: Survey insights

Muzzammil Mohamed Yassin
clsmmy@nus.edu.sg
National University of Singapore

Liana Kosasih
clslk@nus.edu.sg
National University of Singapore

Sophie Micheline J Undorf
sophieu@nus.edu.sg
National University of Singapore

Ngoc Minh Thach
clstnm@nus.edu.sg
National University of Singapore

Haoshu Wang
clshw@nus.edu.sg
National University of Singapore

Abstract

Following a restructure of the landscape of higher education at a university in Singapore, many departments experienced a significant transformation. In a department offering foreign language courses, thirteen foreign languages have been mainly offered as electives to students at the university for over 20 years. As part of efforts to further develop these language programmes as well as improve retention rates, a survey was conducted over a period of 2 semesters in AY2023/2024 to better understand the motivations of beginner language learners. The results revealed what students considered to be motivating factors for them to take up foreign language courses. They also revealed some common challenges faced by students, including some learning difficulties and restrictions at the institutional level. A few of these challenges were found to negatively influence the retention rates of students. Implications on language course design, pedagogy and policy making at the university level will be discussed in this paper.

Keywords: motivation, language retention, beginner learners, university language courses, foreign language programs

1.   Introduction

In recent years, there has been a decline in the number of foreign language learners among university students in countries like the United States, the United Kingdom, and Australia, leading to the gradual closure of some university foreign language programs and departments.

According to a report by the Modern Language Association of America (Lusin, et al., 2023), since 2009, enrolment in language courses has decreased year by year for most languages, except for a few like Korean. This decline includes previously stable language programs such as French, German, Spanish, and Chinese. In UK universities, the number of students studying foreign languages has dropped by 54% over the past decade, with 10 universities closing their modern language

departments and another 9 significantly downsizing them (Kenny & Barnes, 2019). In several universities in Australia and New Zealand, at least 9 language programs have ceased the courses since 2020 (Miller & Neigert, 2024).

This phenomenon raises concerns about whether the young generation has lost interest in learning foreign languages. However, market data suggests the opposite.

According to a report by Global Market Insights (2024), the foreign language learning market was valued at $52.7 billion in 2023 and is expected to exceed $300 billion by 2032, with the largest growth in the market for the 18-20 age group.

A report by HolonIQ (2021, 2023) indicates that the global direct-to-customer language learning market was $60 billion in 2021 and is projected to double by 2025. Certain languages, such as Chinese, have a market value of $7.4 billion, which is expected to double by 2029.

Official figures from individual countries also show an upward trend in foreign language learners. According to the report by the Instituto Cervantes (2020), the number of Spanish foreign language learners increased by 60% in the past 10 years. France's foreign ministry reported a growth of the number of French learners worldwide from 120 million in 2014 to 132 million in 2024, although the number in the UK and US is declining (Jones, 2024). According to the Ministry of Education of China (2021) and a report on China Daily (Wang & Zhou, 2023) the number of people learning Chinese outside China increased from 20 million in 2020 to 30 million in 2023.

Clearly, the decline in foreign language learners among university students stands in stark contrast to the optimistic global outlook and growth in language learning. What are the underlying reasons for this disparity? Current discussions primarily focus on two aspects: economic factors and administrative/policy factors. (e.g. Coda, et al. 2022)

These reasons are certainly important, but many frontline language teachers are eager to know what they can do to help mitigate the decline in university foreign language learners.

The Centre for Language Studies at the National University of Singapore offers 13 languages as elective courses, ranging from beginner to advanced levels. Over the past decade, both the number of language courses and student enrolment have increased. However, we have also observed a decline in the number of students continuing to more advanced courses after completing introductory ones. Given the global trend of decreasing language programs and enrolment numbers, we are concerned about the declining student retention rates in university foreign language courses and hope to take actions to improve these rates.

From an educator's perspective, we are most interested in understanding the factors that encourage or hinder university beginner foreign language learners from progressing to the next level of courses. By identifying these factors, we can make timely adjustments to beginner language instruction to retain students who might otherwise discontinue.

A few teachers who continue to teach the second level occasionally hear from students about their reasons for not progressing. Commonly mentioned reasons include scheduling conflicts, heavy coursework in their major, participation in study abroad programs, and some students expressing concern about poor grades. However, we cannot draw any conclusions from such anecdotal information. Even if we are able track down all students who have chosen not to continue their foreign language studies and ask them directly about their reasons, we are uncertain whether they would feel comfortable answering such questions.

Therefore, we came up with the idea of conducting an anonymous survey among students currently enrolled in beginner courses, asking them if they wish to continue to the next level and what their reasons are. To support this initiative, we have reviewed relevant literature on foreign language learning motivation.

2.   Literature Review

In the past few decades, foreign language learning motivation has been thoroughly and widely discussed. The most well-known theories of foreign language learning motivation include the Socio-Educational Model (Gardner, 1988) and the L2 Motivational Self System (Dornyei, 2009). Empirical research inspired by these models primarily explores which motivational factors contribute to successful foreign language learning (e.g., Hernández, 2006).

The specific context of this study is the decline in university foreign language course enrolment and retention rates since the 21st century. We are particularly interested in understanding which motivational factors drive university students to continue studying foreign language courses of the next level when they have the option to choose otherwise. We believe it is essential to focus on reviewing the most relevant research literature from recent years, specifically regarding the reasons university students choose to learn foreign languages in the 21st century.

Gallagher-Brett (2004) conducted a study through surveys and focus group discussions with British university foreign language learners at different levels to identify the reasons they choose to study foreign languages, which included personal satisfaction, travel, career, future study, communication, culture, and social purposes.

Demers (2009) interviewed 33 Canadian university students learning different foreign languages at various levels, finding that their motivations included interest in the language, living and working abroad, academic requirements, a desire to maintain a language learned in high school, communicating with family, and preserving their heritage language.

Hertzler and Halling (2011) surveyed 100 U.S. college students in French courses at all levels, asking why they chose to learn the French courses. Their reasons included a love for the French language and culture, academic and employment benefits, family heritage, and suitable course schedule.

These studies provide insights into the overall motivations of university students for choosing to learn foreign languages. However, the data and discussions cover learners at various levels and do not distinguish between the initial motivations for choosing to study foreign languages at university and the motivations for continuing to the next level courses after completing beginner levels. In fact, there is relatively little research on the latter, but those that do exist are more in-depth and offer greater value for our study.

Chua and Azlan (2019) interviewed 11 students taking level 2 Mandarin courses in a Malaysian university, the findings showing learners were motivated to continue learning due to the advantage in employability, increased interest and grades in their level 1 learning.

Smith (2009) collected data from seven students from American university learning intermediate and advanced Spanish and Russian through surveys and interviews. The study found that students' motivation to continue studying a foreign language into advanced levels evolves over time. However, having a long-term goal motivates learners to persist, as these goals can diminish the negative impact of short-term difficulties in workload and performance. The development and refinement of long-term goals are supported by increased knowledge and interest in the language and culture during the learning process, improvements in academic performance, and the motivation derived from completing manageable tasks. Additionally, developing linguistic awareness can lead to positive language transfer. Furthermore, helping students recognize the practical value of what they are learning—such as opportunities to interact with native speakers, participate in immersion programs, and engage in simulated scenarios created by teachers—enhances their commitment to advancing their language studies.

Awad (2018) interviewed four students enrolled in advanced foreign language courses at American universities and identified factors that encourage them to continue studying foreign languages, including: the enjoyment of classroom learning, support from teachers and family members, flexibility and enrichment in the curriculum provided by teachers, a desire to apply their skills in the target language community, and an understanding of the target culture and current events.

Matsumoto and Obana (2001) surveyed 245 Japanese learners at three universities in Australia and found that learners choosing to study intermediate courses had a diminished interest in Japanese business compared to beginner students. Instead, they became more interested in specific language system elements, such as grammar and vocabulary. When they recognized the differences between Japanese and their native language and had successful experiences interacting with native speakers, it motivated them to continue learning. In contrast, beginner students, due to their limited knowledge, often struggled to find joy in learning the language system and faced challenges in smooth communication with native speakers. As a result, they tended to view learning Japanese as merely an academic subject, making them more susceptible to the difficulties of specific learning tasks (such as kanji) and their academic performance, which could lead to dropping out. This study also found that

effective teacher support and an enjoyable classroom atmosphere could influence students who initially did not plan to continue their studies to reconsider and choose to enrol in intermediate courses, even if their grades were not very high. The researchers concluded that, compared to other university courses, the impact of teachers and class dynamics in foreign language courses is much stronger. Teachers can help students broaden their diverse learning interests and goals, moving beyond limited language knowledge and academic performance, thereby increasing enjoyment and retention rates.

Although the studies on university students' motivations to continue foreign language courses are few, they provide direct insights for our research. However, they involve a limited range of languages, small sample sizes, and lack data from Asian universities, as well as quantitative analysis results to corroborate their findings.

Moreover, previous research primarily focused on intermediate and advanced foreign language learners, while our urgent challenge lies in the fact that beginner learners have the lowest retention rates. Studies have also shown that beginners are more likely to give up language learning than intermediate learners (Matsumoto & Obana, 2001). Therefore, we designed a quantitative study targeting beginner foreign language learners at the National University of Singapore.

Our exploratory research question is:

1) Among the many reported potential factors, are there any that significantly influence the decision of beginner learners across language programs at the National University of Singapore to continue learning the next level of the language course?
2) If yes, what are the factors, and how do their influences differ?

3. Methodology

3.1 Instrument

We designed an online questionnaire divided into two parts.

The first part relates to the participants' background information, including gender, age, faculty in the university, year level, program level (undergraduate, postgraduate, alumni, exchange), personal interests, intended work industry, first language, second language, course load, and the Level 1 language course they are currently studying. To ensure anonymity, we do not collect participants' names or contact information, and the online questionnaire does not require login or identity verification.

The second part focuses on participants' foreign language learning experiences, including the reasons they chose to take the level 1 language course in the first place, the challenging areas/components in their current language learning, their intention to continue taking the level 2 language course, and the reasons leading to or stop them to choose to continue. The statement options are derived both from factors discussed in the literature and anecdotal evidence reported by the Teaching Development Committee members at the Centre for Language Studies.

The questionnaire and the following procedure of data collection and analysis have been approved by Department Ethics Review Committee (DERC) at Centre for Language Studies, National University of Singapore.

3.2 Procedure

We conducted the questionnaire survey during two semesters of the 2023-2024 academic year. In the fifteenth week of each semester, which is the second week after the final exams for the language courses, administrative staff from the centre emailed all students enrolled in Level 1 foreign language courses at the Centre for Language Studies, National University of Singapore, across 13 languages. We will provide details on the number of participants for each language program in Section 4.1.

Over 3,000 students received the questionnaire invitation, and during the four-week data collection period, they were sent two reminders. Interested students could voluntarily participate in the survey without receiving any form of compensation, and all participants' consent has been obtained for using their anonymous data in publications.

4. Data Analysis

4.1 Descriptive Analysis

We received 548 valid responses (294 from semester 1, 254 from semester 2), they are from students of different demographic profiles and backgrounds, as summarised in Table 1.

Table 1 - *Participants' background: Age, Gender, Exchange status*

	Age (mean)	Male	Female	Exchange students
Semester 1	21.6	40.5%	59.5%	9%
Semester 2	22.1	43.8%	56.2%	6%
Overall	21.8	41.6%	58.4%	7.5%

The survey responses distribute across language programmes, as illustrated in Figure 1 below.
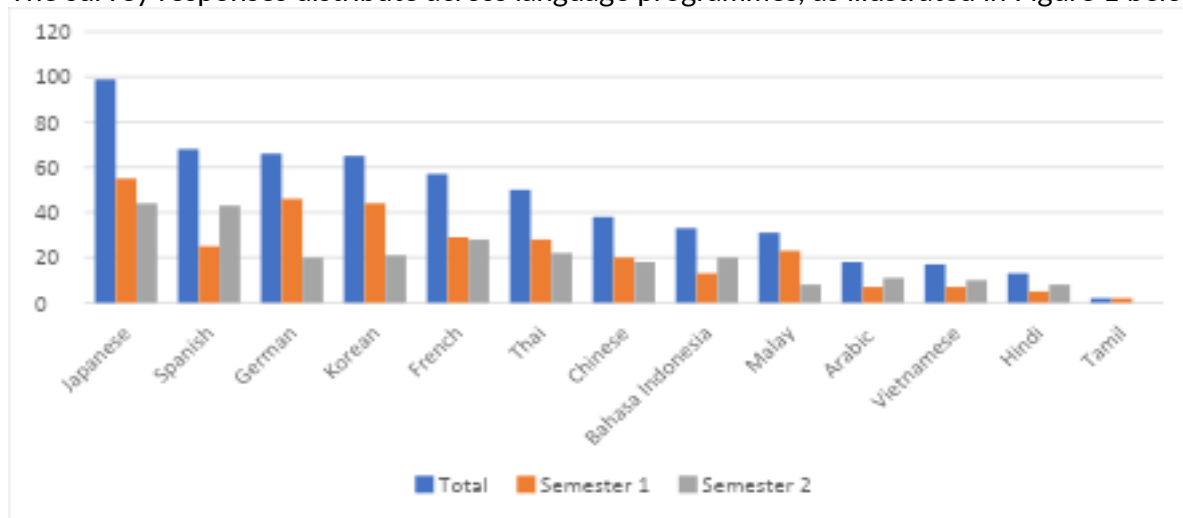
Figure 1. Distribution of Survey Responses across 13 Language Programmes

The survey responses are from students of different faculties in the university, as illustrated in Figure 2.
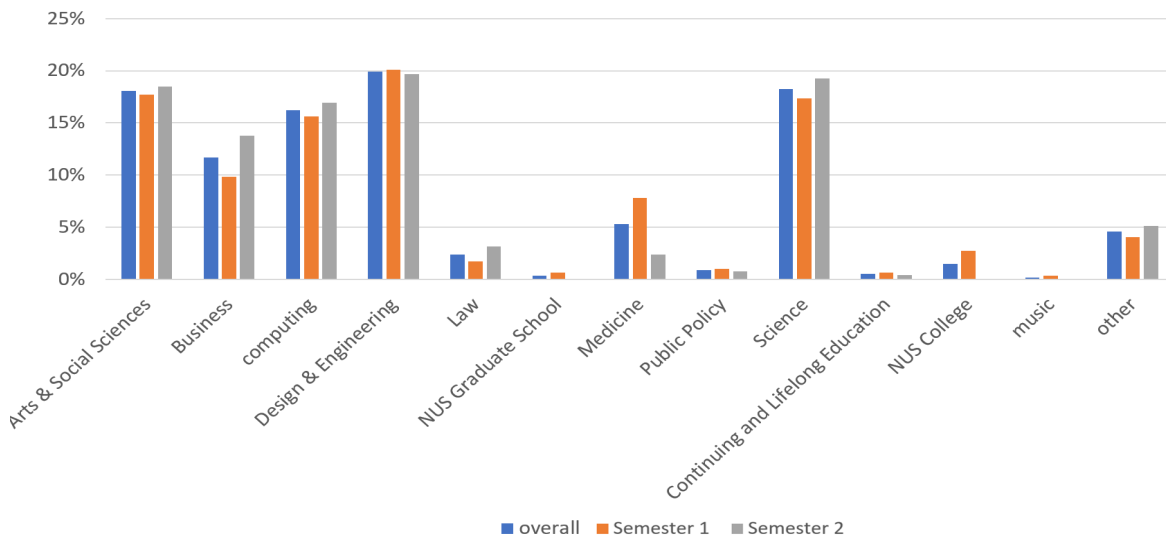
Figure 2. Participants' Faculty in the University

The participants are from different year levels and study programmes, as illustrated in Figure 3.
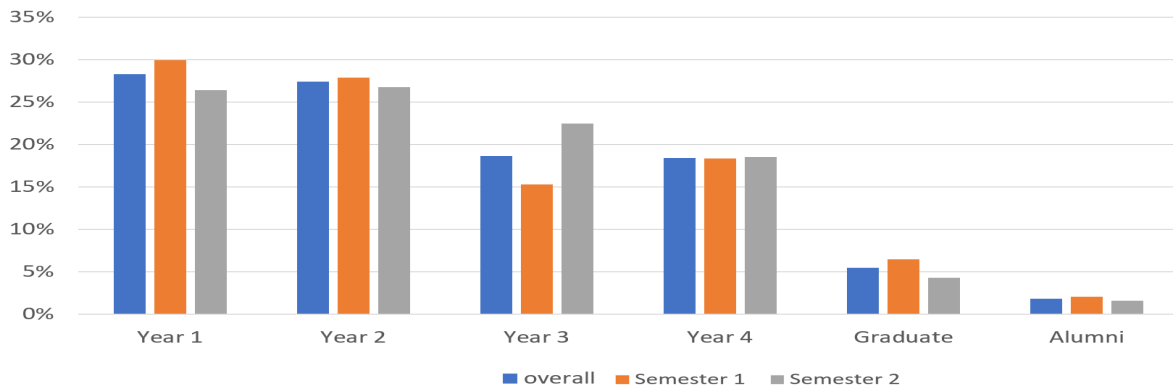
Figure 3. Participants' Year Level and Study Programmes

The participants' intended work industry and personal interests are illustrated in Figure 4 and Figure 5.
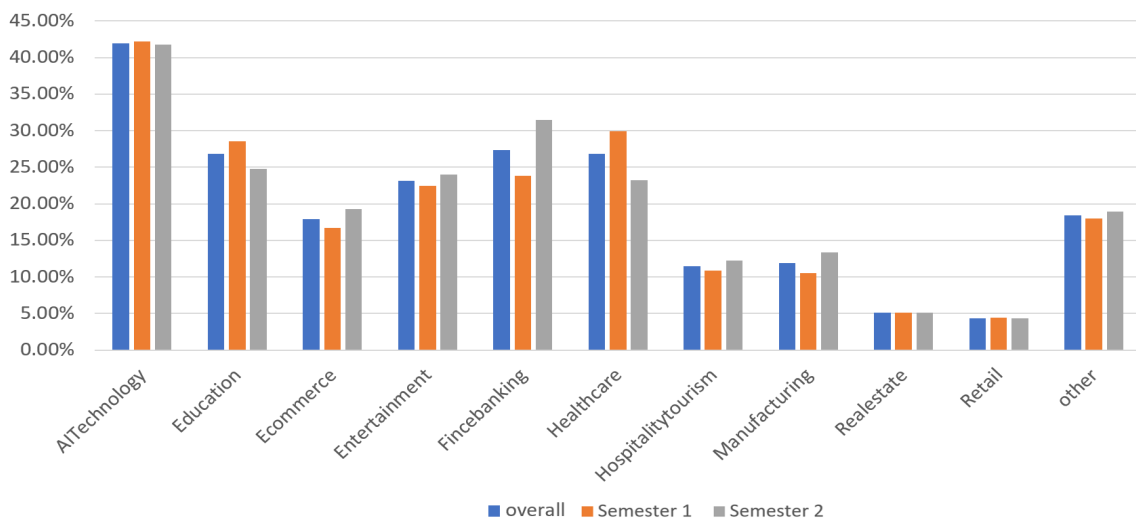
Figure 4. Participants' interested work industry
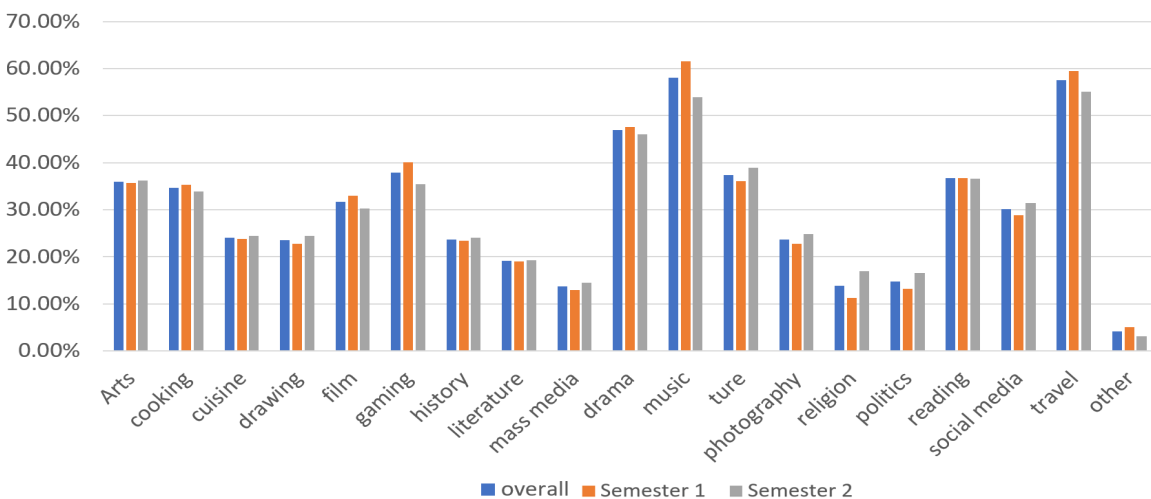
Figure 5. Participants' Personal Interests

The reasons that participants chose to take the level 1 language course are illustrated in Figure 6.
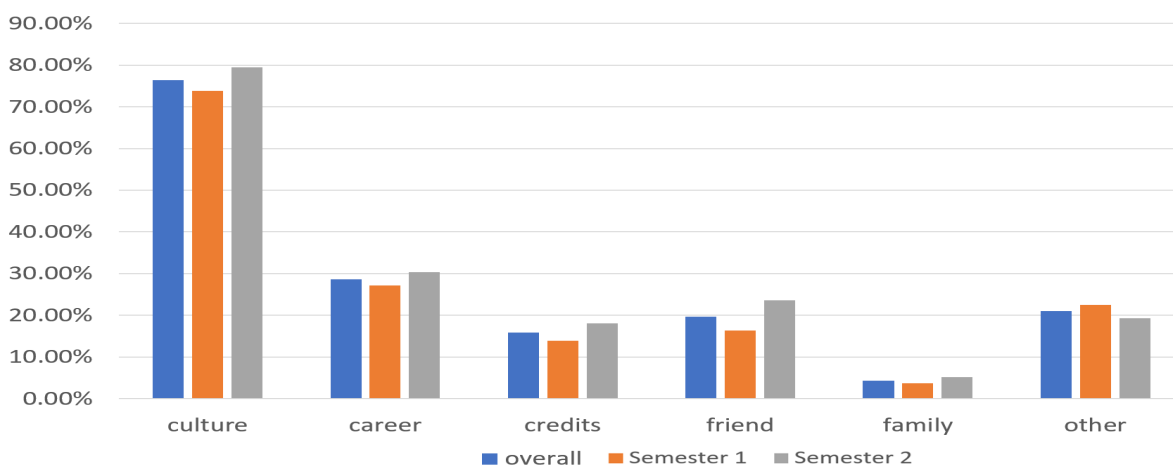
Figure 6. The Reasons for Choosing to take the Level 1 Language Course

The course contents participants feel challenging are illustrated in Figure 7.
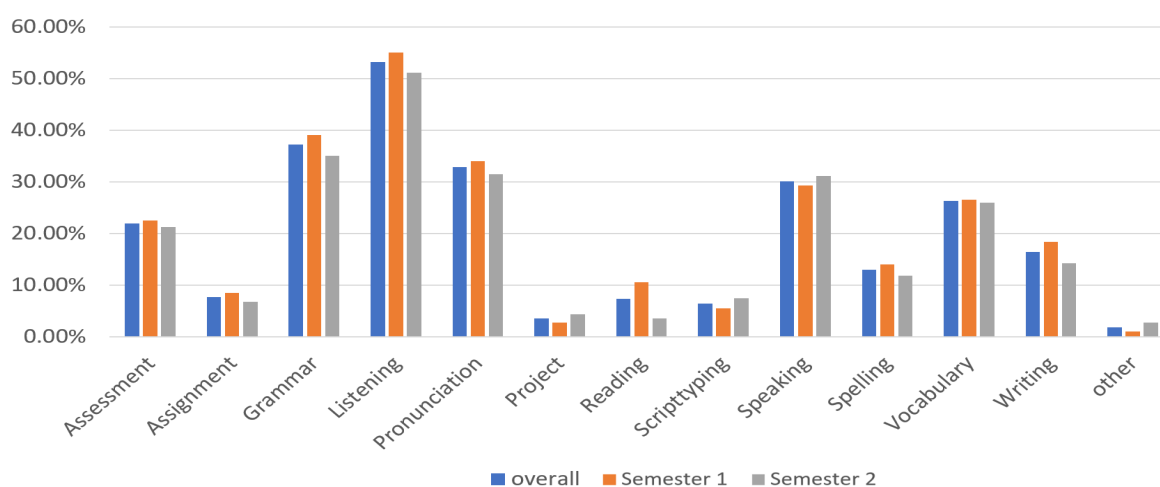
Figure 7. The course contents participants feel challenging

For the reasons might lead students to continue with level 2 language course, participants rate each statement as appropriate on a 6-point Likert Scale, 1 indicates strongly disagree, and 6 indicates strongly agree. Table 2 summarises the mean score of all statements.

Table 2 - Reasons that might lead students to continue with level 2 language course

Overall Ranking	I intend to continue taking the next level of the target language because…	Overall	Semester 1	Semester 2
1	The teacher is nice/helpful/engaging/inspiring.	5.60	5.62	5.58
2	I enjoy the accomplishment and achievement in learning the language.	5.46	5.45	5.48
3	The class is fun, interesting and engaging.	5.46	5.48	5.44
4	I like the target language.	5.37	5.41	5.32
5	I plan to travel to places where the target language is spoken	5.28	5.29	5.27
6	I like the target language culture.	5.26	5.31	5.20
7	The course is well planned, organized and taught.	5.25	5.20	5.32
8	It helps me communicate with the target language speakers	5.18	5.19	5.17
9	It helps me know better the people, society and culture of the target language	5.11	5.12	5.11

10	It can foster a better understanding of cultural similarities and differences.	4.99	5.01	4.97
11	I want to be friends with the target language speakers.	4.67	4.66	4.69
12	Learning the language helps to develop independent learning skills.	4.65	4.58	4.73
13	I want to make friends in the language course.	4.51	4.49	4.52
14	Knowing the target language can enhance my job prospects.	4.49	4.54	4.42
15	I think I may get a good grade for the Level 1 language course.	4.42	4.43	4.42
16	I plan to get the CLS Certificate for the target language.	4.41	4.48	4.34
17	it helps me understand my own culture better.	4.09	4.00	4.20
18	I want to take the course together with my friends	3.97	4.01	3.92
19	My friends/seniors recommended me to continue learning it.	3.60	3.54	3.67
20	Knowing the language will help my future study	3.55	3.55	3.55
21	I plan to get an external language certificate for the target language.	3.38	3.42	3.34
22	My family members recommended me to continue learning it.	3.24	3.26	3.22
23	I plan to get the NUS Language Minor for the target language.	3.13	3.22	3.04
24	I need a course to fulfil my graduation credits.	3.00	3.04	2.96
25	The language is related to my study	2.61	2.58	2.65

For the reasons might stop students to continue with level 2 language course, participants were asked to select the statement which they felt true to them. Table 3 summarises the selection rate of each statement and their ranking.

Table 3 - Reasons that might stop students to continue with level 2 language course

Overall Ranking	The reasons might stop students to continue with level 2 language course	Overall	Semester 1	Semester 2
1	My major courses demand significant time and attention.	57.85%	60.88%	54.33%
2	A low grade will affect my GPA.	47.45%	48.64%	46.06%
3	The target language course is demanding.	38.14%	37.41%	38.98%
4	The target language is difficult.	35.40%	35.03%	35.83%
5	I do not have more S/U grading options for language courses.	16.42%	16.33%	16.54%
6	The language course timings are too early (e.g. 8am).	15.51%	17.01%	13.78%
7	I will graduate after this semester.	13.32%	9.18%	18.11%
8	The language course timings are too late (e.g. 6pm).	11.31%	13.61%	8.66%
9	I am going to on SEP/Intern/NOC/LOA next semester	8.76%	7.14%	10.63%
10	Other	8.58%	10.20%	6.69%
11	I don't receive sufficient support from the course.	7.66%	8.84%	6.30%
12	The learning content is not stimulating or engaging.	6.93%	7.48%	6.30%
13	I can learn the target language with mobile tools	6.39%	5.78%	7.09%
14	I am not allowed to take more language courses	5.84%	5.44%	6.30%
15	I don't feel a sense of achievement	5.47%	5.10%	5.91%
16	I have to travel too far from my department.	4.74%	5.44%	3.94%
17	The learning content is not useful or relevant.	4.01%	4.08%	3.94%
18	I will finish my exchange at NUS.	3.65%	4.08%	3.15%

19	technology/AI can help me communicate in any language in the future.	1.46%	1.36%	1.57%

4.2 Statistical Analysis

Since we collected data from students across two semesters, we first examined whether there were significant differences between the two datasets, considering two university-specific factors. First, there are generally more exchange students in the first semester than in the second semester. Second, more students typically graduate in the second semester, making them less likely to continue to Level 2 courses. Additionally, although the time interval between semesters is short, students' attitudes and willingness to learn may change over time. From descriptive data in Figures 1–7 and Tables 1 and 2, we observed slight differences between semesters.

To test for significant differences, we compared each survey item individually. Categorical variables were analysed using Chi-Square tests, while continuous variables were analysed with Independent T-tests. Results showed no significant differences between semesters, allowing us to merge the two datasets for further analysis.

Our primary research question is: Which factors significantly influence beginner learners' decisions to continue to Level 2 language courses across programs at the National University of Singapore? To answer this exploratory question, we used Logistic Regression to identify predictors of a "Yes" response to the survey question: "Do you intend to take the Level 2 language course?"

Although not all survey items have been previously reported as influencing continuation in higher-level courses, we included all data for screening and performed Logistic Regression by sections. To account for the limitations of statistical testing due to the data structure (discussed further in the Conclusion), we analysed both the merged data and semester-specific datasets to assess consistency in predicting factors across contexts.

Table 4 summarizes the factors that significantly predict a "Yes" response to the question: "Do you intend to take the Level 2 language course?"

Table 4 Predicting factors for continuing with level 2 course

Section	Factors	Semester 1	Semester 2	Overall
Background	I am an exchange student			(-) *
	Overall course load		**	
Personal Interests	#Cuisine	(-)*		(-)**
	Drawing		(-)*	
	History		*	
	Politics	*		
	Travel			*
Intended Work Industry	#Education	*		*
	Entertainment		*	
Reason to take level 1 course	Career		*	
	Culture	*		
Challenging	Grammar	(-)*		
Course content	Speaking		(-)*	
	#Vocabulary	*		*
	#Writing	(-)*		(-)*
Reasons for continuing with level 2 course	#I like the target language.	*	*	*
	#The class is fun, interesting and engaging.	**		***
	#Knowing the language will help my future study	(-)*		(-)*
	I plan to get the CLS Certificate	(-)*	**	
	I plan to get the NUS Language Minor	**		
	The language is related to my study	*		
	I think I may get a good grade	(-)**		
	My family members recommended me to continue learning it.	(-)*		
z	The language course timings are too early (e.g. 8am).	**		
	#The language course timings are too late (e.g. 6pm).	(-)**		(-)*

Note. (-) negative effect, # significance observed consistently, *(p<.05), **(p<.01), ***(p<.001)

As shown in above table, identified predicting factors that are consistent across different datasets were marked with #. In the following section, the results will be discussed by section, with a focus on the consistent factors.

5 Discussion

5.1   Variables related to Background

Among the variables related to participants' background information, only "exchange student" and "overall course load" had significant predicting effects, although neither was found to be consistent across the datasets.

In the merged data, students who identified as exchange students were less likely to continue with the Level 2 course, which is an understandable finding. Participants might have limited their consideration of the question "Do you intend to take the Level 2 language course?" to the context of the National University of Singapore, which is not an option for those who are completing their exchange. We have also heard some exchange students mention that their home universities do not offer the language courses they are currently taking, making it difficult for them to pursue Level 2 even after returning to their home university.

Overall course load was found as a predicting factor only for the data of semester 2, and it is not understandable why students with heavier course load tend to continue with level 2 language course. Since its predicting effect is not consistently significant across data sets, we do not focus on it for discussion.

5.2   Variables related to Personal Interests

Only "Cuisine" was identified as a consistent predicting factor with a negative predicting effect, but it is difficult to understand why students who enjoy cuisine are unlikely to continue with the Level 2 language course. Therefore, we treat this result with caution, pending verification with future data and analysis.

"Drawing," "History," and "Politics" were found as predicting factors in the data from only one semester, so we consider these to be inconsistent findings.

"Travel" was identified as a predicting factor in the overall data. Although this finding is not consistently reflected in the respective two sub-datasets, the merged data with a larger sample size gives us more confidence in this result. Additionally, its positive predicting effect aligns with previous literature, which reports that traveling to or living in a target language country is a motivation for foreign language learners to continue their studies (Gallagher-Brett, 2004). If learners wish to use the language while traveling, this desire supports their motivation to continue learning, especially since beginner courses may not meet these functional needs.

5.3   Variables related to Interested work industry

Education as an intended work industry was found as a predicting factor for both semester 1 data and overall data. It's positive predicting effect indicates students who intend to work in the education industry are likely to continue with level 2 language course. This finding is fresh to us, and we didn't find anything about it in the literature. But an anecdotal evidence we encounter recently inspired us in interpreting the finding.

A former student who had previously learned Arabic recently wrote to her former Arabic teacher that she is pursuing her Master's degree in Education, and she always recall and reflect on the teacher's instructional style and methods and learn from him, even though her master's specialization is unrelated to the Arabic language. Although this finding does not directly relate to the primary aim of this research—improving retention rates—we believe it is quite insightful and worthy of continued attention in future studies.

Entertainment as an intended work industry was found as predicting factors only in semester 2 data, so we consider it as an inconsistent finding.

5.4   Variables related to reasons for choosing level 1 language course

Although "Culture" and "Career" reasons were identified as predicting factors in the data from only one semester, their positive predicting effects align with findings reported in most previous literature and are very understandable results. While these findings do not directly relate to our initial goal of improving retention rates, they serve as indicators that suggest our data can reflect students' motivation for learning foreign languages.

5.5   Variables related to challenging course content

In this section, three challenging course content areas with negative predicting effects were identified as influencing factors, but only one of them, "Writing," showed consistency across the datasets. This finding generally aligns with previous literature, which indicates that beginners are easily affected by difficulties in language learning, leading them to discontinue foreign languages. Unfortunately, when we sought to further discuss "Writing" as a predicting factor, we realized that the questionnaire's definition of this item was not sufficiently clear. We were unsure whether students were thinking of handwriting scripts or essay compositions when they respond to this option. Therefore, we have listed this as one of the limitations of our study and will revise the wording of this item in future data collections.

Grammar and Speaking as challenging learning content were found as predicting factors only in the data of 1 semester, however their predicting effect is not consistent across datasets.

An unexpected result was that "Vocabulary," as a challenging learning component, had a positive and consistent predicting effect across different datasets. In other words, students who find vocabulary challenging to learn are more likely to continue with the Level 2 language course. We can find some indirect evidence to explain this finding. According to Matsumoto and Obana (2001), intermediate Japanese learners show more interest in language system elements, such as grammar and vocabulary, compared to beginner students. Our finding suggests that, despite vocabulary being seen as a challenging component, these learners are not deterred by this difficulty; rather, they are more willing to continue their studies. We tend to believe these students are more serious learners who actually care about expanding vocabulary with strong practical motivations but face frustration at beginner level. Awad (2018) found that when learners hope to use the target language in real-life contexts, it drives them to continue deeper language studies. Unfortunately, with limited language knowledge like few vocabularies, beginner students are unlikely to experience the sense of accomplishment from applying what they've learned, nor will they feel the motivation that comes from it.

Although the difficulty of learning vocabulary is a reality—due to the heavy memorization load involved, we believe teachers can go extra mile to help beginners sooner feel the practicality of vocabulary learning, for example, by creating more contextualized learning situations for vocabulary practice, or adjusting the textbook content with a more practical focus. The advanced language learners interviewed by Awad are motivated to continue progressing to higher levels because they appreciate how their teachers flexibly adjust the curriculum content to enhance practicality.

Another interesting notice is that Listening as the highest-ranking challenging learning content, was not found as a predicting factor effectively influencing students' decision for taking the next level language course. We can understand this contrast as that, it is common for foreign language learners to perceive listening as a difficult component, but this difficulty is well taken by the learners, so it is not reason stopping them to continue learning. It is worth digging why the difficulty of listening is well understandable by students, while some other components are not.

Following this logic, if there is a way to alleviate the demotivation caused by the difficulties of learning, teachers can take targeted actions in the classroom to prevent students from being discouraged by the challenging components.

5.6   Variables related to Reasons for continuing with level 2 course

In this section, three reasons were found as predicting factors consistent across data sets, but with different predicting effects and significant levels.

"The class is fun, interesting and engaging" (rank 3 in Table 2) shows the strongest positive predicting effect and consistent in Semester 1 data (p< .01) and overall data (p< .001). The enjoyment in having the lesson motivates learners to continue learning. This point has been repeatedly reported in the research, so as in our study. Enjoyable classroom atmosphere can be so influential to motivate students with not so good grades to continue learning, and even can change students' decision in the middle of their level 1 learning from Discontinue to Continue (Matsumoto & Obana, 2001).

"I like the target language" (rank 4 in Table 2) shows the most consistent positive predicting effect in all three data sets. It is not stated whether the learners like the language in the first place or the learning in level 1 made them like the target language, but since the survey is taken after the course and exams, it is reasonable to believe their level 1 learning experience contributed to their positive perception to the language and thereby motivates them to continue learning.

Although the top-ranking reason, "the teacher is nice/helpful/engaging/inspiring" was not found to be an effective predictor by itself, the above two findings are indeed closely related to the teacher. This aligns with previous literature; Matsumoto and Obana (2001) argue that the impact of teachers and classes in foreign language courses is much stronger compared to other university courses. Teachers can help students expand their diverse learning interests and goals, making them enjoy the learning journey, rather than only looking at the learning difficulties and academic performance.

Therefore, we believe that the impact of teachers to foreign language learners may be greater than we initially thought. To help students enjoy the classroom and appreciate the target language, some specific methods can be employed, such as inviting native speakers as guests to interact with them, providing affordable immersion opportunity (Smith, 2009), might make some inevitable learning difficulties seem trivial as compared with the satisfaction gained, and thus alleviating the demotivation associated with those challenges.

In this section, we also encountered a perplexing result: the statement "Knowing the language will help my future study" had a negative predicting effect. This means that students who selected this statement tended not to continue with the Level 2 course, and this effect is consistent across datasets. In fact, this result contradicts some qualitative findings in the literature (Gallagher-Brett, 2004). Therefore, we tend to treat this finding with caution, pending verification in future rounds of data collection and analysis.

5.7   *Variables Related to Reasons for not continuing with level 2 course*

Only one statement was identified as the predicting factor with a negative predicting effect and consistent across data sets 'The language course timings are too late (e.g. 6pm)', indicating students feel evening lessons are too late tend not to continue with level 2 course. We cannot identify whether the responses are from students who took evening lessons in level 1 course. But according to some teachers, some evening lessons timing are popular for some language programmes. But some other students also shared they chose evening lesson timing only because it fit their course schedule. It is reasonable to believe in the evening, most students are not at their most energetic moment, leading a decrease in concentration, enjoyment and effectiveness. However, this should be verified with more direct evidence, such as qualitative data from interview.

6.   **Conclusion**

In general, our research findings from the survey are consistent with previous studies, indicating that learning enjoyment and affection for the target language have the greatest impact on motivating students to continue to the Level 2 course. This is largely contributed by the teachers' efforts. We believe that teachers can further enhance their influence on students by creating more practical scenarios that emphasize the practicality of the learning content, alleviating the demotivation associated with short-term challenges and frustrations.

Regarding the learning difficulties commonly mentioned by some students, such as listening, we might not need to be very concerned, as these inevitable challenges are associated with the beginner level. And our survey finding shows it is unlikely to lead to a decision to quit language learning.

Additionally, some of our intriguing findings, such as those related to vocabulary as a challenging component and evening lesson timing, are worth verifying with future data and analysis.

Finally, our study has some limitations. First, the majority of questionnaire items required participants to select options, resulting in many categorical variables that are not fine-grained and limit the choice of statistical analysis. Therefore, in future rounds of data collection, we plan to revise the survey questions to a Likert-scale format whenever possible. Second, some survey items were not clearly stated, such as "writing" as a challenging learning component, which limited our interpretation of the statistical results. Third, in the last two sections of the questionnaire, we directly asked what reasons led participants to continue or not continue with the Level 2 course. This approach required participants to make judgments about each statement and establish causal relationships. The way of asking questions might be too direct and could not capture many uncertainties and subconscious thoughts in participants' minds. Therefore, we will also review the phrasing of the questionnaire items to better align with the psychological foundations of survey research.

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20 - "See you next semester!" Learner Motivations for Continuing a Foreign Language Course: A Comparison across Language Groups

Jan Auracher
auracher@nus.edu.sg
National University of Singapore

Oi Lin Lian
clslol@nus.edu.sg
National University of Singapore

Yukiko Saito
clssy@nus.edu.sg
National University of Singapore

Sergio Rodríguez-Flores
roflose@nus.edu.sg
National University of Singapore

Sophie Micheline J Undorf
sophieu@nus.edu.sg
National University of Singapore

Seowon Chi
clscsw@nus.edu.sg
National University of Singapore

Suthiwan Titima
clsts@nus.edu.sg
National University of Singapore

Abstract
Retention rates in university foreign language programs often decline sharply after beginner courses, creating challenges for sustaining higher-level modules and raising questions about the evolving role of foreign language education. To address these issues, this study explores the motivational factors influencing students at the Centre for Language Studies (CLS), National University of Singapore (NUS), to continue learning beyond beginner-level courses. Drawing on data from 325 beginner-level students across 13 languages collected over two semesters in 2023–2024, the study investigates whether motivations differ depending on the target language. Using a factor analysis approach, five motivational dimensions were identified: Knowledge & Integrative Orientation, Internal & Enjoyment Orientation, Instrumental Orientation (Job/Academic Future), Instrumental Orientation (Certification), and Social Influence. Results show that enjoyment of learning and interest in the language and its culture are the most significant motivators across all languages. However, differences emerged between language groups. Students learning East Asian languages (e.g., Chinese, Korean) were less driven by instrumental motivations, focusing more on personal interest and cultural engagement. In contrast, students of European languages (e.g., French, German, Spanish) and Japanese demonstrated significantly higher motivation to obtain certifications. The findings highlight the importance of tailoring curricula and pedagogical strategies to students' primary motivations. For instance, European and Japanese language programs might emphasize certification pathways, while East Asian language courses could incorporate informal learning elements such as social media and cultural content. Addressing language-specific motivations may enhance student engagement and retention in advanced modules. Future research should expand on these

findings by examining larger, more diverse cohorts and exploring the dynamic nature of language learning motivation over time.

Keywords: language learning motivation, retention rates, instrumental vs integrative orientation. foreign language courses

1. Introduction

It is a truism that learning a foreign language is more of a marathon than a sprint. Learning a foreign language requires perseverance and patience. This makes it all the more worrying that foreign language learners often lose their motivation and drop out of their studies early on. As at many university language centres around the world (see for example Bartley, 1970; Cambridge Assessment, n.d.; Gascoigne & Parnell, 2014), the retention rates of students who learn a foreign language as an elective subject at the Centre for Language Studies (CLS) at the National University of Singapore (NUS) are for most languages considerably low after the beginners' courses.

Foreign language learning can only reach an advanced level through continuous learning. At least at NUS, the role of foreign language teaching is to give all learners interested in foreign language learning not only the opportunity to acquire advanced foreign language skills, but also to understand and appreciate the target language and culture in order to work harmoniously with people from different linguistic, social and cultural backgrounds in the international community, and to open up potential job opportunities to them.

The high drop-out rate and the resulting unfavourable ratio between language learners at beginner level and language learners at intermediate or advanced level should therefore be a cause for concern. The declining retention rates in higher-level language courses create challenges for foreign language centres and institutions in terms of financially sustaining low-demand courses. They also raise questions about the role of foreign language teaching in higher education, which is particularly true for foreign language teaching in the era of technological advancement, where learners are exposed to various online learning tools and generative artificial intelligence (AI) and can learn the basics of the foreign language without taking any university foreign language courses.

In order to better understand the reasons for the decrease in retention rates in foreign language courses at CLS, a large-scale study was conducted in 2023 and 2024 among students of all 13 languages who took a beginners' course. In the study, participants were – among other questions – asked which reasons motivated them to continue their language studies. The extensive results were analysed with regard to various questions which will be published separately.

The main focus here is on whether the reasons for continuing to learn a foreign language after the first course differ according to the target language. This means that we used the collected data to analyse whether students learning an East Asian language such as Korean or Japanese have a different motivation to continue their studies after the beginners' courses compared with students learning – for example – a European language such as French or German. In other words, we investigated whether – and to what extent – differences between students in their motivation to continue their language studies after the beginners' courses can be explained by the language learnt.

2. Review of relevant literature

The study of motivation in second and foreign language learning has garnered significant interest over the past few decades, largely due to its critical role in facilitating language acquisition (Lamb, 2017). Traditionally, many studies have revolved around key concepts such as instrumental and integrative motivations (Gardner & Lambert, 1959) or key frameworks such as the Self-Determination Theory (Deci & Ryan, 1985) and the currently dominant L2 Motivational Self System (L2MSS) (Dörnyei, 2005). What all these theories have in common is their focus on the *motivational orientation* of learners, i.e. on the situational motives that prompt a person to pursue a goal. Most theories distinguish between *intrinsic motivation*, which results from the interest or pleasure in the subject or action itself, and *extrinsic motivation*, which is based on external factors such as the desire for prestige or success.

A substantial portion of these studies is dedicated to English language learning, reflecting its global importance (Boo et al., 2015). However, there is increasing awareness that Languages Other Than English (LOTE), which often stand "in the shadow of Global English" (Dörnyei & Al-Hoorie, 2017, p. 457), tend to be neglected in second or foreign language motivation research. Accordingly, scholars have called for more attention to LOTE (Dörnyei & Al-Hoorie, 2017). This does not imply that motivations for learning English and those for learning LOTE are entirely divergent. However, given its global prominence, English is often seen as the 'natural' and 'unquestioned' language choice, whereas the motivations to learn LOTE may stem from different or language-specific factors (Dörnyei & Al-Hoorie, 2017). As Al-Hoorie (2017) noted, "paying more attention to LOTEs has the potential to deepen our understanding of the complexities involved in language learning motivation" (p. 7).

In the research on LOTE, a variety of factors have been identified that play a role in motivating learners in their language acquisition or sustaining their efforts. One of them is instrumental motivation, which refers to the desire to learn languages for utilitarian reasons (Gardner & Lambert, 1959). For example, the prospect of future benefits may help sustain language learning, as Matsumoto and Obana (2001) discovered in their investigation of Japanese language students' motivations at an Australian university. In another study, González-Becerra (2019) focused on Science, Technology, Engineering and Mathematics (STEM) students learning LOTE at a UK institution and found that they were primarily extrinsically motivated by factors such as employability or value of LOTE for STEM.

Apart from instrumental motivation, integrative motivation can be a crucial factor in the learning of LOTE, potentially more so than in learning English, as suggested by Al-Hoorie (2017). This motivation encompasses the desire to engage with the target language and members of the target community (Gardner & Lambert, 1959). When studies such as Matsumoto and Obana (2001), Davis (2022), and Wadas et al. (2024) compared students who indicated that they were continuing their language studies with those with no intention to do so, it was found that the 'continuers' tended to exhibit stronger elements of integrative motivation than those who did not wish to continue. These included an interest in communicating with the people associated with the languages, connecting with their cultures as well as having positive attitudes towards the people and the cultures.

Another motivational factor highlighted in LOTE research is enjoyment or a positive learning experience. Chen et al. (2020) interviewed students learning French or Spanish in a master's programme at a Chinese university and discovered that these students viewed learning these languages more as a form of "leisure" and "consumption" rather than as an "investment" in their future careers. Davis (2022) found that when students felt supported, respected, and cared for, it had a positive impact on their decisions to enrol in a non-compulsory language course in the subsequent semester. Similarly, positive learning experiences have been recognised as motivating factors for learners of Japanese, especially at the elementary level (Matsumoto and Obana, 2001), and for German (Wadas et al., 2024). However, it is important to note that while positive experiences can motivate learners, they may not necessarily prevent them from discontinuing their language studies (Wadas et al., 2024).

Course-related factors can also play an important role in motivating LOTE learners. Bruen and López (2024) suggested that a curriculum that is student-centred and pedagogically innovative can encourage students to continue their language studies. For learners who do not intend to pursue language study further, meeting language requirements often serves as a primary motivator (Davis, 2022; Wadas et al., 2024).

Research also suggests that the motives to learn a foreign language can differ depending on the target language. For example, González-Becerra (2019), found that STEM students in the UK perceived the strategic value for employability of German, Mandarin, French and Spanish as higher than that of Arabic, Italian, Japanese, and Russian. Similar findings were reported by Gonzales (2011) and Humphreys and Spratt (2008), who investigated the influence of the target language on the motivational orientation of university students in the Philippines and Hong Kong respectively. The results of both studies indicate that, depending on the socio-cultural context, the ratings for the instrumental value can be significantly higher for some languages, while other languages are learnt more for integrative or self-efficacy-related reasons.

In summary, the literature has highlighted various factors that can motivate (or demotivate) LOTE learners. Yet, despite the progress made in understanding motivation for LOTE learning, some gaps remain. One notable gap is the limited geographical diversity of studies. Much of the existing LOTE research is concentrated in countries such as the US, Japan, and China (Boo et al., 2015), which may not fully capture the motivational dynamics present in other parts of the world. Expanding research to include underrepresented countries such as Singapore can offer a more nuanced understanding of LOTE motivation. Furthermore, there is a need for more research on introductory LOTE courses at the university level. As mentioned earlier, a significant part of language programme enrolments consists of beginner-level students, many of whom do not continue beyond initial courses. Gaining deeper insights into what motivates students to persist past the introductory level may help educators develop strategies to better support their learners. Our present study aims to address these gaps.

3. Method

3.1 Participants

Participants of the survey were NUS students enrolled in beginner-level courses at CLS at the time of the study. CLS offers courses in 13 languages to students from all faculties, with levels ranging from beginner to lower or upper intermediate, depending on the language. The courses are primarily aimed at students in the Bachelor's programmes and are only taken by Master's students in exceptional cases. For the analysis of this study, the cohorts of two semesters in the academic year 2023/24 were analysed.

A total of 548 students participated in the study. However, after filtering all participants with missing answers from the dataset, 325 cases remained. Out of these, 184 were female and 139 male (two gave no answer regarding their gender). The average age of the participants was 21.7 (min: 18, max: 32, STD: 2). Of the 325 participants analysed, 189 students (58%) were in their first or second year of study and 120 students (37%) were in their third or fourth year. Only 14 participants (4%) were postgraduate students and 2 participants were already alumni.

The distribution of participants also differed significantly in terms of the target language (see Tables 1a&b). While almost 45% of the participants were distributed across only three (out of 13) languages, four languages were each represented by less than 5% of the participants. The low representation of some languages raises the question of the extent to which the results can be generalised with regard to these languages. For this reason, three languages with fewer than 20 participants were excluded from the analysis (i.e. Arabic, Hindi and Tamil). Vietnamese was subsumed under the Southeast Asian languages.

Table 1a&b - Number and percentage of participants per target language

	Japanese	Spanish	Korean	French	German	Thai	Bahasa
Number	61	43	42	31	31	23	23
Percentage	18.77	13.23	12.92	9.54	9.54	7.08	7.08

	Malay	Chinese	Arabic	Vietnamese	Hindi	Tamil
Number	21	20	12	9	8	1
Percentage	6.46	6.15	3.69	2.77	2.46	0.31

3.2 Materials

Participants were asked to answer an online questionnaire. The questionnaire consisted of two sections, one asking participants basic questions about their sociodemographic profile, their studies and their career plans. The other section asked participants about their experience and attitude towards foreign language learning as part of their academic education. Each section consisted of several blocks of predominantly closed questions.

In this report, we mainly focus on the questions about the participants' motivation to continue their foreign language studies. This block comprised 25 items to be answered on a 6-point Likert scale to assess the participants' agreement with the statement made in each item (1 = "Strongly Disagree", 6 = "Strongly Agree"). The items were based on the dimensions of motivational orientation in foreign language learning identified in previous studies and included statements on intrinsic, integrative, instrumental, knowledge, travel, sociocultural and friendship orientation (a list of the items can be found in the Annex Table 1).

3.3   Procedure

Over 3,000 students enrolled in beginners' classes across the 13 languages offered at CLS were invited to participate in the study via email. Invitations were sent out at the end of each respective semester after teaching had been completed.

The questionnaire and the procedure for data collection, processing and storage were approved by the Department Ethics Review Committee (DERC) of CLS, NUS. To answer the questionnaire, participants had to give their consent to the conditions of the survey after reading an information sheet. The questionnaire was entirely anonymous. Participants were informed about the use of their data.

4.   Results

The data analysis comprised two steps. First, an exploratory factor analysis was conducted on the 25 items to identify latent variables. Subsequently, the average ratings of the resulting factors were compared between the target languages using the non-parametric Kruskal-Wallis test with Dunn-Bonferroni post-hoc analysis.

4.1   Factor Analysis

A factor analysis with varimax rotation was conducted to identify latent variables. Five factors were extracted in accordance with the Kaiser-Guttman criterion. Items were allocated to the factor with the highest loading. A minimum factor loading of 0.4 was set as threshold for an item to be excluded. Accordingly, five of the items could not be assigned to any of the factors (Appendix - Table 1). Together, the five factors explained 47% of the variance (between 7% and 12% per factor).

The values for the internal consistency of the five factors were between *acceptable* and *good* (Cronbach's Alpha >0.7 to >0.8). A thematic analysis of the items per factor also supported the assumption that the latent variables were meaningful constructs and not merely statistical artefacts. Based on the Clement model for describing motivational orientation (Clément & Kruidenier, 1983; Clément et al., 1994), the five factors were characterised as follows:

- **Factor 1: Knowledge & Integrative Orientation**
  Six items asking participants about their interest in the target culture or people from the target culture, their desire to make friends with people who speak the target language, or their interest in the course or in travelling to a country where the target language is spoken.
- **Factor 2: Internal & Enjoyment Orientation**
  Five items asking participants whether they are enjoying the course, the class is fun, the teacher is nice, and whether they like the language and enjoy their accomplishments in learning the language.
- **Factor 3: Instrumental Orientation A – Job and Academic Future**
  Three items asking participants whether learning the language is beneficial for their current or future studies or for future job prospects.
- **Factor 4: Instrumental Orientation B – Certificate**
  Three items asking participants whether they considered to continue their language studies because they want to get a Minor in Foreign Language Studies or because they intend to get an internal certificate from NUS or an external certificate.
- **Factor 5: Social Influence**

Three items asking participants whether they study a foreign language because someone (a friend or a family member) recommended them to do so or because they wanted to be together in the same class with a friend.

A comparison between the factors shows that the average rating of Factor 1 (Knowledge & Integrative) and especially that of Factor 2 (Internal & Enjoyment) were seen as significantly more important reasons for continuing to study a foreign language than was the case for the other factors (Figure 1).
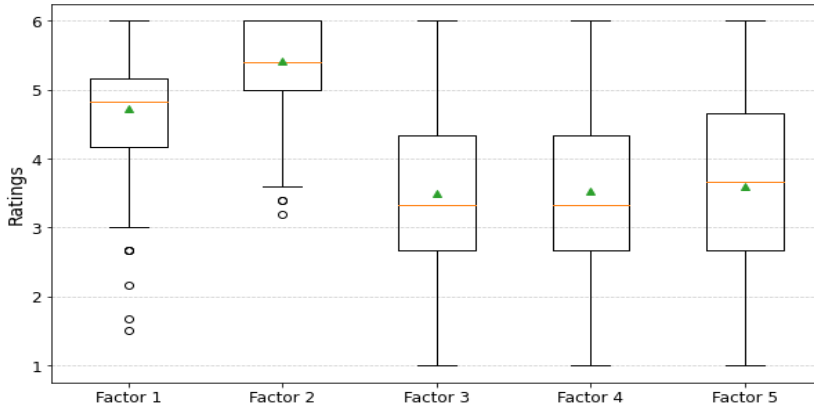
Figure 1: Median (orange), mean (green) and variance of ratings per factor

4.2   Comparison between language groups

The next step was to analyse whether there were differences in the rating of the items between the language groups. For this purpose, groups of foreign languages were formed according to cultural and geographical criteria. Four groups emerged:

1. East Asia (EA):   Korean and Chinese   62 Participants
2. Europe (EU):   German, French, Spanish   105 Participants
3. Japan (Jap):   Japanese   61 Participants
4. South East Asia (SEA):   Bahasa Indonesia, Malay, Thai, Vietnamese   76 Participants

Japanese was treated as a separate group due to the high number of respondents studying Japanese and because the responses of those participants were significantly different from those studying other East Asian languages (i.e., Korean and Chinese).

When comparing the ratings per factor between the language groups, it can be seen that there are no differences regarding Factors 1, 2 and 5. In contrast, ratings of Factors 3 and 4 differ significantly between the language groups. For Factor 3, the values for East Asian languages are slightly lower than for European or Southeast Asian languages. By contrast, the values for Factor 4 are clearly higher for European languages and for Japanese than for East and Southeast Asian languages (Figure 2).
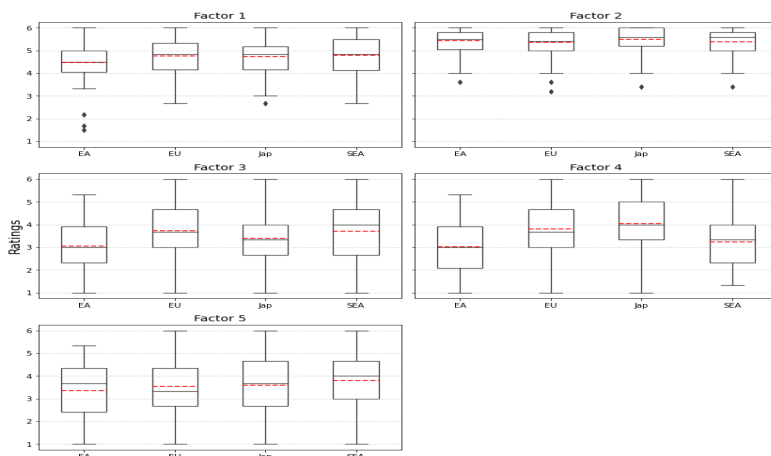
Figure 2: Median (solid line), mean (dotted line) and variance per factor divided by language group

A comparison of the ratings between the language groups using a rank-based analysis of variance (Kruskal-Wallis statistic with Dunn-Bonferroni post-hoc test) shows that these differences are significant or highly significant (Appendix – Table 2). The results suggest two conclusions. First, participants learning an East Asian language see instrumental reasons such as improved career opportunities or benefits for their studies as less of an incentive to continue their language studies than learners of other languages. Second, for participants learning a European language or Japanese, the prospect of obtaining a certificate in that particular language is significantly more important than for learners of East or Southeast Asian languages.

5.   Discussion

The aim of the study was to investigate whether the motivational orientation of foreign language learners at a university in Singapore differs depending on the target language. The results of the study provide a twofold picture. On the one hand, for all students, regardless of the language they are learning, the enjoyment of learning a foreign language and interest in the language and its associated culture predominate as motivators to continue studying the language after the introductory course. On the other hand, there were also differences between the languages or language groups. For students learning East Asian languages (i.e. Chinese and Korean), the motivation to continue learning these languages is less instrumental or purpose-driven, and it was found that those who learn these languages do not do so primarily for professional or academic reasons.

The reasons for these differences were not analysed in detail in the study. Language-specific reasons, such as the perceived difficulty of a language, or the institutional conditions under which a language is taught, are therefore conceivable. One context-specific reason for the results of this study could be that the Korean programme and - even more so - the Chinese programme at NUS have a high proportion of exchange students, whose motivation might differ from that of local students. Specifically, for the Korean language, informal and independent learning may also play a role, driven by the significant influence of elements like Korean music and drama, which may lead to learning motivated by personal interest rather than academic purposes.

Another identified element is that students of the three European languages, French, German, and Spanish, behave similarly to Japanese learners concerning the instrumental orientation of their learning. Specifically, these four languages show significantly higher motivation to obtain a certificate when compared to East or Southeast Asian languages. In this regard, a future line of research could analyse which type of certification students value most, such as the Language Minor, the proficiency certificate from CLS, or internationally recognised diplomas (e.g., JLPT, Goethe-Zertifikat, DELF/DALF, DELE).

In conclusion, the results highlight that each programme could adapt its curriculum and pedagogy to better align with the main motivations of its students. A deeper understanding of students' motivations and goals may contribute to improved retention, enabling them to continue to enrol in higher-level modules. Therefore, it is important that each programme can take its own direction according to the needs and motivations of its students. For instance, the European language and Japanese programmes could focus on strengthening synergies and building closer relationships with prestigious institutions that offer internationally recognised certifications to more instrumentally motivated students. They could also establish connections with reputable universities in the countries where the target language is spoken to provide joint diplomas. However, all this should be done without neglecting the fact that the main motivation for the majority of students to study languages is to have fun.

For students with less instrumental motivation, a possible area of focus could be the inclusion of more day-to-day elements in the curriculum to engage these students, such as incorporating social media, music, or series into activities.

This study has certain limitations, as the sample size could have been larger to include more students' opinions. Additionally, motivation in language learning is a complex matter, as it is highly dynamic and quickly changing, often influenced by temporary trends. This study captures students' opinions at a specific moment in time, so future studies should continue monitoring the situation to identify any changes.

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Appendix
Table 1
Items with descriptive statistics, factor, and factor loadings

Text	N	Mean	STD	Factor	Loading
I plan to travel to places where the target language is spoken	513	5.28	0.88	1	0.42
It helps me understand my own culture better	500	4.09	1.44	1	0.46
I want to make friends in the language course	499	4.51	1.25	1	0.58
I want to be friends with the target language speakers	505	4.67	1.11	1	0.68
It helps me know better the people, society and culture of the target language	514	5.11	0.83	1	0.78
It can foster a better understanding of cultural similarities and differences.	514	4.99	0.93	1	0.79
The class is fun, interesting and engaging	525	5.46	0.71	2	0.53
I like the target language	522	5.37	0.68	2	0.56
The teacher is nice / helpful / engaging / inspiring	527	5.6	0.64	2	0.64

Text	N	Mean	STD	Factor	Loading
I enjoy the accomplishment and achievement in learning the language	526	5.46	0.67	2	0.72
The course is well planned, organized and taught	525	5.25	0.89	2	0.73
Knowing the target language can enhance my job prospects	498	4.49	1.23	3	0.47
The language is related to my study	469	2.61	1.43	3	0.66
Knowing the language will help my future study	488	3.55	1.53	3	0.77
I plan to get the CLS Certificate for the target language	467	4.41	1.46	4	0.53
I plan to get an external language certificate for the target language	448	3.38	1.52	4	0.62
I plan to get the NUS Language Minor for the target language.	439	3.13	1.62	4	0.83
My family members recommended me to continue learning it	437	3.24	1.59	5	0.56
I want to take the course together with my friends	478	3.97	1.58	5	0.57
My friends/seniors recommended me to continue learning it	446	3.6	1.53	5	0.64
I like the target language culture	517	5.26	0.78	x	---
It helps me communicate with the target language speakers	518	5.18	0.83	x	---
I think I may get a good grade for the Level 1 language course	511	4.42	1.19	x	---
I need a course to fulfil my graduation credits	462	3.0	1.52	x	---
Learning the language helps to develop independent learning skills	515	4.65	1.14	x	---

Table 2

Mean and STD per Factor by Language Group with Kruskal-Wallis statistic (H-value) and Dunn-Bonferroni post-hoc level of significance (where applicable).

Factor	Lang Gr	Mean	STD	H-value	Jap	EA	Eu	SEA
Factor 1	Japanese	4.73	0.79	4.81^{ns}				
	East-Asia	4.46	0.9					
	European	4.75	0.77					
	SEA	4.79	0.78					
Factor 2	Japanese	5.5	0.55	4.35^{ns}				
	East-Asia	5.43	0.52					
	European	5.35	0.55					
	SEA	5.38	0.58					
Factor 3	Japanese	3.39	1.13	15.43**	---	.328	.192	.316
	East-Asia	3.06	1.09			---	**.002**	**.01**
	European	3.73	1.11				---	.79
	SEA	3.71	1.25					---
Factor 4	Japanese	4.04	1.26	29.96***	---	**.001**	.507	**.001**
	East-Asia	3.03	1.11			---	**.001**	.507
	European	3.82	1.18				---	**.004**
	SEA	3.24	1.07					---
Factor 5	Japanese	3.58	1.42	3.65^{ns}				
	East-Asia	3.35	1.28					
	European	3.53	1.24					
	SEA	3.79	1.16					

(Inference statistical tests were double checked using Welch ANOVA and Tukey's HSD)

21 - Insights from student feedback into language learning: Implications for course design and pedagogy

Izumi Walker
clsiw@nus.edu.sg
National University of Singapore

Sandhya Singh
clssas@nus.edu.sg
National University of Singapore

Sasiwimol Klayklueng
clssk@nus.edu.sg
National University of Singapore

Sergio Rodríguez-Flores
roflose@nus.edu.sg
National University of Singapore

Abstract

This study is part of a large research project aimed at understanding the factors that influence learners to continue studying a foreign language at a University in Singapore. The present study aimed to explore learners' perceptions of 13 language courses, focusing on what they liked and disliked about the courses. Data were collected from 1,034 language learners through online student feedback conducted by the university and analysed using the Modified Grounded Theory Approach. The analysis process included initial coding and focused coding, resulting in the identification of several key categories and the theories. Preliminary results indicated that positive factors such as course design, relevance, exposure, and learning environment were commonly identified across languages. In contrast, the negative factors, including assessment, course design, and organisation, were diverse depending on the language programme. Through this systematic approach of Modified Grounded Theory, the study supplemented the details of the motivation survey stated above, underscoring the multifaceted nature of language learning and highlighting critical factors that can motivate learners to persist in their language studies. The findings have relevant implications for foreign language education. They can offer a validated framework for evaluating and enhancing learning components and provide evidence-based recommendations for course design.

Keywords: Student feedback, Language learning, Course design, Motivation, Pedagogy

1.   Introduction

The growing demand for multilingual competencies in today's interconnected and globalized world has placed increased emphasis on foreign language education in universities. Understanding student perspectives on language learning becomes crucial for developing practical pedagogical approaches and course designs within this context. While extensive research exists on student feedback in general education, there remains limited comprehensive analysis of student perceptions across multiple foreign language programs, particularly in Asian contexts. This study examines student feedback across 13 language courses at a Singaporean university, offering unique insights into the factors that influence language learning motivation and persistence. Understanding these factors is crucial for designing language courses that enhance learning outcomes and improve student

engagement and retention. Ultimately, this study can contribute to developing evidence-based approaches to foreign language education, ensuring that programs align with diverse learners' evolving needs and expectations.

Student feedback has been recognized as significant in improving teaching quality and course design. It offers insights into course strengths and areas for development, enabling educators to make evidence-based adjustment to curricula. While studies have examined the role of feedback in evaluating teacher performance, its application in guiding course improvement, especially in multilingual and culturally diverse contexts, still needs to be explored. This section examines the literature on student feedback mechanisms, challenges, and implications for improving language course design.

Using student feedback to inform teaching and course improvement can be challenging. Kember, Leung, and Kwan (2002) conducted a longitudinal study on student feedback questionnaires (SFQs) across 25 departments of a Hong Kong university, revealing minimal evidence of improved teaching quality over time. Their findings attribute this stagnation to the inflexible design of standardized feedback instruments, prioritizing appraisal over development, and discouraging educators from leveraging feedback for meaningful change. They argue that feedback systems often fail when focusing solely on performance evaluation, neglecting developmental goals. These insights underscore the need for feedback systems tailored to the specific needs of courses and learners, particularly in dynamic and diverse language programs.

Mandouit (2018) also critiques traditional end-of-course feedback mechanisms, describing them as "inherently flawed" for assuming that outgoing students' feedback is equally applicable to future cohorts. The scholar advocates for iterative and structured feedback cycles, emphasizing the importance of professional development to support educators in acting on feedback. While Mandouit's study focuses on teacher improvement in secondary education, its emphasis on developmental feedback offers valuable insights for adapting student feedback in higher education.

Central to the effective use of feedback is its framing as a developmental tool rather than an evaluative one, Mandouit's action research methodology highlights the transformative potential of feedback when integrated into a continuous process of reflection, collaboration, and professional growth. This resonates with the present study which seeks to use student feedback to identify areas of improvement and guide course redesign in ways that enhance student engagement and learning outcomes.

In a similar vein, a study by Kember et al. (2000) highlights that fostering reflective thinking in students requires intentional curriculum design and supportive educational practices. While their work does not explicitly focus on feedback systems, it underscores the importance of aligning teaching and assessment practices with broader institutional goals of improving learning outcomes.

Feedback is pivotal in bridging the gap between teaching strategies and student learning outcomes. As Black and Wiliam (1998) argue, formative assessment is most effective when it prioritizes development rather than appraisal, providing actionable insights that guide learners and educators. The role of teacher-student interaction and self-assessment is central to this transformation. The scholars (1998) underscore that meaningful learning occurs when students actively engage with feedback, identifying gaps in their understanding and taking steps to address them. Similarly, this study's findings reveal that opportunities for interactive learning and reflective practices significantly influence student motivation and engagement. By promoting environments that encourage student autonomy and participation, language programs can enhance both the quality of learning experiences and the effectiveness of feedback systems.

Research on feedback in education highlights several nuanced aspects that are particularly relevant to multilingual and diverse educational contexts. For instance, Hattie and Timperley (2007) argue that feedback is most impactful when it addresses specific aspects of a learner's performance, providing clear guidance on tasks, strategies, or self-regulation. Their model identifies three key questions: "Where am I going?" (goal setting), "How am I going?" (monitoring progress), and "Where to next?" (future improvement) as fundamental to effective feedback.

Similarly, Nicol and Macfarlane-Dick (2006) highlight that feedback is most effective when it empowers students to engage with and regulate their learning processes actively. The researchers (2006) propose that feedback systems should clarify good performance, facilitate self-assessment,

deliver high-quality information, encourage teacher-student dialogue, motivate positive beliefs, provide opportunities to close gaps, and inform teaching practices. Building on this, they argue that effective feedback must go beyond a one-way transmission of information. This dialogue approach allows learners to discuss feedback, reflect on their performance, and collaboratively explore ways to improve.

Li (2019) highlights the significance of feedback timing, suggesting that immediate feedback during communicative tasks can enhance learner uptake and performance. In contrast, delayed feedback encourages reflective thinking but is less effective for immediate application. These findings are particularly relevant for multilingual classrooms, where feedback timing must be tailored to diverse learner needs and task demands.

Similarly, Shute (2008) underscores the importance of formative feedback for improving learning outcomes, emphasizing its effectiveness when it is supportive, timely, and specific. Her work identifies key variables influencing feedback success, such as timing, specificity, and alignment with learner needs. These insights are particularly relevant to the present study, which examines feedback practices in multilingual language programs to enhance learner engagement and motivation.

Zheng and Yu (2018) demonstrate that engagement with written corrective feedback varies significantly among lower-proficiency students, often limited by linguistic competence. Their study highlights that while LP students exhibit positive attitudes (affective engagement), they face challenges in understanding and applying indirect feedback (cognitive engagement).

These findings are particularly relevant to the present study, which examines feedback mechanisms in diverse language programs to enhance student learning outcomes.

Furthermore, Wisniewski et al. (2020) conducted a comprehensive meta-analysis, highlighting the significant variability in feedback effectiveness. They found that high-information feedback, which integrates task, process, and self-regulation levels, is most effective, while simple reinforcement offers limited benefits.

The present study aligns with these insights by examining feedback from 1,034 learners across 13 language programs at a Singaporean university. Identifying factors that influence student motivation and persistence seeks to bridge the gap between feedback collection and actionable outcomes, contributing to evidence-based improvements in course design and pedagogy. Building on the Modified Grounded Theory Approach, the research contributes a framework for understanding how feedback can be leveraged to improve multilingual course design and pedagogy. This integration of theoretical insights and practical applications sets the stage for the subsequent Methodology section, where the study's design and analysis are detailed. The focus on over 1,000 learners' feedback across diverse language courses offers a unique opportunity to examine the interplay between feedback practices and learner engagement in multilingual educational contexts.

2. Methodology

The primary aim of this study is to examine the positive and negative perceptions of students enrolled in Level 1 language modules across 13 foreign languages offered by the Centre for Language Studies at the National University of Singapore. This analysis is based on data collected from the end-of-semester module feedback. Specifically, the study focuses on the feedback sections titled "What I like about the module" and "What I did not like about the module," which contain a compilation of students' open-ended comments. These comments have been analysed qualitatively to provide insights into student experiences and attitudes toward the modules.

As such, the study poses the following Research Questions (RQs):

RQ1: What aspects of the language course do learners perceive positively?
RQ2: What aspects of the language course do learners perceive negatively?
RQ3: Are there positive and negative shared features across the 13 language courses?

These research questions provide a framework for gathering perspectives into both positive and negative aspects of the course and how common or specific features impact the language learning experience. providing actionable insights to enhance foreign language course design. Furthermore, these results are expected to provide actionable insights to enhance foreign language course design.

2.1 Methods

2.1.1 Participants

Participants in this study were students enrolled in Level 1 modules for any of the 13 languages offered at the Centre for Language Studies during the first semester of the 2023-2024 academic year. These participants included students from various bachelor's and master's programmes across multiple faculties within the university, who elected to study a language either as an elective course or as part of their degree requirements. The participant group also encompassed exchange students studying at the university, along with life-long learning students. Table 1 details the number of students enrolled per module and the number of respondents to the online student feedback form.

Table 1 - Number of Enrolled Students per Language Course

Languages	Enrolment Numbers: AY 2023-2024, SEM1	Number of Respondents
Arabic	43	24
Bahasa Indonesia	81	46
Chinese	158	83
French	241	147
German	223	119
Hindi	12	10
Japanese	273	168
Korean	305	173
Malay	137	72
Spanish	214	116
Tamil	9	7
Thai	87	63
Vietnamese	18	6
Total 13 languages	1801	1034

2.1.2 Data

The data used in this study was the official end-of-semester module feedback form, a structured questionnaire that students complete to evaluate their experiences in a specific module. This feedback form typically includes questions about various aspects of the courses such as course content, teaching quality, learning resources, course organization and assessment. Additionally, students are asked to share what they liked most and least about the module, including open-ended comments. The data from these forms are used by faculty and administrators to assess and improve the course quality and teaching methods, making it a valuable tool for ongoing course development and enhancement of the learning experience.

2.1.3 Data Analysis

All data were collected from module feedback forms and anonymized by program module convenors to ensure confidentiality before analysis. The study adhered to ethical standards, receiving clearance from the university's Institutional Review Board.

The data were analyzed using the Modified Grounded Theory Approach (M-GTA) by Kinoshita (2003), an adaptation of Glaser and Strauss's Grounded Theory (1967). M-GTA was chosen for its flexibility and structure, making it particularly effective for analyzing complex datasets like student feedback. This methodology integrates existing frameworks with emergent data, enabling the identification of recurring patterns and unique themes. It is especially suited for multi-language analysis, uncovering both shared themes—such as teaching methods and curriculum design—and culturally or linguistically specific insights. This dual focus ensures findings are actionable and tailored to the diverse needs of language programs, leading to more effective educational strategies.

The analysis involved systematic coding of feedback by language group and categorizing comments as positive or negative. The authors divided responsibilities across the 13 languages as

follows: (1) Japanese and Korean, (2) Arabic, Chinese, Hindi, and Tamil, (3) Bahasa Indonesia, Malay, Thai, and Vietnamese, and (4) French, German, and Spanish. The process included open coding to identify key concepts, axial coding to organize categories, and selective coding to develop central theories explaining the data.

Individual analyses were compared in collaborative meetings to ensure rigor and minimize bias. These sessions fostered collective interpretation, achieving consensus and enhancing the reliability of the findings. By combining diverse perspectives, the methodology yielded balanced insights into students' perceptions of each language module and highlighted commonalities across the programs.

The results of this detailed analysis are presented in the following section.

3.   Data Analysis Procedure

The data analysis in this research was conducted in the following procedure.

3.1   Step 1: Open Coding – Generation of Basic Concepts

The initial phase was generalising fundamental notions in alignment with the "constant comparison" strategy. To analyse the substantial volume of data, the authors categorised 13 languages into 4 groups and appointed a researcher to oversee each group. Each researcher meticulously examined every comment, enquiring, "What is the meaning of this?" What is being alluded to here?" and made classifications indiscriminately. During this preliminary phase, it became apparent that numerous learners provided the following comments:

(1) Enjoyed the course.
(2) Fun and interesting.
(3) Classes were very engaging and interactive.

(1) and (2) express the pleasure and interest derived from the process of learning. Conversely, (3) delineates the manner in which the classes are done. Consequently, (1) (2) were provisionally classified within the category designated as "fun and interesting." Conversely, (3) was established under the provisional designation of "engaging and interactive." Each researcher established the categories in the aforementioned method. Subsequently, we exchanged the categories developed independently and examined the similarities and differences among the various linguistic groups. As a result, the following categories were created.

【 Why I like the language course 】

interest and fun	engaging, lively, interactive	a new language and scripts	Culture	peer
teachers	assignments/assesments	workload, volume of contents	safe /stress free environment	pace, speed of the course
easy	feedback	materials, textbook, resources	course content and organization	rewarding, sense of achievement
class size	relevance, applicability, real-world application	Speaking, conversation, good practice	Counter Examples	Others

Figure 1a. Basic concepts generated by open coding

【 Why I don't like the language course】

Workload	Prior knowledge, unfairness, smurfers	Assessment problems Examination/Test /Quizzes	Bellcurve
Others Counter Examples	Pace, Speed of course	Class timing	lack of practice, class hours
Teaching problems	Difficulty	Lack of application, releavnce	textbook, resources problems

Figure 1b. Basic concepts generated by open coding

3.2   Step 2: Initial organization of common categories across languages

By comparing languages, we determined that a uniform categorisation could be applied across all languages, while allowing for the inclusion of extra categories that accommodate language-specific nuances. Consequently, we developed a unified worksheet and reclassified the data accordingly and then we labeled key concepts for each category.

3.3   Step 3: Re-organization of categories by selective coding

Analysis of the data utilising the common framework revealed that a particular category should be divided into two distinct categories. For instance, (4) and (5) belonged to the same category.

(5) Able to learn a new language.
(6) Learning more about the Korean language and culture.

However, (5) indicates that students exhibit a favourable attitude towards acquiring a new language, which may not be the language they have a specific reason to take. This include the comments such as 'I wanted to get a new knowledge" but not necessarily a language nor the particular language. Conversely, students who wrote (6) demonstrated an interest in the specific language and articulated the achievement that fulfilled their aspiration. Consequently, (5) and (6) were delineated as "Learning a new language" and "Interest in the language and culture."

On the other hand, some categories were merged. For example, (7) were positive descriptions about 'teachers' and (8) was those about 'students'.

(7) The teachers are really helpful and kind.
(8) Everyone is friendly and my classmates from tutorial class are willing to help me when I faced some problems in class.
(9) All the tutors and lecturers are extremely kind, understanding and helpful.

Nonetheless, numerous comments address both subjects concurrently like (9), making it challenging to distinguish between them. Consequently, they were merged into a singular category tentatively titled "teacher and peers make the lesson enjoyable."

After examining all of the languages, we reorganised the categorisation of positive comments by merging several categories marked in the same colour and creating a new category highlighted in red. On the other hand, we discovered that it is unnecessary to re-categorize negative comments. Instead, it provided for new categories to handle language-specific comments, which exist depending on the language course. It is because positive factors were commonly identified across languages. In contrast, the negative factors were diverse depending on the language programme.

Figure 2. Re-organized concepts generated across languages

【 Why I like the language course 】

interest and fun	engaging, lively, interactive	a new language and scripts	Culture	peer
teachers	assignments/assessments	workload, volume of contents	safe /stress free environment	pace, speed of the course
easy	feedback	materials, textbook, resources	course content and organization	rewarding, sense of achievement
class size	relevance, applicability, real-world application	Speaking, conversation, good practice	Counter Examples	Others
		Interest in the language and culture		

3.4   Step 4: Completion of the categories

As a result, the categories and the key concepts were finalized as follows:

Table 2 - Finalized Categories and Definitions

【 Why I like the language course】

	Category	Definitions
A	Interesting and Enjoyment	Course/lesson is interesting and fun
B	Interactive and Engaging	Lesson is interactive and engaging
C	Cultural Exposure	I can lean culture
D	New Language Acquisition	I can learn a new language
E	Speaking Practice Opportunities	The course enhances communication skills pronunciation
F	Positive Teacher and Peer Influence	Teacher and peers make the lesson enjoyable
G	Interest in the Language and Culture	I like the language and culture
H	Practicality and Usefulness	Contents are applicable and relevant to real word
I	Appropriate Course Pacing	Pace of the course is good
J	Useful Assignment/Assessment	Assignment / Assessment is helpful for learning
K	Well-organized course and materials	Course content is resourceful and well-organized
L	Accomplishment and Satisfaction	Sense of achievement, satisfaction, reward, confidence
M	Counter examples and others	Counter examples and others

【 Why I don't like the language course】

	Category	Definitions
A	Heavy Workload	The workload is too heavy
B	Experienced Students	Students have background knowledge
C	Assessment /Assignment Issues	The assessments are too difficult/have problems
D	Competitiveness	The bell curve is steep
E	Pacing Issues	The pace of the course is too fast
F	Logical Challenges	Class times are too early/too late
G	Insufficient Practice	There is not enough practice
H	Language Difficulty	The language is difficult to learn
I	Lack of Practical Application	The course is not applicable or relevant
J	Materials / Course Organization	Course content is not sufficient and not well organized
K	Teacher issues (= one of the language-specific categories)	Teacher or teaching has areas for improvement

Based on the finalized categories, we checked through the data throughout languages and built the theories which will be presented in the next section:

4. Major Findings

4.1 Summary of Segmented Comments

Given the focus on qualitative analysis, this study exclusively examines the positive and negative open-ended comments provided by students. These comments correspond to the sections titled "What I like about the module" and "What I did not like about the module," where students are encouraged to freely express their thoughts and opinions on any aspect of the module they wish to elaborate on. Overall majority of the languages received more positive comments than negative. Table 4 outlines all the segmented comments analysed (total n = 1472).

Table 3 - Number of Segmented Comments

Languages	Positive Comments n	Negative Comments n	Total Comments	Positive Rate %
Arabic	15	9	24	63%
Bahasa Indonesia	32	18	50	64%
Chinese	56	37	93	60%
French	152	64	216	70%
German	94	74	168	56%
Hindi	28	6	34	82%
Japanese	163	110	273	60%
Korean	174	112	286	61%
Malay	51	62	113	45%
Spanish	90	41	131	69%
Tamil	5	3	8	62%
Thai	48	21	69	70%
Vietnamese	6	1	7	86%
Total for 13 languages	914	558	1472	62% (Average)

The comments in the students' online feedback titled "Why I Like the Language Course" were systematically arranged into columns, each denoting a distinct category, labelled from "A" to "L". Each row comprises segments of feedback comments from students regarding different facets of their language training experience. The following are the principal themes identified through theory building based on students' opinions regarding their appreciation for language education, accompanied by illustrative comments. Sample comments are extracted from the language that contains a significant number of corresponding remarks.

The abbreviations of the following languages are indicated in brackets after the sample comments: Arabic (AR), Bahasa Indonesia (BI), Chinese (CH), French (FR), German (GR), Hindi (HD), Japanese (JP), Korean (KR), Malay (ML), Spanish (SP), Tamil (TM), Thai (TH), Vietnamese (VT)

4.2 Why I Like the Language Course

A: Interesting and Enjoyment. Across all languages, the most frequently recurring comments were "interesting" and "fun." This suggests that students' motivation to learn can be significantly enhanced by "fun" and "interesting" contents or courses.
- very easy to find it super fun (KR)
- Spanish is interesting to learn (SP)
- It was very enjoyable and fun learning a foreign language (ML)

B: Interactive and Engaging. The interactive and engaging classroom activities were well-received by the students. This implies that interactive activities, including games, roleplays, and discussions, etc. can foster a positive association with language learning, thereby motivating students to engage in their learning process.
- Interactive and made me more passionate about learning Korean (KR)

- the lessons are very effective because they are very engaging (SP)
- the fact that we can speak with other students a lot more than in regular modules (JP)

C: Cultural Exposure. Students placed a high value on cultural elements in language courses. This suggests that students view language as more than just a means of communication; it is also a means of comprehending cultural contexts, which can enhance their motivation and commitment to the course.

- A great initial introduction to the Thailand culture (TH)
- I liked how the course also focused on the cultural aspects of the course (BI)
- It allowed me to better appreciate Vietnamese culture (VT)

D: New Language Acquisition. This is another of the most frequently encountered comments in various languages. Comments such as "I got to learn a new language system (CH)" suggest that students appreciate the opportunity to learn a new language, while "it is a new subject that is a breath of fresh air (KR)" suggests that students appreciated the language course as a source of comfort or refreshment in contrast to their rigorous core subjects.

- I love having the opportunity to learn a new language (GM)
- have fun learning a new language despite its difficulty (VT)
- new topic outside of my technical course (SP)

E: Speaking Practice Opportunities. Students highly regarded the availability of practice opportunities, particularly speaking exercises. This serves as confirmation of the importance of interactive components in the course design, indicating that the inclusion of a diverse and frequent array of practice activities enhances student engagement and the perceived utility of the course. However, only a small number of language courses received such feedback.

- Since the class size is small, we get a lot of practice time as well (VT)
- enjoy speaking and practicing Chinese with my classmates and my professor (CN)
- The fact that we can speak with other students a lot more than in regular modules (JP)

F: Positive Teacher and Peer Influence. A number of comments emphasised the significance of a supportive environment, with a particular emphasis on instructors and classmates. This implies that student satisfaction in language courses is influenced by the role of teachers and peers, which can also improve the overall course satisfaction and learning outcomes.

- teacher made the class enjoyable (CN)
- good friendships with classmates (HD)
- I love the people in the class as well, many of us are generally very fun! (FR)

G: Interest in the Language and Culture. Personal interest in the language was a significant factor in the student's enjoyment of the course. The course was perceived more favourably by students who were personally invested in acquiring a particular language. This implies that by motivating students to investigate and articulate their rationales for selecting a specific language, their dedication and admiration may be improved.

- Learning more about the korean language and culture (KR)
- I love French, so being able to learn it was a dream come true! (FR)
- I like languages and Indonesia (BI)

H: Practicality and Usefulness. Students valued courses that provided practical applications, considering language skills to be practical, applicable, and valuable beyond the classroom. This implies that the integration of real-world applications, which are founded on cultural scenarios and daily conversation in a variety of contexts, may fortify students' motivation.

- The course allowed me to learn a new language which is very useful especially when I travel to Indonesia (BI)
- the fact that this course was able to help me converse with my thai friends! (TH)
- I was able to appreciate and learn a new language that may be useful for my future career (ML)

I: Appropriate Course Pacing. The course's pace affects students' perception of its manageability and effectiveness. Feedback about good pace suggests that a well-balanced pace facilitates learning without overwhelming students. A structured yet flexible pace allows students to absorb new information steadily, enhances retention and comprehension. Nevertheless, the number of courses that received such feedback was restricted.

- The pace is just nice (TH)
- very chill and easy to follow (ML)

J: Useful Assignment/Assessment. Students appreciated assessments that were both balanced and diverse, as they offered clear indicators of their development in various language areas. This suggests that assessments should be strategically intended to evaluate students' progress throughout the course by addressing various language skills, including listening, speaking, writing, and reading.
- Has a wide range of segments to test our understanding of French language – written tests, oral, hand–written assignments (FR)
- There are various different kinds of assessments including vocabulary tests, role play, assignments (GM)

K: Well-organized Course and Materials. The course organisation and structure, as well as a diverse array of materials, were articulated by a significant number of students. This suggests that supplementary assistance and autonomous learning are fostered by a well-organised curriculum and appropriate learning materials, which in turn increase student motivation.
- The course is very well structured (AR)
- Taught in a very well structured manner! (GM)
- very nice balance of theory and practice, theory being homework, practice in tutorials (JP)

L: Accomplishment and Satisfaction. Several students expressed their satisfaction and sense of accomplishment in the process of acquiring a new language. Statements such as "able to master a new language" are indicative of the rewarding experience of skill acquisition. Students can be motivated by this sense of proficiency, which validates their progress and promotes ongoing engagement with the language.
- the amount of knowledge gained at the end is very impressive (HD).
- has been taught can be further developed on our own or by following up with the other levels (AR)
- My confidence in speaking Chinese has increased and I am motivated to continue my studies (CH).

In conclusion, the aforementioned findings suggest that students value language courses for a variety of reasons, including practical utility, structured support, and cultural learning, as well as interactive engagement. Concurrently, certain trends may be identified, which will be elaborated upon at a later date. These insights offer invaluable advice on how language courses can be designed to engage students and how to cultivate long-term student motivation in language acquisition.

4.3   Why I Don't Like the Language Course

The comments in the students' online feedback titled "Why I don't like the Language Course" were systematically organised into columns, each signifying a unique theme or concept, and labelled from "A" to "K". This arrangement was similar to the aforementioned. Segments of feedback comments from students regarding various aspects of their language learning experience are found in each row. The following are the primary themes that were identified through theory building from students' perspectives on their appreciation for language education, accompanied by illustrative comments. In comparison to positive remarks, negative comments were scarce and were exclusively found in specific language courses. Sample comments are extracted from the language that contains a greater number of corresponding remarks, even if the number is only a few.

A: Heavy Workload. The heavy workload and time demands were among the most frequently voiced complaints. Numerous students in a variety of language courses reported that the burden was excessive, particularly when they were attempting to balance other academic obligations. They cited frequent quizzes, assignments, and vocabulary lists as being particularly taxing.
- The workload is definitely very high (JP)
- the workload could be quite high for some people since there is homework every other week and there is quite a number of quizzes throughout the semester (TH)
- Too much to learn in 10–11 weeks (AR)

B: Experienced Students. In multiple language courses, students observed that peers who had prior knowledge of the language created an uneven playing field, which impacted grading curves and made it more difficult for true novices to perform well. This is likely attributable to the fact that learners acquire language through popular culture, as these comments were written mainly by students in Korean, Japanese, and Hindi language courses.

- Having smurfers in the course (KR)
- Sometimes, I felt as if certain students knew the language and could speak it already so from the get–go, I was already being disadvantaged (HD)
- There are still groups of students who seems to have good grasp and some knowledge of the language which is unfair to complete beginners taking this course (JP)

C: Assessments/Assignments Issues. Assignments and assessments were frequently identified as challenging, particularly in the context of auditory comprehension. Students frequently encountered difficulties with the pace and clarity of listening exams, and they perceived that assessments occasionally did not correspond with their level of preparedness.

- Listening comprehension was too fast and was not replayed which made it very difficult (JP)
- The writing quizzes are TOO easy, and the listening quizzes are TOO difficult. There needs to be a balance between them (TH)
- The questions for the exams are very ambiguous and hard to understand (ML)

D: Competitiveness. A few courses received a significant number of complaints regarding the bell-curve, and students reported feeling anxious and demotivated when their grades are influenced by performance comparisons with their peers. In particular, bell curves and competitive grading structures add pressure and diminish the enjoyment of learning.

- the bell curve/average scores of the course being very high, making me uninterested in continuing to learn the language (KR)
- the very competitive bell-curve (FR)

E: Pacing Issues. Students felt that the fast pace of the courses did not allow them enough time to fully absorb the material before moving on to new content, making it challenging to keep up, especially for beginners.

- Sometimes the course was so fast paced that I felt a bit left behind by all the new information that got thrown at us during one lecture (CH)
- it was quite slow for the first half of the semester, then after the midterms we get drilled with sooo much vocab (AR)
- It is too fast, I do not have enough time to practice and be comfortable with the new sentence structure before going to the next topic (GM)

F: Logistical Challenges. A few language courses had logistical issues, such as shortage of lesson hours, inconvenient class timings or classroom locations, which added additional strain on students' schedules and hindered their overall learning experience.

- The classes should be longer (GM)
- the location of the classroom one is in utown and the other is in as4, it is quite inconvenient (SP)

G: Insufficient Practice. Several courses were criticized for not offering enough in-class practice, particularly for speaking and listening skills, leaving students feeling underprepared and lacking confidence in real-life application.

- More should be spent on forcing us to speak freely (ML)
- It did not give sufficient practice for sentence structure and assembly (GM)
- I feel that we could have more emphasis on training our listening ability of the language (SP)

H: Language Difficulty, Many students found specific aspects of language structure—such as grammar, vocabulary, or scripts—especially challenging, with insufficient foundational support provided for beginners to build confidence.

- The French words has too many irregularities (FR)
- Difficult language to learn and master (VT)
- characters are really difficult if you have never experienced the writing style before (CH)

I: Lack of Practical Application. Some courses included components (like skits, vlogs, or blog posts) that students found irrelevant or unhelpful for language acquisition. They felt these activities added to the workload without enhancing practical language skills.

- Some characters not really relevant for everyday use (CH)
- The in real life applications of the things we learnt is quite little (KR)
- Some vocab we won't use in everyday life – eg modes of transport (BI)

J: Materials/Course Organization. Disorganization in course materials, resources, and online platforms (like Canvas) was a frequent complaint. Students found it difficult to access or understand assignments and resources due to inconsistent or unclear organization.

- Even simple things like who we should submit our assignments to is not clear, when this could be easily avoided by making use of the Canvas "Assignments" function (ML)
- I wish more resources could be provided (HD)
- i would have preferred more structure in the announcement for canvas, which can be quite messy at times and hard to find important information the announcement for canvas (FR)

K: Teacher Issues. Some students were uncomfortable with the lecturer's comments and teaching style, which they found to be inappropriate and distracting. Comments that were perceived as insensitive or irrelevant detracted from the learning environment.

- The lecturer was absolutely the worst part of the course (ML)
- The idea of a class having two different teachers is very poor – both teachers are not necessarily in sync on what they are teaching. Most pertinently, it forces students to figure out the links between lectures ourselves (ML)

In summary, these findings highlight areas requiring attention to improve student satisfaction and learning outcomes, such as workload management, equitable assessment practices, enhanced practical applications, and better course organization.

4.4 Major students' negative comments

It is encouraging to note that students provided more positive than negative feedback, as illustrated in the findings above. This provides valuable insight into the aspects of the language courses that are performing well. By capitalizing on these strengths and addressing areas of improvement, the overall quality of the courses can be enhanced. Certain limitations—such as class hours and class size—are factors beyond teachers' control. While these aspects may present challenges, improvements can still be made in areas under our efforts, such as curriculum, teaching pedagogy, learning materials and assessment.

Therefore, this section will focus on addressing areas that can be improved within the scope of our control. Specifically, it will discuss key themes focusing on Assessment and Assignment Issues, Insufficient Practice, and Materials and Course Organization. Figure 3 provides a summary of the most frequent complaints and requests given by the students across larger language courses, including Japanese, Korean, Chinese, French, German, Spanish, Malay, and Bahasa Indonesia.

Figure 3. Frequency of students' negative comments on three categories
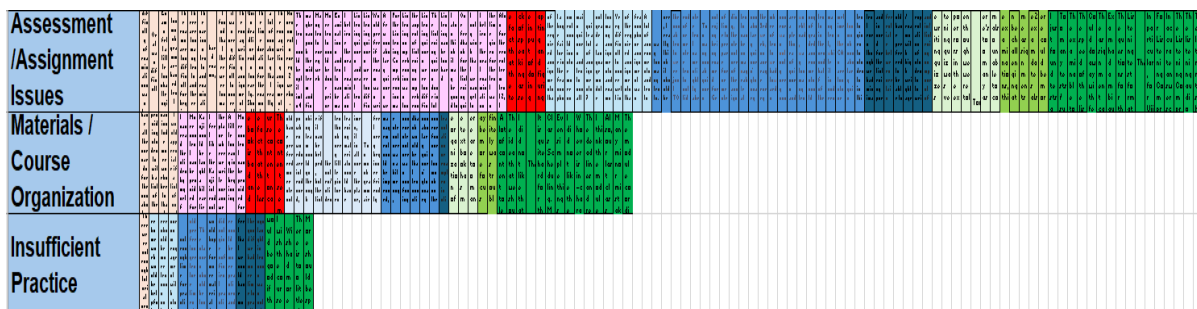
Legend

| Korean | Japanese | Chinese | French | German | Spanish | Thai | BI | Malay |

The following is a summary of the major criticisms provided by students across the major language courses.

C: Assessments/Assignment Issues. Among three categories, assessments and assignments issues are the most unfavourable component shared among students across languages.

Korean: The feedback highlights concerns about the difficulty of exams, particularly for beginners, and the heavy emphasis on grammar-based tests. Students also mentioned challenges with exam timing, frequent assessments, unclear essay rubrics, and the need for more vocabulary quizzes. They suggested extending exam durations and quiz deadlines to alleviate these issues.

Japanese: Students expressed concerns about the frequency and intensity of assessments, with some suggesting the test schedule be adjusted to reduce workload and anxiety. Several comments highlighted difficulties with listening quizzes, especially due to the speed and format of the audio, and the lack of time to process answers. There were also requests for oral exams to be individual assessments rather than team-based, so that teachers could better evaluate individual speaking skills.

French: Students expressed that some take-home assignments were tedious and lengthy, especially in an introductory language module. Some students felt that assessments should better incorporate conversation practice and suggested that certain assignments, like the "voyage francophone," were time-consuming and not necessary. Overall, the frequency and difficulty of assignments and tests were seen as overwhelming.

German: Students expressed concerns about the frequency and workload of assessments, particularly the many vocabulary quizzes, which they found overwhelming, especially for a beginner-level course. There were complaints about the timing of the semester tests, which overlapped with other assignments, leaving little time for revision. Some students found the listening tests difficult due to fast accents, and the vocabulary quizzes were often seen as excessive, with unclear or repetitive content.

Spanish: Students expressed concerns about the oral test, noting that they had minimal practice prior to it. There were concerns about tests and exams carrying a high weightage, as well as the expectation for students to write an essay for the first continuous assessment (CA), which some felt was too challenging. Additionally, the listening components of the tests were seen as too fast, making it hard for beginners to understand.

Thai: Students noted that there was a lack of balance between writing and listening quizzes, with writing quizzes being too easy and listening quizzes being too difficult. The listening quizzes were particularly challenging due to the speed, making students guess answers instead of understanding them fully. Additionally, students felt that the mid-term format did not match the expectations set in the homework assignments, especially with unannounced changes regarding pronouns.

Malay: Students found the assessments overwhelming, with too many tests and assignments for a beginner-level course. They mentioned difficulties with the listening comprehension due to fast speed and poor audio quality, which impacted their performance. Additionally, there were complaints about ambiguous exam questions, poorly structured assignments, and content-heavy exams.

J: Materials / Course Organization. Materials and course organization was another major components students perceived negatively.

French: Students suggested improvements in the course structure, especially in organizing Canvas announcements, which they found messy and hard to navigate. There were requests to introduce vocabulary together with gender (un, une) to reduce the extra work of searching for it later. Additionally, students requested that listening exercises be slowed down for better comprehension, and that more learning materials would be helpful. There were concerns that the course's focus on grammar, conjugation, and subject-verb agreement could be better structured and made more beginner-friendly.

German: Students found issues with course management and structure, mentioning that content was difficult to find and there were concerns about the vocabulary quizzes, with students noting that the glossary was poorly arranged and contained repetitions or inaccuracies. The frequency of vocabulary quizzes, combined with the volume of words to memorize, was seen as overwhelming. Additionally, some students felt that the course focused too much on grammar, leaving little time to enjoy and understand the language.

Malay: Students expressed frustration with the course's disorganization, particularly the scheduling issues. There were complaints about a lack of a fixed vocabulary list, unclear exam content, and mismatched information across Canvas, slides, and assignments. The course's coordination was criticized, with students mentioning that changes in deadlines, test dates, and course expectations were not communicated well.

G: Insufficient Practice. Students of some programmes also felt that there is not enough conversation practice provided by the teachers.

German: Students mentioned that there was not enough time for practice and suggested longer lecture times (preferably 2 hours instead of 1.5 hours). There was also a request for more practice material and course notes to help grasp the concepts better. Some students felt that the course did not provide sufficient practice with sentence structure.

Malay: Students expressed a desire for more practice in conversational Malay, as well as an emphasis on forming sentences. They suggested that the course should focus more on conversational vocabulary rather than adjectives, which would be helpful for practical application in writing and speaking.

5. Summary and Discussion

5.1. Language Similarities

Table 4 and Table 5 summarise the frequency of segmented comments to address RQ3: Are there positive and negative shared features across the 13 language courses? The intensity of each feature within each language group is indicated by the colour; the darker the colour, the more frequently the corresponding remark segments appeared. This leads to the emergence of some trends, which will be elaborated upon in the subsequent section. Note that Hindi, Tamil, and Vietnamese are weaker colours due to few numbers of comments overall.

Table 4. Frequency Table of Positive Features of Each Language

		AR	JP	KR	SP	BI	TH	VT	FR	GM	HI	TM	ML	CH
A	Interesting and Enjoyment	■	■	■	■	■	■			■			■	
B	Interactive and Engaging							■						
C	Cultural Exposure				■	■	■	■	■		■			
D	New Language Acquisition		■	■	■				■		■		■	■
E	Speaking Practice Opportunities		■											■
F	Positive Teacher and Peer Influence	■					■		■	■	■		■	■
G	Interest in the Language and Culture			■										■
H	Practicality and Usefulness							■						
I	Appropriate Course Pacing								■			■	■	
J	Useful Assignment/Assessment													
K	Well-organized course and materials	■	■	■	■	■			■	■	■	■		
L	Accomplishment and Satisfaction	■									■			

Table 4 is a summary of the positive features of each language. From this, the following trends can be observed.

Firstly, **A: Interesting and Enjoyment** were predominantly perceived by students from AR, JP, KR, SP, and ML. These students also appreciated **K: Well-organized course and materials.** This suggest that classroom activities and teaching/learning materials play a key role for making the course / lessons interesting and enjoyable. If we look at the languages themselves, certain languages have complex written scripts, and the introduction of tones compared to some languages which use the

Latin alphabet. It is notable that despite needing to learn an entirely new script, students of AR, JP, KR TH still indicate that they found the course to be interesting and enjoyable. This occurs despite the Arabic and Japanese students reporting a substantial workload. These findings indicate that students may derive pleasure from language acquisition, even when faced with a new script or challenging language, provided the course is well-structured and utilises thoughtfully designed materials.

Secondly, students in BI and TH appreciated **C: Cultural Exposure.** This may be because Indonesia and Thailand are popular destinations for Singaporeans to travel to and are in close proximity to Singapore. This also reflects the students' cultural project of the respective programmes. These students also appreciate **H: Practicality and Usefulness.** They mentioned that the target language is useful for travelling when they visit the target countries.

Thirdly, students in CH predominantly expressed their appreciation for the course due to **D: New Language Acquisition**. This may be due to their status as exchange students primarily from Western nations, where they lacked sufficient exposure to the target language in their home countries.

Table 5 is a summary of the negative features of each language.

Table 5. Frequency Table of Negative Features of each Language

		TH	CH	JP	AR	GM	SP	FR	BI	KR	HI	ML	TM	VT
A	Heavy Workload	■	■	■	■	■			■					
B	Experienced Students									■	■			
C	Assessment/Assignment Issues	■	■	■		■	■	■	■	■	■	■		
D	Competitiveness									■				
E	Pacing Issues	■	■	■	■	■	■							
F	Logistical Challenges													
G	Insufficient Practice											■		
H	Language Difficulty				■		■	■					■	■
I	Lack of Practical Application								■					
J	Materials/Course Organization		■					■			■	■		
K	Teacher Issues													

According to the table, the following trends can be observed.

Firstly, **A: Heavy Workload, C: Assessment /Assignment Issues, and H Language Difficulty** were most unfavourable comments perceived by the students of TH, CH, JP, AR, and BI. This may be due to the complex writing system of the target language and the frequency of assignments and assessments. This should be why they also feel the pace is too fast.

Secondly, **B: Experienced Students** was most strongly indicated by students in KR. It may be a testament to South Korean soft power, through their cultural exports such as Korean pop music or Korean dramas, which has resulted in students learning Korean, and subsequently desiring to formalize such learning at the university level. Similarly, learners of HI are typically exposed to cultural elements such as Bollywood cinema, music and social media.

Thirdly, **H: Language Difficulty** were perceived by students in SP, FR, TM and VT. Those difficulties arose from different reasons, for instance, SP was perceived as challenging in listening, FR was due to the grammar (including gender) and pronunciation, TM for its script and VT for its tones. GM received comments about difficulty of grammar as well, however there were more comments against assessment / assignment, heavy workload and pacing issues.

5.2   Implications

This study highlights numerous positive aspects of the courses that could be the major motivational factors for learners to continue learning the specific language. On the other hand, negative features discovered in this study could be the major reasons to discontinue the learning of the respective language. These insights would enable educators to make timely adjustments that align with students' evolving needs and challenges, supporting a responsive curriculum that adapts effectively at each stage of language proficiency. This approach would facilitate evidence-based curriculum adjustments, refining language education to better support students' learning needs and motivations throughout their language learning journey.

Consequently, the findings are profoundly relevant and enlightening for enhancing students' motivation.

Nevertheless, certain limitations must be acknowledged. Feedback was exclusively gathered from students enrolled in Level 1 courses. This may offer preliminary insights for students unfamiliar with the language; nevertheless, if the respondents are from advanced courses, their perspectives may differ. Moreover, the data was obtained from a single institution, and the results may not be generalisable to other institutions. The results may be affected by the attributes of the educational environment in which this study was performed. Subsequent research could mitigate these constraints by broadening feedback acquisition throughout numerous semesters at diverse schools. The findings open pathways for future research to expand on insights across proficiency levels and over time. Ultimately, this study lays the groundwork for a more responsive and evidence-based framework in language education, enriching the language learning experience.

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Proceedings Part 3

Charting FUTURE DIRECTIONS, Navigating Emerging Horizons

The papers in Part 3 demonstrate a forward-thinking approach to tackling challenges in language education by combining cutting-edge technologies and sociocultural insights. They highlight under-researched areas, setting a trajectory for future advancements in technology-enhanced and culturally informed language education. Key themes include:

- **Technological Innovations**: Papers explore the potential of advanced technologies like **Generative AI** and **eye-tracking tools** to enhance pedagogy and better understand cognitive processes. For example, studies analyze AI-generated dialogues to facilitate academic spoken English (*Mišćin, Sekitani et al.*) and apply eye-tracking methods to improve reading efficiency (*Hayashi & Sato, Song et al.*).

- **AI Literacy and Pedagogical Applications**: A focus on developing **AI literacy** among educators and learners ensures ethical and effective integration of AI into language education. Investigations include analyzing trends and patterns in AI tools (*Mišćin, Wahyudi*) and examining collaborative AI-driven learning outcomes (*Liu*).

- **Cognitive and Sociocultural Insights**: Studies address the cognitive aspects of language processing and the sociocultural factors influencing language maintenance. Examples include the cognitive processing of passive sentences and written texts (*Song et al., Hayashi & Sato*) and parental attitudes toward heritage language education (*Guo*).

- **Interdisciplinary Approaches**: Drawing from cognitive linguistics, corpus linguistics, and educational technology, these papers emphasize the importance of interdisciplinary methods. Combining digital tools with language learning strategies fosters innovative teaching practices (*Wahyudi, Liu*).

- **Future-Oriented Perspectives**: By identifying emerging gaps and uncharted areas, the studies contribute to **human-AI collaboration frameworks** and culturally responsive teaching, setting directions for future research (*Wahyudi, Guo*).

Together, these studies reflect a commitment to reshaping educational practices, integrating advanced technologies, and addressing sociocultural dynamics for future-ready foreign language education.

22 - The language of ChatGPT

Evelina Miščin
evelinamiscin@yahoo.co.uk
RIT Croatia, Zagreb, Croatia

Abstract

This research deals with the language of Artificial Intelligence (AI) with a focus on distinguishing characteristic vocabulary that delineates discourse pertaining to AI. The central inquiry revolves around identifying lexical patterns specific to AI discourse, thereby aiding educators in discerning when a paper is written by AI. Employing SketchEngine, we compare corpora from students' writings and ChatGPT, on analogous topics. Our methodology involves linguistic analysis to pinpoint unique vocabulary prevalent in ChatGPT corpus that distinguishes it from student-written texts. Preliminary results exhibit a distinct lexicon associated with AI discussions, including technical terms, jargon, and specialized terminology. These findings suggest the potential for developing linguistic markers to detect AI-centric content. The significance of this research lies in facilitating educators' ability to differentiate AI-related discourse, thus enhancing pedagogical practices and scholarly inquiry in language education. By establishing the distinct language of AI, this study contributes to a nuanced understanding of AI discourse and its implications for language education.

Keywords: AI-generated text detection, Academic integrity, Linguistic analysis, ChatGPT vs human writing, Educational implications of AI

1. Introduction

AI has become more and more prevalent in our daily lives. In the same way, it is finding its place in education. It could be useful for educators, helping them in various ways – from suggesting classroom activities, generating ideas for lesson plans, creating quizzes. Educators can also use it to facilitate debates by asking thought-provoking questions, or for generating case studies that promote discussion and critical thinking.

Despite its advantages, AI, in this case ChatGPT, can be misused by students who might use it for generating entire essays or projects without proper citation which leads to a lack of original thought and critical thinking. There are still no tools that can discover the use of ChatGPT or they are quite unreliable. Therefore, this research aims in investigating the language of ChatGPT trying to establish if there are certain structures and words used by ChatGPT which can help educators in recognising if the paper was written by a person or AI.

2. Theoretical background

There have been several studies dealing with the similar topic. For example, Mindner et al. (2023) explore methods to detect whether a text has been written by a human or generated by artificial intelligence (AI), specifically focusing on ChatGPT. They conducted experiments to classify basic and advanced human-generated and AI-generated texts, as well as AI-rephrased texts. The study includes the creation of a new text corpus covering ten school topics where the following features were used for text classification: perplexity, semantic, error-based, readability, list lookup and AI feedback features. The study achieved F1 scores above 96% for basic AI and human-generated text detection and over 78% for AI-rephrased texts. The paper concludes that combining traditional and new features can significantly improve the detection of AI-generated content, outperforming current tools like GPTZero.

Georgiou (2024) explores linguistic differences between human-written and AI-generated texts. His study analyses various phonological, morphological, syntactical, and lexical features in both types of text using Open Brain AI, a computational linguistic tool. Among other findings, it is interesting to mention that AI-generated texts included more difficult words and content words, whereas human-written texts favoured easier words and function words. The study also emphasises the benefit of tools like Open Brain AI in linguistic analysis and assessment, particularly useful in education and healthcare. It concludes that despite high linguistic competence of AI-generated texts, there are clear differences between AI and human writing.

The article by Dugan et al. (2023) explores how well humans can detect transitions between human-written and machine-generated text. The authors used the RoFT platform, a gamified system where participants try to identify machine-generated sentences in various genres, such as news articles, stories and recipes. Their research established that certain genres, like recipes, were easier to detect compared to news and stories. The paper concludes that detecting AI-generated text remains a challenging but essential task, and suggests that with better tools and training, humans can enhance their ability to differentiate between real and fake text.

Another article, written by Berber Sardinha (2023) compares AI-generated texts, specifically those produced by ChatGPT, with human-authored text. It uses a multidimensional analysis approach based on the linguistic dimensions established by Biber (1988). The study indicates that AI-generated content, although sometimes resembling human language, still fails to fully capture the complexity of human communication. The conclusion is that while AI-generated texts can mimic human writing to some extent, they still exhibit artificiality, particularly in conversational and narrative contexts, showing that current AI models are not yet fully capable of replacing human-authored texts in various registers.

Similar research was carried out by Amirjalili et al. (2024) where they compared AI-generated texts and human-written academic texts in the context of English literature. The researchers compared an essay written by a second-year English literature student with a similar essay generated by ChatGPT-4. They analysed assertiveness, self-identification, and authorial presence using the "Voice Intensity Rating Scale" (VIRS). The paper highlighted the current limitations of AI in replicating the complexity and authenticity of human academic writing. The study suggest that educators must be cautious in how these tools are integrated into academic contexts, particularly in upholding academic integrity and encouraging genuine authorship.

All these studies explore how AI-generated texts differ from human writing and how these differences can be detected and analysed using various linguistic and computational approaches. They stress the importance of advancing detection tools and caution against over-reliance on AI in contexts requiring genuine authorship.

3. Research

The research was carried out in the fall 2023/2024 with Writing Seminar students. 56 students participated. Their task was to write a 2500-word essay on any topic of their choice. However, only 20 best essays were chosen for the research. Here is the list of titles of the chosen essays:
1. Climate change and its effects on health
2. Constant stress affecting students' mental health
3. The relationship between mental health condition and creative expression
4. Impact of hunger on cognitive function and memory recall
5. NBA vs the rest of the world
6. Rage to redemption: analysing Kratos' character development
7. Technologies in modern cinematography
8. The role of motonautica in student life
9. Reinvesting money to gain financial freedom
10. Protecting the human body to live in space and other planets
11. Developing social skills through video games
12. Down syndrome
13. Loot-boxes as in-game monetization system and their effect on the gaming industry

14. Qatar after FIF World Cup 2022
15. Albanian Besa
16. Will artificial intelligence make humanity smarter or dumber in the future?
17. Teaching strategies and outcomes: Finland and Croatia compared
18. Killer whales and the damaging effects of men on marine life
19. Differences in prosciutto production in Istria and Dalmatia
20. Feline Affection: Unravelling the Cat-Human Bond

After that, ChatGPT was asked to write the same length essays on the same topics. The aim of the research was to answer the following questions:

- How do the vocabulary and linguistic structures in AI-generated content differ from those in student-written texts on similar topics?
- What specific technical terms, jargon, collocations or specialized terminology are prevalent in AI-generated discourse that can be used as markers to detect such content?
- What are the pedagogical implications of being able to distinguish AI-generated language from human-authored writing in an educational context?

4. Procedure

Twenty best students' essays on various topics of their choice were collected and put into one file. On the other hand, ChatGPT 4.0 was asked to write the 2500-word essays on the same topics as mentioned before, for compiling the second file. Students' corpus consisted of 47,209 words and ChatGPT corpus of 37,748 words.

5. Results and discussion

Both files were separately analysed by *SketchEngine*. Sketch Engine's automatic keyword and terms extraction tool was used to obtain a list of the most frequent keywords, collocations and concordances (Figure 1).

Figure 1. Sketch Engine's interface, showing, among other features, the option "Keywords: Terminology extraction" that was used to extract the most frequent terms.

Both files were separately analysed. Function words were neglected and only content words were used for concordance analysis. After this, the results were compared.

First, it had to be established whether there are any significant differences between the two files. SketchEngine also offers this option as it can be seen in Figure 2.
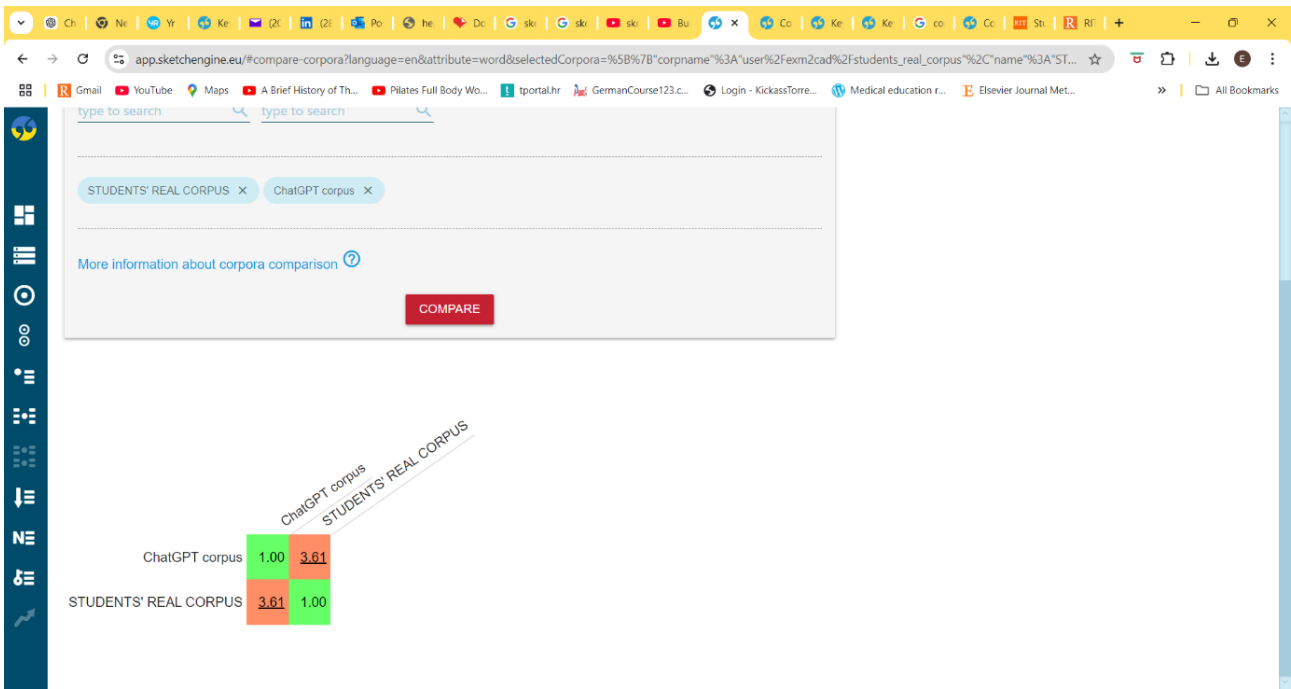
Figure 2. The difference between two corpora

As it can be seen in Figure 2, the difference between two corpora is 3.6. The value of 1 means identical corpora and the higher the score, the greater the difference between corpora. Therefore, the difference here is quite significant.

We shall start by analysing the most frequent words that appear in each corpus. Figure 3 shows 100 most frequent words in the students' corpus.

word (6,647 items | 54,547 total frequency)

Word	Frequency	DOCF	Word	Frequency	DOCF	Word	Frequency	DOCF
1 ,	2,969	1	35 people	126	1	69 important	80	1
2 the	2,591	1	36 but	124	1	70 research	78	1
3 .	2,223	1	37 was	124	1	71 cats	77	1
4 and	1,617	1	38 also	124	1	72 could	75	1
5 of	1,501	1	39 will	118	1	73 than	75	1
6 to	1,424	1	40 them	116	1	74 into	74	1
7 in	970	1	41 these	116	1	75 who	73	1
8 a	968	1	42 :	115	1	76 time	72	1
9 is	806	1	43 change	114	1	77 health	72	1
10 that	733	1	44 other	109	1	78 games	70	1
11 with	466	1	45 at	108	1	79 human	70	1
12 it	428	1	46 climate	103	1	80 social	69	1
13 as	427	1	47 life	103	1	81 such	68	1
14 for	407	1	48 there	101	1	82 students	68	1
15 are	397	1	49 how	101	1	83 about	67	1
16)	382	1	50 all	101	1	84 education	67	1
17 (	382	1	51 mental	98	1	85 besa	67	1
18 this	358	1	52 skills	97	1	86 different	66	1
19 be	316	1	53 when	95	1	87 while	66	1
20 on	304	1	54 his	93	1	88 we	65	1
21 their	294	1	55 would	89	1	89 kratos	65	1
22 "	271	1	56 many	87	1	90 new	64	1
23 can	250	1	57 stress	87	1	91 financial	64	1
24 not	227	1	58 even	87	1	92 been	63	1
25 they	204	1	59 space	87	1	93 way	63	1
26 more	203	1	60 between	86	1	94 those	62	1
27 by	192	1	61 world	85	1	95 game	62	1
28 have	192	1	62 some	84	1	96 were	61	1
29 has	191	1	63 he	83	1	97 what	61	1
30 from	190	1	64 like	83	1	98 used	61	1
31 which	162	1	65 i	83	1	99 down	61	1
32 an	158	1	66 most	82	1	100 et	60	1
33 or	149	1	67 only	81	1			
34 one	140	1	68 its	81	1			

Figure 3. The most frequent words in the students' corpus

As it can been seen in the above Figure, even the punctuation marks appear in this frequency. As expected, the most frequent are function words and the first content word is 'people' which occurs in the 35. place.

For ChatGPT corpus, the result was a bit different and can be seen in Figure 4.

word (5,012 items | 42,704 total frequency)

Word	Frequency	Word	Frequency	Word	Frequency	Word	Frequency
1 ,	2,497	26 from	131	51 individuals	76	76 down	61
2 and	2,421	27 has	122	52 killer	76	77 other	60
3 .	1,933	28 also	99	53 significant	75	78 potential	58
4 the	1,650	29 support	96	54 whales	74	79 while	57
5 of	1,178	30 or	94	55 more	74	80 syndrome	57
6 to	930	31 marine	90	56 cognitive	73	81 through	57
7 in	614	32 challenges	90	57 change	73	82 cats	57
8 a	610	33 games	90	58 international	70	83 crucial	57
9 can	509	34 its	90	59 often	70	84 lead	56
10 for	452	35 students	89	60 which	70	85 between	56
11 is	315	36 mental	87	61 systems	69	86 including	56
12 with	286	37 his	86	62 it	68	87 an	55
13 as	278	38 :	86	63 ai	67	88 creative	55
14 that	231	39 human	85	64 loot	67	89 effects	55
15 on	227	40 development	84	65 financial	67	90 strategies	54
16 this	222	41 provide	83	66 skills	66	91 role	51
17 are	206	42 climate	81	67 activities	65	92 hunger	51
18 health	201	43 (	79	68 boxes	65	93 global	50
19 their	196	44 impact	79	69 like	65	94 help	50
20 "	168	45)	79	70 be	63	95 space	50
21 social	166	46 enhance	77	71 into	62	96 physical	50
22 by	166	47 education	77	72 essential	62	97 both	50
23 these	153	48 life	77	73 besa	62	98 cultural	49
24 such	150	49 players	77	74 world	61	99 promoting	49
25 have	132	50 stress	76	75 prosciutto	61	100 learning	49

Figure 4. The most frequent words in the ChatGPT corpus

The above figure shows that the function words are also the most frequent. However, the first content word appears a bit earlier than in the students' corpus and it is 'health', already in the 18. place. Both corpora share some frequent nouns – change, skills, stress, health, games, students, education, but they appear in different places. Words which only appear among the first 100 words of the students' corpus are: people, space, world, research, cats, time and besa, whereas those that appear only in the first 100 words of the ChatGPT corpus are: support, challenges, development, impact, life, players, individuals, whales and systems. From the semantic point of view, the students' corpus uses words more oriented towards personal, experiential or societal themes and the ChatGPT corpus uses words oriented towards scientific and social issues.

The next step was to compare concordances. The example is given for the word 'health' which appears as the most frequent in both corpora.

Figure 5 shows the concordances for 'health' in the students' corpus.

Figure 5. Concordances for 'health' in the students' corpus

It can be seen that 'health' most frequently occurs in collocations like 'mental health', 'students' mental health', 'health science', 'health implications', 'psychological health'. Figure 6 shows concordances for 'health' in the ChatGPT corpus.

Figure 6. Concordance for the word 'health' in the ChatGPT corpus

The above figure shows that 'health' occurs in somewhat different collocations and phrases – for example 'health effects', 'health conditions', 'health impacts', 'health consequences', apart from the known one 'mental health'. There are also multi- word collocations like 'significant health impacts', 'preexisting health conditions', 'public health challenge'. Based on these two concordances, it can be concluded that in the ChatGPT corpus, 'health' is more associated with public health impacts, while the context in which 'health' appears in the students' corpus is more focused on individual well-being and educational setting, emphasising a personal perspective.

The last part of the research involved the analysis of collocations which occur in both corpora.

Figure 7 shows a hundred collocations in the students' corpus.

	Term		Term		Term
1	istrian prosciutto	35	students' mental health	69	psychological ownership
2	stress cope	36	creative outlet	70	gacha game
3	academic stress	37	deep space	71	developing social skill
4	down syndrome	38	blood feud	72	protein percentage
5	dalmatian prosciutto	39	multiplayer game	73	long-term depression
6	mental performance	40	don tran	74	albanian people
7	stress coping strategy	41	aspect of motonautica	75	mental well-being
8	creative expression	42	motoric ability	76	academic life
9	coping strategy	43	space ray	77	world of finance
10	fifa world cup	44	conscious sensation	78	gaming industry
11	santa monica studio	45	subjective happiness	79	young individual
12	sworn virgin	46	water percentage	80	star wars battlefront
13	cat behavior	47	human caregiver	81	visual effect
14	long-term potentiation	48	finnish education	82	emotional health
15	cognitive efficiency	49	memory retention	83	major sporting event
16	cooperative skill	50	mental health condition	84	western audience
17	problem-solving skill	51	sony computer entertainment	85	single father
18	space radiation	52	other aspect of life	86	type of job
19	emotional well-being	53	educational system	87	mental health challenge
20	creative activity	54	single-player game	88	augmented reality
21	killer whale	55	genshin impact	89	major sporting
22	space travel	56	sprained ankle	90	effect of climate change
23	monetization scheme	57	art therapy	91	chemical composition
24	synaptic weight	58	mental model	92	star player
25	warren buffet	59	loss of volition	93	effect of climate
26	emotional intelligence	60	entertainment-centric approach	94	professional support
27	emotional resilience	61	good cooperative skill	95	practical effect
28	cognitive performance	62	deep space ray	96	investment strategy
29	secure attachment	63	team-based video game	97	complete gacha
30	financial freedom	64	kind of loot-boxes	98	medicine in space
31	safety awareness	65	paid loot-boxe	99	cat-human bond
32	in-game monetization	66	aspect of life	100	source of academic stress
33	circadian rhythm	67	deep space travel		
34	social skill	68	attachment behavior		

Figure 7. Hundred collocations in the students' corpus

Apart from discipline-specific vocabulary, it can be seen that these collocations include abstract terms, like 'mental performance', 'emotional resilience', 'financial freedom', which denote concepts and qualities characteristic of academic writing. Multi-word terms like 'stress coping strategy', 'problem-solving skill', 'mental health challenge' reflect a linguistic economy, where multi-word terms serve to express complex ideas within a single phrase. Terms like 'psychological ownership' and 'attachment behaviour' demonstrate nominalisation, frequent in academic context to discuss abstract psychological and behavioural concepts. Phrases like 'aspect of life' and 'source of academic stress' serve pragmatic functions, such as generalizing or introducing complex ideas. These hedging expressions soften claims, making statements less absolute, which is a linguistic strategy often used in academic discourse to maintain objectivity.

Figure 8 shows a hundred collocations in the ChatGPT corpus

(items: **9,200**)

Term	Term	Term
1 loot box	35 social dynamics	69 crucial role
2 killer whale	36 health impact	70 creative activity
3 dalmatian prosciutto	37 regional disparity	71 production technique
4 down syndrome	38 other planet	72 prey specie
5 marine ecosystem	39 social skill	73 educational outcome
6 creative expression	40 global cooperation	74 apex predator
7 financial freedom	41 mental health condition	75 pollution control
8 istrian prosciutto	42 cognitive impairment	76 marine mammal
9 international league	43 kratos' character	77 academic performance
10 prosciutto production	44 damaging effect of human activities	78 enabling filmmaker
11 extreme weather event	45 cat-human bond	79 principle of besa
12 cognitive function	46 in-game monetization	80 kratos' journey
13 feline affection	47 damaging effect	81 prosciutto industry
14 health of marine ecosystems	48 resilience of marine ecosystems	82 strong social bond
15 social interaction	49 direct human interaction	83 human activity
16 sustainable fishery	50 achieving financial freedom	84 overall well-being
17 conservation effort	51 availability of prey	85 long-term space
18 human companion	52 albanian society	86 social bond
19 impact of climate change	53 sustainable fisheries management	87 human interaction
20 impact of climate	54 effect of human activities	88 well-rounded individual
21 weather event	55 various aspect of life	89 adaptation strategy
22 habitat destruction	56 chronic hunger	90 real-time rendering
23 player experience	57 extra chromosome	91 education system
24 economic diversification	58 cultural impact	92 habitat restoration
25 health impact of climate	59 space exploration	93 skill development
26 chronic stress	60 teaching strategy	94 competitive balance
27 extreme weather	61 virtual production	95 fisheries management
28 reinvesting money	62 plastic debris	96 ethical consideration
29 modern cinematography	63 executive function	97 socio-economic background
30 health impact of climate change	64 talent development	98 fish population
31 marine life	65 gaming industry	99 environmental sustainability
32 geopolitical influence	66 space mission	100 early warning system
33 passive income	67 adequate nutrition	
34 student-centered learning	68 healthcare infrastructure	

Figure 8. Hundred collocations in the ChatGPT corpus

Collocations like 'chronic stress', 'cognitive function', 'geopolitical influence' are technical and scientific terms, indicating that the corpus provides factual information on many subjects. There are also very frequent abstract nouns like 'social dynamics,' 'economic diversification,' 'cultural impact.' This supports corpus's orientation towards the objective discussions. The formal tone is reinforced by terms like 'conservation effort' and 'production technique,' which describe systematic approaches to problem-solving in environmental and industrial contexts.

By comparing two corpora, it can be concluded that the tone of the ChatGPT corpus is more objective, while the student corpus is more subjective. The lexical choices in the ChatGPT corpus indicate high information density, commonly found in scientific literature. The student corpus uses terms that are less technical and more practical.

6. Conclusion

The analysis reveals distinctive linguistic characteristics between student-written and ChatGPT-generated content. The ChatGPT corpus demonstrates a more objective, technical tone, often using scientific and structured terms to discuss broad, factual topics, whereas the student corpus reflects a more subjective, experiential approach, with language oriented toward individual well-being, academic pressures, and personal engagement. The ChatGPT corpus exhibits high lexical density and formality, as seen in technical terms and structured collocations. In contrast, the student corpus

integrates conversational, accessible language and everyday vocabulary, making it suited for discussions directly relevant to personal experiences and educational themes.

Therefore, the answers to the questions posed in the introduction are as follows:

1. ChatGPT-generated content uses a high density of technical and scientific vocabulary with formal, objective language, focused on abstract, systematic topics. Student-written texts, in contrast, use more subjective language that reflects personal experiences.

2. Key terms and collocations in the ChatGPT corpus include 'cognitive function,' 'geopolitical influence,' 'health impacts,' and 'conservation effort,' which indicate a factual, technical focus.

3. Identifying AI-generated language can help maintain academic integrity, as students would be encouraged to submit original work and develop critical thinking and writing skills. For educators, having linguistic markers to detect AI text enables more accurate assessment of student comprehension and effort. This distinction can also guide curriculum development, supporting assignments that encourage authentic expression and discouraging over-reliance on AI-generated content.

The limitations of the study could be a limited set of topics selected by students. Another one could be overreliance on lexical markers and such a distinction could slowly disappear as AI are constantly evolving and may adopt a more human vocabulary. The analysis could be enriched by examining sentence structures, complexity, and use of passive versus active voice. Including examples of distinct syntactic patterns would strengthen the comparisons but not with the use of SketchEngine.

Future research could examine AI and human-authored texts across a broader range of genres and academic disciplines, from scientific reports to creative writing, to identify genre-specific linguistic markers. Further studies could incorporate syntactic and stylistic analyses, examining sentence length, complexity, and rhetorical devices. In cases of doubt about whether a student used AI, questions could be devised to verify the paper's authorship.

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23 - Generative Artificial Intelligence in English as a Foreign Language Education: A Scoping Review of Tools, Trends, and Pedagogical Effectiveness

Bethellionie Wahyudi
lionienie@gmail.com
Airlangga University

Abstract

Over the past few years, generative artificial intelligence or GenAI has fascinated worldwide publications, showing that the more artificial intelligence (AI) is ubiquitous, the more it becomes a debatable topic for massive publications, considering its benefits to human beings, particularly in enhancing English as foreign language (EFL) teaching and learning experiences. Following this rationale, this study presents, intending to mapping the current research trend or state in the application of GenAI in EFL education. Specifically, this study contributes to delving into GenAI applications in EFL education, specifically mapping the tools together with their effectiveness. Following the aim, a scoping review methodology was carried out, deriving from the scopus database. From 15 publications, this study highlights a couple of prominent GenAI incorporated in English foreign language education: ChatGPT targets productive language skills, consisting of speaking and writing competence, while Andy Chatbot optimizes speaking skills. Further, those previous studies note that GenAI is effective in EFL education. Hence, for future suggestions, GenAI should be incorporated in language education following its benefits to the educator as potential tools to enhance their pedagogical skills. At the same time, for the students, it is beneficial to enhance their language skills, particularly in English. Moreover, for future implications, a map detailing the GenAI tool with its specialty is presented, aiming at increasing GenAI awareness towards its adoption in EFL education.

Keywords: ChatGpt, English language education, EFL, Generative artificial intelligence, GenAI, scoping review

1. Introduction

Over the past few years, generative artificial intelligence, or GenAI, has fascinated worldwide publications, showing that it has advanced several paradigms to illuminate its concept. Yusuf et al. (2024) set the initial explanation by clarifying its function: mimic human intelligence in its conversation. Further, Tlili et al. (2023), Pesovski et al. (2023) and Michel-Villarreal et al. (2023) expand its functions within their study, that is to create valuable and interactive content, elicited from human inquiries. Supporting this perspective, Pesovski et al. (2023) and (Su and Weipeng, 2023) detail its characteristics that are customizable and personalized. Thus, the users are enabled to create content based on their needs. Hence, Michel-Villarreal et al. (2023) predict that if this sort of AI rapidly evolves in a continuum, it will generate innovation and improvements in many fields. All the more, GenAI has become a ubiquitous technology nowadays, reckoning its impacts on human life.

The more artificial intelligence (AI) is ubiquitous, the more it becomes a debatable topic for massive publications, considering its benefits to human beings, particularly in enhancing the learning environment (Kohnke et al., 2023). Taking evidence from one of the AI types, generative AI or GenAI, Kohnke et al. (2023) assert that GenAI revolutionizes the educational industry, aiding students to participate in adaptive and interactive learning experiences. Following this rationale, Law (2024) opines that GenAI is conceptually designed by applying large language models (LLMs) to generate textual and multimodal content as well as art and video-based models. In a similar view, Law (2024) also assumes that this sort of AI caters to the student's needs, supplying vast amounts of information about language sources and learning platforms. Reckoning the function of GenAI, it can be inferred that GenAI is the perfect AI tool for students to engage in language learning activities, recognizing

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the opportunities to elicit valuable language learning resources. From this point of view, it results that many publications sought to endorse this AI as the research intention, particularly in the language education landscape.

Speaking about language education, GenAI is perceived to have a special place in English as a foreign language education after Yuen and Schlote (2024) rationalize that GenAI aids both the educator and learners in enhancing additional language learning experiences. Following the lingua franca concept, English still becomes an additional language to learn in multivarious countries such as Indonesia (Darwin et al., 2023), Iran (Fathi et al., 2024; Hassani et al., 2020), China (Su and Weipeng, 2023), South Korea (Lee et al., 2023), Saudi Arabia (Alzubi, 2024), Algeria (Boudouaia et al., 2024), Vietnam and Thailand (Duong and Suksan, 2024) also many more countries to count. Frankly, those from these countries crave to master the languages following the more opportunities to come. Consequently, GenAI presents to assist them in enhancing the productive skills along with the receptive skills of English speakers, resulting in several publications soliciting evidence to investigate its effectiveness in English foreign language education.

However, a great number of scholars highlight the need for careful consideration of GenAI implementation in EFL education, reflecting on these negative influences. These negative perspective comes from its misuse. Therefore, a great number of publication mention that its use leads to overreliance behavior (Ahmad et al., 2023; Gawlik-Kobylińska, 2024; Jafry & Vorstermans, 2024; Zhang et al., 2024), resulting in diminishing students' cognitive abilities (Yan et al., 2024; Wardat & Alneyadi,. 2024). From this perspective, it can not be denied that the more they use it either for specific purposes or not, it leads to loss of cognitive development due to their dependency. Moreover Cotton et al. (2023) and Nikolic et al. (2024) point out that this action leads to cheating and plagiarism behaviour in continuum. From these points of view, the users is allowed to utilize GenAI in EFL context on condition that it is applied for the specific purposes.

Despite the positive outcomes of artificial intelligence in language education, publications focused on GenAI still need to be made available. Supporting this statement, Law (2024) is in line with the perspective of the study in investigating the application of GenAI in English language education receiving paucity of evidence, culminating in Law (2024) sought to conduct a scoping study contributed to provide a comprehensive insight into the implementation of GenAI in English language education, albeit Law (2024) realize that this study is far from perfect, resulting in noting several gaps to come such as the need to expand its findings on the specific language skills targeted by GenAI, and to explore its effectiveness. In a similar scope, Khan et al. (2024) also set a systematic review in discovering this issue, turning out this study failed to explore this issue in a more extended period, for instance, this study merely focuses on the literature published in 2022 - 2024. Evidently, these studies unveil possible gaps to fill for future studies.

To shrink the gaps, this study offers valuable insights to delve deeper into the application of generative artificial intelligence in English foreign language education, focusing on its effectiveness. From those previous research, it can be viewed that the publications neither mention GenAI effectiveness nor mapping GenAI app together with its effectiveness. For this reason, this study therefore organized a scoping review as the primary method of the study due to its clarity in investigating the GenAI in EFL education remains unclear, showing that most research solely focus on mapping the trend. Furthermore, this study presented a novelty in delivering insights regarding the following gaps. Consequently, this study complemented the gap with the aim of mapping the current research trend or state in the application of GenAI in English foreign language education, focusing on its effectiveness and language-targeted skills.

2. Literature Review

2.1 Artificial Intelligence

Leveraging the application of artificial intelligence in the educational landscape, the literature tends to perceive its meaning in a diverse light. As an initial instance, Shah (2023) claims AI is human intelligence simulated by machines. Hassani et al. (2020) therefore denote its rationale because AI has a computer's ability to solve individuals' challenges, based on the provided data. This view is in

line with the publication written by Zou et al. in 2023. Zou et al. (2023) assume AI is a human virtual assistant due to its characteristics that become general problem solvers (Chowdary, 2020; Fui-Hoon Nah et al., 2023). Summing up, AI is a promising technology to utilize since the benefits look captivating

Regarding the trajectory of artificial intelligence, the typology varies. Following the study's main objective about generative AI or GenAI, this section performs particular points of view regarding its meaning. Most publications are consistent in defining GenAI as artificial intelligence (AI) systems that formulate novel and creative content, such as text, audio, or video (Kalota, 2024; Kohnke et al., 2023; Mannuru et al., 2023; Law, 2024; Lv, 2022; Shah, 2023). Such actions emerge from its characteristics that adapt large language models from AI systems (Law, 2024). Apart from that, Shah (2023) categorizes its variations into several apps or tools as follows: Google's Bard and OpenAI's ChatGPT. To conclude, Hassani et al., 2020 and Shah (2023) expose that GenAI is an AI machine that performs human intelligence in a particular task.

2.2 *Generative Artificial Intelligence In English Foreign Language Education*

After recognizing the characteristics of generative artificial intelligence, GenAI's roles in English foreign language education receive particular variations. Interestingly, GenAI in language pedagogy offers functional features that assist the pedagogical subjects in completing the workload (educator) and course load (students) (Shah, 2023). On the other hand, GenAI also fine-tunes their language skills, implicating productive and receptive skills (Alzubi, 2024; Fathi et al., 2024; Jackaria et al., 2024). More and more, Essel et al. (2024) note that GenAI potentially benefits the advancement of the users' cognitive skills. These skills are imperative in language teaching and learning, and if one fails to elaborate these skills in language pedagogy activities, the outcome decreases (Essel et al., 2024). Critically, GenAI plays a crucial role in innovating pedagogical activities, particularly English foreign language education.

3. **Methods**

Drawing attention to cross-cultural research trends, this study performs a scoping review as the research design, benefitting the researcher to look broadly at the issue of generative artificial intelligence in English foreign language education (Peters et al., 2021). To apply the scoping review methodology, this study manages various stages simplified by Jaleniauskiene & Kasperiuniene. Jaleniauskiene & Kasperiuniene (2023) organize those steps in five phases including defining the research questions, determining the criteria such as exclusion and inclusion criteria of the relevant studies, mapping the data, and reporting the findings. Generally, the framework of this current scoping review literature relies on these phases.

Having conceived the study's objective, the research questions were placed in particular problem statements. First and foremost, this study specified the current research trends in applying GenAI in English foreign language education. Following this statement, it involves specific objects to explore, such as the study's characteristics, year of publication, design, location of study, and participants. The scoping review methodology follows the five-phase framework by Jaleniauskiene & Kasperiuniene (2023), which includes defining research questions, establishing inclusion and exclusion criteria, mapping the data, and reporting findings. This structured approach ensures a comprehensive exploration of current GenAI applications in EFL contexts.

3.1 *Phase 1: Defining Research Questions*

The research questions focus on identifying current trends in GenAI applications for EFL education, examining study characteristics, publication details, research designs, target audiences, and educational contexts. Specifically, this study investigates the types of GenAI tools used, their targeted language skills, and their effectiveness in enhancing EFL teaching and learning.

3.2 Phase 2: Determining Relevant Studies

The Scopus database was selected as the primary source due to its reliability in providing high-quality academic publications (Harnegie, 2013; Zhu & Liu, 2020). Articles published between 2014 and 2024 in English were included, with a focus on primary research aligned with the study objectives. Keywords such as "generative artificial intelligence," "GenAI," "English foreign language," "EFL," "English language teaching," and "English language learning" were used in a Boolean search strategy. The initial screening yielded 185 publications, which were narrowed to 15 after filtering out gray literature and studies unrelated to the objectives.

3.3 Phase 3: Mapping the Data

Thematic analysis, as outlined by Braun & Clarke (2022), was used to analyze the data. Following title and abstract screening, 44 articles were shortlisted, and further review excluded 29 due to non-alignment with the study criteria. The final dataset of 15 articles was categorized to explore recurring patterns and unique insights, focusing on study characteristics, GenAI tools, their applications in EFL education, and potential gaps in the literature.

3.4 Phase 4: Reporting the Results

The findings were presented through thematic analysis, which grouped data into distinct themes, including study characteristics, types of GenAI tools, their applications in EFL contexts, and gaps for future research. A table summarized the core findings, supported by five figures that detailed the identified themes.

4. Result

This chapter reports the findings of the study collected from Scopus database publications, resulting in fifteen literature that met the criteria to delve into. Moving on to the transcription process, a table was presented to unpack the primary data, and five figures were generated to map the findings based on particular themes, including study characteristics, generative artificial intelligence tools, generative artificial intelligence in English foreign language education, and potential gap to offer within the literature. For the last paragraph, it details the provided GenAI effectiveness.

Table 1. Studies included in this review

Title	Author	Yr	Study Design	Location	Participants	Educational Level	GenAI types	Effectiveness	Language Skills	Educational Focus
The effects of generative AI on initial language teacher education: The perceptions of teacher educators	Benjamin Luke Moorhouse, Lukas Kohnke	2024	Qualitative with exploratory study	Hong Kong	24 teacher educators	Higher Education	ChatGPT-4 (provided though Poe.com)	Yes	Writing and speaking	Teaching
Exploring generative artificial intelligence preparedness among university language instructors: A case study	Lukas Kohnke, Benjamin Luke Moorhouse, Di Zou	2023	Qualitative with case study	Hong Kong	12 instructor	Higher Education	ChatGPT-4	Yes	N/A	Teaching

Title	Author	Yr	Study Design	Location	Participants	Educational Level	GenAI types	Effectiveness	Language Skills	Educational Focus
ChatGPT effects on cognitive skills of undergraduate students: Receiving instant responses from AI-based conversational large language models (LLMs)	Harry Barton Essel, Dimitrios Vlachopoulos, Albert Benjamin Essuman, John Opuni Amankwa	2024	Mixed-method	Ghana	125 undergraduate students	Higher Education	ChatGPT	Yes	Cognitive skills (critical, creative, and reflective thinking skills)	Learning
Bridging technology and pedagogy from a global lens: Teachers' perspectives on integrating ChatGPT in English language teaching	Mohammad H. Al-khresheh	2024	Qualitative	Saudi Arabia	46 English language teachers from multiple countries	N/A	ChatGPT	Yes	N/A	Teaching
A Comparative Analysis of the Rating of College Students' Essays by ChatGPT versus Human Raters	Potchong M. Jackaria, Bonjovi H. Hajan, and Al-Rashiff H. Mastul	2024	Quantitative with comparative-descriptive study	Philippines	20 students	Higher Education	ChatGPT-3.5	Yes	Writing	Learning
Utilizing large language models for EFL essay grading: An examination of reliability and validity in rubric-based assessments	Fatih Yavuz, Özgür Çelik, Gamze Yavaş Çelik	2024	Quantitative	Turkey	15 experienced EFL instructors	Higher Education	ChatGPT-4 and Google's Bard (2023.07.13 version)	Yes	Writing	Teaching (focusing on grading students' essay)
ChatGPT in English Language Learning: Exploring Perceptions and Promoting Autonomy in a University EFL Context	Kyle R. Van Horn	2024	Qualitative with exploratory study	South Korea	120 students	Higher Education	ChatGPT	Yes	Writing and speaking	Learning
Exploring AI-mediated informal digital learning of English (AI-IDLE): a	Guangxiang Leon Liu, Ron Darvin & Chaojun Ma	2024	Mixed-method	China	867 EFL students	N/A	ChatGPT, GPT-4, New Bing, Ernie Bot, and Third party application	Yes	Writing and speaking	Learning

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Title	Author	Yr	Study Design	Location	Participants	Educational Level	GenAI types	Effectiveness	Language Skills	Educational Focus
mixed-method investigation of Chinese EFL learners' AI adoption and experiences										
Generative AI for Customizable Learning Experiences	Ivica Pesovski, Ricardo Santos, Roberto Henriques, and Vladimir Trajkovik	2024	Mixed-method with exploratory study	Macedonia	20 students	Higher Education	OpenAI's API	Yes	N/A	Learning
Generative Artificial Intelligence and ChatGPT in Language Learning: EFL Students' Perceptions of Technology Acceptance	Anh Vo and Huong Nguyen	2024	Quantitative	Vietnam	369 English-majored students	Higher Education	ChatGPT	Yes	Writing	Learning
Generative Artificial Intelligence in the EFL Writing Context: Students' Literacy in Perspective	Ali Abbas Falah Alzubi	2024	Quantitative	Saudi Arabia	278 EFL students	Higher Education	N/A	Yes	Writing	Learning
Integrating ChatGPT in Grade 12 Quantum Theory Education: An Exploratory Study at Emirate School (UAE)	Saif Alneyadi and Yousef Wardat	2024	Mixed-method	Saudi Arabia	55 students	Higher Education	ChatGPT	Yes	N/A	Learning
The Effects of Generative AI Platforms on Undergraduates' Narrative Intelligence and Writing Self-Efficacy	Nikolaos Pellas	2023	Quantitative with descriptive study	Greece	64 students	Higher Education	Sudowrite, Jasper, and Shortly AI	Yes	Writing	Learning
University students' perceptions of artificial intelligence-based tools for English writing courses	Yong-Jik Lee, Robert O. Davis, and Sun Ok Lee	2024	Mixed method	South Korea	80 students	Higher Education	Grammarly	Yes	Writing	Learning

| Title	Author	Yr	Study Design	Location	Participants	Educational Level	GenAI types	Effectiveness	Language Skills	Educational Focus
Improving EFL learners' speaking skills and willingness to communicate via artificial intelligence-mediated interactions	Fathi, Jalil, Rahimi, Masoudb, Derakhshan, Ali	2024	Mixed method	Iran	65 EFL learners	Higher Education	Andy Chatbot	Yes	Speaking	Learning

4.1 Study Characteristics
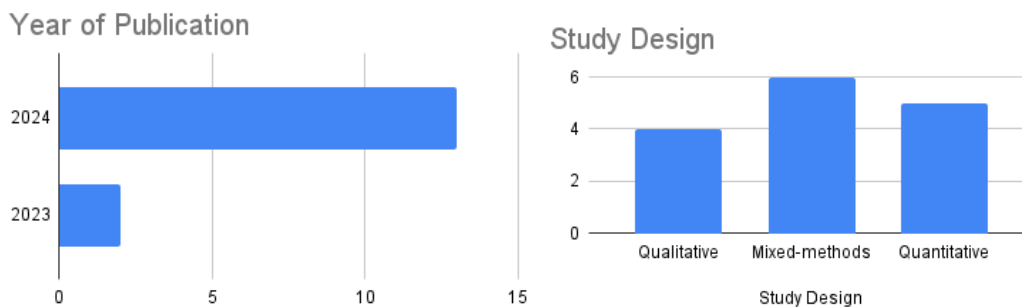
Figure 1. Study Characteristics

Having conceived the table and Figure 1, there are a couple of findings presented here, involving the publication methodological design, paralleled with the year of publication. These findings report that most publications published in the year 2024, approximately thirteen papers in a year being published under the issue of GenAI in English foreign language education. In sharp contrast to this statement, a couple of pieces of literature were published during the year 2023. Following this argument, it can be inferred that the year 2024 offers a greater influence on GenAI development since this period rationalizes that researchers sought to explore the application of GenAI, particularly in language education domains in general, English foreign language education in specific.

During the years 2024 and 2023, those publications approached the data with various methodological designs, pointing out that mixed-methods design took the top place on the chart. As seen in Figure 1, the score of its design peaked at 6, indicating that most publications utilized its methods to conduct the inquiries. Apart from that, quantitative methodologies also increase gradually, amounting to five publications appearing during those couple of years. Last but not least, qualitative research almost has the same level as quantitative design, indicating that its score remained adjacent to the score of quantitative research, albeit it was far lower than mixed-methods study. To unveil the score, Figure 1 recorded that its method obtained approximately four points, showing that four pieces of literature designed their study under a qualitative paradigm. Evidently, mixed-methods design has become a prominent method for designing research, contributing to the application of GenAI in the educational sphere.
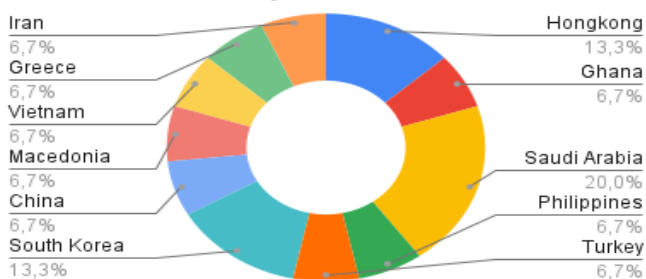

Figure 2. EFL Countries within the studies

Furthermore, research is not about its methodological process, the location of the study is required to be undertaken since the research takes English language learning issues into evaluation. As a consequence, this study has already mapped the demography of EFL countries that establish GenAI publications, pertaining to its English language education sphere. Visualization of Figure 2 highlights that the GenAI application in English language education captivates publications coming from three diverse countries as follows, Saudi Arabia, South Korea, and Hong Kong. To be specific, Saudi Arabia is the country that published GenAI articles on its implementation in the language educational landscape in the continuum, amounting to 20 % of the collected publications produced during the years 2023-2024. Nonetheless, South Korea and Hong Kong peaked at second place, probing its prevalence that remained similar in vein, yielded 13,3 % GenAI publications within a year. Correspondingly, other countries' ratio in GenAI publication halved by approximately 6,7 % within a year of publication. To classify the countries, figure 2 divides it into eight countries in a row as follows: Iran, Greece, Vietnam, Macedonia, China, Ghana, Philippines, and Turkey. Summing up, multivarious countries have already leveraged the GenAI implementation in the educational sector, implicating the English language's pedagogical aspects.
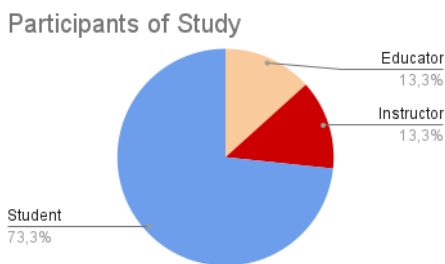
Figure 3. Participants of the study

Taking study characteristics into account, participants always have a special place within the publication. Hence, figure 3 depicts the participant composition of a study divided into three categories, including students, educators, and instructors. The data shows that students gain the largest portion, accounting for 73.3%. Moreover, educators and instructors make up a smaller and equal portion, yielding 13.3% each. Overall, the pie chart demonstrates that those studies primarily focus on students, with a smaller representation from educators and instructors, implying that GenAI implication contributes to English language pedagogy in EFL students or learners.

Apart from participant characteristics, the background of the participant, implicating educational level also plays an important role when bringing educational issues into inquiry. For this reason, Table 1 sought to record the educational level that was hoved into view among the studies. Evidently, Table 1 denotes that most of the educational levels of those participants are coming from higher education levels, auditing from fourteen publications. To be more specific, the level involves the pedagogical subjects who learn or ever learned EFL, and who major in EFL as their coursework. Considering those arguments, it can be assumed that GenAI is yet to spread all over the educational level, grasping the trend is merely placed in the tertiary level.

4.2   Generative Artificial Intelligence

Figure 4. Language skills

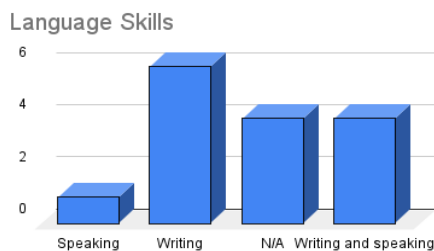Among the selected papers, Table 1 shows that GenAI intervention targets particular language skills, including productive and receptive skills. To visualize the data, figure 4 illustrates the distribution of the language skills targeted by GenAI during language pedagogical activities, resulting in GenAI mainly pointing to productive skills, such as writing, indicated by the height of the bar which peaked at the six points. Further, Figure 4 with the help of Table 1 depicts that those sorts of GenAI effectively aid the users in enhancing the writing skill along with speaking skills, albeit the evidence detailing the improvement of the speaking skills remains scant. Corroborating this perspective, all studies are in line with this argument, even suggesting to integrate GenAI in EFL education, following GenAI's effectiveness in enhancing language skills.

Regarding the utilization of generative artificial intelligence in enhancing language skills, fifteen papers have already categorized various potential GenAI tools to apply in language education activities. In the context of writing, eleven pieces of literature agree that ChatGPT contributes to the advancement of the users' writing skills. Following this statement, the literature also highlights the ChatGPT typologies that are often paralleled with writing competence, such as ChatGPT 3.5 and ChatGPT 4. Apart from the use of ChatGPT for L2 writing, several works of literature also bring the current GenAI tools into light such as Erni Bot, Grammarly, New Bing AI, Jasper AI, Sudowrite, Shortly AI, and Google Bard AI as the alternative GenAI intervention in developing the students and teachers writing competence. Critically, those publications opine that the selection of GenAI efficiently assists both EFL teachers and students in generating written materials.

As mentioned before GenAI also targets spoken skills, a few papers have discussed the prominent GenAI tools to leverage in the context of speaking competence. Taking the initial instance, a publication written by Fathi et al. (2024) mentions the integration of Andy Chatbot in improving Iranian students' skills in English, asserting that GenAI offers a beneficial impact on their language skills used to communicate. By the same token in ChatGPT integration, this GenAI remains famous in all language skill domains, resulting in several articles expressing the satisfaction of implementing ChatGPT in their pedagogical activities, showing that this GenAI is adequate to utilize in the context of language teaching and learning. In conjunction with ChatGPT, Erni Bot also plays a crucial role in developing Chinese students' language proficiency, particularly in speaking skills. To some degree, GenAI is a beneficial tool in mitigating the impediment of EFL learners' and educators' opportunities for sufficient practice during communicative language activities.

4.3   *Generative Artificial Intelligence In English Foreign Language Education*
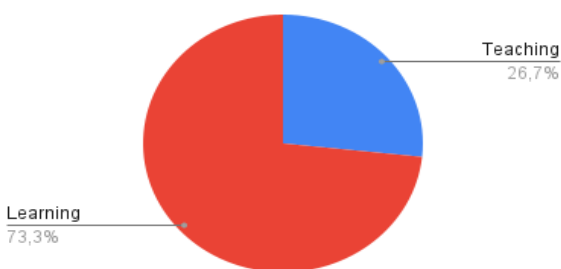
Figure 5. Educational Focus

Within the integration of generative artificial language in language pedagogy, there are a couple of major educational areas documented in the fifteen published works. Thus, this pie chart illustrates the educational focus divided into two categories: Learning and Teaching. The largest segment, labeled "Learning", comprises 73.3% of the focus. The remaining segment, labeled "Teaching", accounts for 26.7%. Corresponding to this argument, the Learning area has garnered substantial attention, with twelve studies dedicated to the topic of GenAI. Conversely, the Teaching domain also gained notable scientific interest, although the published works were established in short supply, auditing from three articles in Table 1. All in all, GenAI has received significant interest in both educational and pedagogical areas in English foreign language, despite the published works remaining in contrast.

4.4   Potential Gaps

Having conceived all arguments elicited from fifteen chosen articles, future research implicates various factors. Concerning Table 1 and all figures, fifteen publications pinpoint that the integration of GenAI targeting speaking skills remained pauce, culminating in future research ought to consider this issue as their article interest. Next, it notes that the topic of GenAI is rarely discussed from the educational team's perspective, resulting in lacking scientific papers that delve into the application of GenAI in their teaching activities. Importantly, those papers highlight that GenAI solely offers contributions at the higher education level, thus the measure could not be applied to see its effectiveness since it only focuses on one type of educational level. Reckoning this situation, those papers offer future researchers to complement the gaps to generalize better outcomes of scientific study.

5.   Discussion

From 85 entries in the Scopus database, 15 matched the inclusion criteria and were evaluated in this scoping review to address the objective of the study, which intended to explore the current research trend or state in the application of GenAI in English foreign language education. To achieve the goal, four review questions were formulated and satisfactorily addressed.

Mapping the research trend of generative artificial intelligence in the educational landscape, 2024 is perceived as a productive year in producing papers relating to GenAI in EFL education, auditing from fifteen papers published under different research methodologies. Nevertheless, half of the published literature performs a mixed-method design in approaching the data. Timans et al. (2019) and Zhou & Min (2020) rationalize this statement, mentioning that mixed-methods research gradually increases in social sciences and humanities domains since it investigates sociological issues. Furthermore, Zhou et al. (2023) corroborate this statement by demonstrating the function of its design in educational research, noting that mixed-method design is conceptually designed to elicit reliable data through different method strategies, qualitative used to understand the participant perspective and quantitative used to measure the evidence-based teaching intervention in specific. To infer, the current research trend in GenAI was published in 2024, undertaken from a mixed-methods paradigm for the purpose of creating nuanced understandings toward GenAI phenomena in EFL education.

By the same token, fifteen papers expose diverse countries that productively raise the application of GenAI in English foreign language education into evaluation. First and foremost, South Korea takes the lead because this country is perceived as one of the world's most innovative nations, since enacting outstanding performance in research and development intensity (David, 2020). In addition, David (2020) highlights that the researchers primarily delve into the technology aspect, due to the fact that technology plays a crucial role in this country. Next, this study finds out Saudi Arabia also offers an investment in evaluating the use of GenAI in their English language education. By investing in education technology, this country benefits in promoting innovation, improving learning outcomes, and equipping individuals with the skills needed for the future (Alshareef, 2024). Critically, technological intervention, artificial intelligence in particular could be the potential tools to revamp the educational ecosystem, thus both countries sought to put their educational sector in technological investment.

Recognizing the worldwide research trends of generative artificial intelligence, fifteen literature records a prominent educational level addressed by the issue of GenAI in English foreign language education, that is tertiary level or higher education. Detailing this argument, this finding is in line with the idea of GenAI targeting the higher education level due to its dynamic educational environment, marked by an intricate interaction between the educator and students, wherein the educators do not simply transmit the knowledge but also facilitate the students to engage in the learning environment that promotes critical thinking, problem-solving, and the development of competencies relevant to the current and future professional field (Kurtz et al., 2024). In the same vein, O'Dea (2024) exposes the possibility of implementing GenAI in the higher education sector, aiming to provide a valuable

asset for improving critical thinking along with academic writing skills. Overall, higher education still endorses the integration of GenAI in EFL education since it brings more valuable opportunities to advance pedagogical practices and experiences.

To specify the current GenAI tools, these findings bring particular GenAI tools to unpack along with the targeted language skills. Interestingly, fourteen publications treasure ChatGPT for the improvement of productive skills in general, and writing skills in certain areas, turning out the notion to apply ChatGPT in writing projects is really beneficial for both the students and the educator because ChatGPT is naturally designed to assist them in various aspects of L2 writing, including brainstorming the idea, and revising as well as giving direct feedback (Ghafouri et al., 2024). In conjunction with this statement, several pieces of literature have taken alternative GenAI apps apart from ChatGPT, including Ernie Bot, Shortly AI, New Bing, Sudowrite, Jasper AI, Grammarly, lastly Google Bard or Gemini AI in more popular names. These GenAI cultivate the pedagogical subjects' L2 writing because its characteristics are conceptually made to nurture them in advancing their writing performance. For instance, Grammarly is specifically designed to check and correct grammatical errors (Barot, 2022). Next, Sudowrite offers creative writing assistance (Fang et al., 2024) whilst Jasper AI and Shortly AI contribute to copywriting materials (Pellas, 2023). In the same scope as ChatGPT, Ernie Bot, Google Bard, and New Bing are conceptually designed to have similar characteristics to ChatGPT, albeit Fathi et al. (2024) and Liu et al. (2024) opine that those tools are factually made to innovate the technology sector in several countries, turning out it is influential to enhance the writing competence. Summing up, the notion of leveraging the technology in writing performance is adequate on condition that the measurement objectives prove the effectiveness hence, it could be great potential if future studies consider the integration of GenAI in writing activities.

In fact, ChatGPT seems promising to utilize in enhancing the language's productive skills, particularly in speaking skills. This study figures out that GhatGPT is effective in speaking activities, as asserted in a paper written by Liu et al. in 2024. This finding aligns with a paper written by Muniandy et al. Muniandy et al. (2024) approve the idea of investing ChatGPT in communicative language activities, due to the chance of becoming a partner in turn-taking. Moving away from the ChatGPT, this finding reports another emerging GenAI tool from those publications as an alternative tool for advancing speaking proficiency, Andy Chatbot in detail. Evidently, Fathi et al. (2024) suggest the emergence of Andy Chatbot in communicative language activities since it creates a comfortable and enjoyable learning environment in order to facilitate the learner with immersive conversation. To conclude, this finding is persistent to other publications that believe the incorporation of technology in language pedagogy would enhance productive language skills (Annamalai et al., 2022; Huang et al., 2021; Koong Lin et al., 2024; Muniandy et al., 2024; Vladova et al., 2021), culminating in endorsing the incorporation of GenAI in EFL education since the literature remains at surface level.

Despite its effectiveness in the learning area, another pedagogical aspect should be undertaken, teaching activities in particular. The finding of this study pinpoints that most literature delves into the issue of learning rather than teaching, implying that it crosses the border of other studies that assert that GenAI is a handy tool in pedagogy activities because the literature remains scarce. Besides, if the researchers overlook this area in detail, they would treasure a set of opportunities to innovate the teaching activities, such as mapping the course outline, generating course objectives together with designing the learning materials, including the learning activities and assessments (Choi et al., 2024). All in all, the integration of GenAI in EFL teaching could become a notable idea to enquire because it increases the possibility of reforming the pedagogical activities in technologically driven.

Surprisingly, this finding solicits a great deal of refusal. Most literature presented here is in line with the idea of implementing GenAI in EFL education. Conversely, Yusuf et al. (2024), Kasneci et al. (2023), and Sullivan et al. (2023) do not reinstate this notion because this study finds out that GenAI could be a threat to academic integrity. Sullivan et al. (2023), therefore, voice the rationale behind the refusal of GenAI in the educational sectors. Sullivan et al. (2023) assume it is due to most GenAI being accessible and convenient to use even, the generative content by the AI is not easily recognized by the AI checker as well as plagiarism checker, resulting in the users being able to leverage this sort of AI as much as possible as their virtual assistant to aid them within their educational course load. From these arguments, it can be concluded that GenAI has become a notable investment in the

pedagogy sector, yet ethical consideration is required to optimize its benefits together with ameliorating the misuse or overuse of its applications (Chen & Jasmine, 2023; Jackaria et al., 2024; Van horn, 2024).

6. Conclusion

Generally speaking, generative artificial intelligence or GenAI captivates worldwide publications jointly with its integration into the educational industry and English foreign language education in detail. Henceforth, GenAI integration in language education is a promising area of research with the potential to revamp language education. This scoping literature review has seized its objective by answering the provided review questions relating to the current state of research in GenAI in EFL education across cultures concerning the literature. This study highlights that GenAI has the potential and beneficial impact to incorporate in future research since it innovates the educational sector to engage in technological-driven areas. Moreover, this study proposes a prominent topic to come into light in the GenAI publication, including its integration into teaching activities that focus more on speaking performance rather than writing competence. Besides, future research should consider the use of GenAI targeting at any kind of educational level.

Unsurprisingly, this study is far from perfect, culminating in providing promising references to reconstruct this study. Firstly, this study is limited to exploring more databases, as mentioned in the methodological section, this study merely employs the Scopus database to elicit the data, thus future studies ought to reckon this situation to shrink the gap of this study. Moving on to the second gap, this study highlights that most collected publications, focusing on primary articles emerge in the year 2023-2024, despite the criteria having already set the year of publication in 2014 to 2024, hence future research should carefully consider this experience together with the keywords that applied to discover the articles. More and more, this study is limited to evaluating the extent to which GenAI is implemented in the world of English education, as well as the attitudes of AI users. Following these gaps, this study expects more comprehensive findings reconstructed from other literature to emerge in generalizing better outcomes

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24 - Enhancing business Chinese writing with AI: A comparative analysis of independent and collaborative writing outcome

Stephanie Lu Liu
lu-stephanie.liu@polyu.edu.hk
Chinese Language Centre, The Hong Kong Polytechnic University

Abstract
As artificial intelligence (AI) tools increasingly integrate into education, their role in enhancing business communication skills warrants investigation. This study examines the impact of AI-assisted writing, focusing on business Chinese courses at a Hong Kong university. Third- and fourth-year students in accounting and finance were divided into control and experimental groups: one completed tasks independently, while the other used AI tools like ChatGPT to generate drafts and refine them. The study evaluates the outputs based on grammatical accuracy, communicative effectiveness, and situational awareness, alongside an analysis of students' interactions with AI. Findings reveal that AI-assisted students demonstrated improved organization, grammar, and situational awareness but often struggled to align AI-generated texts with the intended communicative purpose. Revision of drafts highlighted gaps in logical thinking, linguistic proficiency, and practical experience. The study underscores the potential of AI tools in improving writing skills while emphasizing the importance of structured revision and critical thinking in teaching strategies. Recommendations include integrating AI tools into curricula to optimize their benefits and preparing students for professional business communication.

Keywords: AI-Assisted Writing, Business Communication, Business Chinese, Revision Strategies, Generative AI

1. Introduction

With the rapid development of artificial intelligence (AI) and its integration into the global economy, efficient business communication has become a cornerstone of corporate success. Business letters, as a widely used form of communication, require precise language, professional formatting, and clarity—elements that significantly impact the transmission of information and corporate image. In university education for business majors, business Chinese writing is a critical skill. However, traditional teaching methods, which rely on manual writing, example analysis, practical exercises, and teacher feedback, are often time-consuming and may fail to address the demands of modern professionals.

AI technology offers transformative possibilities for business communication. Tools leveraging natural language processing can generate initial drafts, adjust text style and tone, and significantly enhance writing efficiency. They also provide grammar and structural suggestions, enabling students to effectively revise and refine their work. Understanding the distinctions between AI-assisted and traditional manual writing is essential for improving teaching methods and preparing students to excel in a competitive, technology-driven workplace.

This study investigates the effectiveness of AI tools in business letter writing, with a focus on improving efficiency and teaching outcomes. By assigning students to experimental and control groups, it compares performance in business letter writing tasks completed with and without AI assistance. Through text analysis and performance evaluation, this study assesses the practicality of AI-generated drafts and their potential impact on business communication and business Chinese writing instruction.

2.   Significance of the Study

2.1   *The Importance of AI in Writing Instruction*

Generative AI tools, powered by deep learning models, have shown remarkable capabilities in understanding and generating natural language texts, finding extensive applications across societal domains. These tools reduce the burden of communication by comprehending and responding to basic user needs. From automated customer service interactions to drafting documents such as resumes, reports, and business letters, AI is revolutionizing traditional practices. In the educational sector, these tools have demonstrated significant potential.

AI tools provide instant grammar, spelling, and style suggestions, offering personalized feedback that enhances learning efficiency and writing skills (Vall & Araya, 2023). They promote autonomy by tailoring exercises to students' proficiency levels (Haristiani, 2019), a benefit that extends to Chinese language learning (Fu et al., 2020). These tools not only support skill development but also make writing tasks more engaging and accessible.

AI-assisted writing has been shown to improve writing structure (Gayed et al., 2021) and stimulate interest (Alharbi, 2023). Many users report that these tools boost confidence and streamline communication, reducing the time spent drafting while allowing greater focus on revisions (Coman et al., 2024; Shakked & Zhang, 2023). However, concerns remain regarding the accuracy of AI-generated content and risks of over-reliance.

In educational contexts, AI tools excel at producing grammatically correct texts, prompting educators to rethink the role of grammar instruction in writing classes. Strategic integration of AI can enhance grammatical accuracy and overall proficiency. However, AI-generated texts often fall short in addressing complex business logic, subtle communication etiquette, and cultural nuances, which are critical in business communication. Educators must focus on teaching these elements to address the limitations of AI tools and ensure students are prepared for real-world applications (Coman et al., 2024).

2.2   *The Significance of Revision in Improving Writing Skills*

Revision is a critical step in the writing process and a key component of developing strong writing abilities. It involves not only refining grammar and word choice but also improving expression and structure. Systematic revision instruction significantly enhances writing quality, particularly in academic contexts (Wischgoll, 2017). Purposeful revision exercises help students refine grammar, vocabulary, and overall structure, making them essential for academic and professional writing.

In business writing instruction, revision helps students convey information clearly and effectively. By re-examining and refining their work, students learn to identify and correct errors, improve sentence structure, and optimize information transmission.

Yuknis (2014) highlights that revision requires advanced skills, such as distinguishing between purposes and meanings, correcting errors, adding information, and adjusting tone. Integrating revision into writing education fosters critical thinking, enhances writing skills, and elevates text quality. A structured revision process enables teachers to better support students in improving their writing, deepening their understanding of communication contexts, and becoming independent, proficient revisers.

3.   Research Methodology

3.1   *Research Design*

This study employs a randomized assignment to form experimental and control groups with the aim of comparing the effectiveness of traditional business letter writing (control group) and AI-assisted letter writing (experimental group) on student learning outcomes. The participants are university juniors and seniors enrolled in a Business Chinese course, with majors including Accounting

and Finance. To ensure the accuracy of the experiment, the students in both groups have similar scores on their language proficiency tests.

Thirty students participating in this study are randomly assigned to two groups, with 15 students in each group. Group A (control group) independently completes the writing of a business invitation letter; Group B (experimental group) uses AI tools to generate a draft, which the students then revise to complete the text. Additionally, Group B students are required to submit the full interaction record with the AI tool (the choice of AI tool is not restricted).

Before the study begins, all students will attend a lecture on business letter writing. The lecture will cover communication contexts and letter content, letter formatting, language features, and writing structures. The instructor will also explain the grading criteria (see Appendix). Concurrently, the instructor will provide an additional 30-minute training session on AI tool usage for Group B, introducing basic questioning techniques and text revision methods.

One week later, the instructor will ask students from both groups to complete a business invitation letter of no more than 600 words within 90 minutes. The writing task will provide a specific communication context, including the type of letter, the identities of the sender and recipient, and relevant background information. This information will be presented in dialogue form, requiring students to extract useful information from the conversation records to complete their writing.

3.2 Data Collection and Revision Marking

All submitted essays will be graded according to pre-established criteria, which cover three aspects: content, language, and structure. Additionally, this study categorizes revision behaviors into eight types based on behavior and purpose.

Table 1 - Revision Types

Revision Attribute	Error Code	Error Type Description	Specific Explanation
Behaviour	A	Addition	Adding words, phrases, or sentences
	D	Deletion	Deleting words, phrases, or sentences
	V	Movement	Moving words or phrases
	R	Replacement	Completely replacing a word in the text with another word or phrase of equivalent function
Purpose	G	Grammar and Language	Grammar errors, sentence structure, language fluency
	L	Logic and Coherent	Connections and coherence of text paragraphs and ideas
	F	Information Accuracy	Accuracy of facts, data, and citations
	S	Style and Identity awareness	Text style suitable for specific readership and writing purposes

Subsequently, the study will classify the revisions made by Group B students based on the AI-generated drafts. The frequency and count of revisions will be recorded to understand how students interact with AI tools and their revision strategies

4. Data Analysis

First, this study calculates the mean and standard deviation of the overall scores, content, language, and structure for both Group A and Group B. An independent samples t-test is then conducted to determine whether there are statistically significant differences between the scores of the two groups.

Second, to evaluate the effectiveness of AI-assisted practical writing and understand the correlation between revision types and text performance, the texts from Group B are subjected to correlation and regression analyses. This aims to determine whether there is any systematic relationship between the two.

Additionally, the study considers the students' proficiency in using AI tools, including their ability to articulate commands, pose questions, and make requests, as well as the quality of the AI-generated drafts and the impact of the revision process.

Through the above analyses, this study aims to comprehensively assess the effectiveness of AI-assisted practical writing and explore the potential application of AI tools in writing instruction.

4.1   Data Results
4.1.1   Descriptive Statistics of Evaluation Scores

This study analysed the performance of Group A and Group B's essays across four evaluation categories: overall score, content, language, and structure. The results are presented in Table 2.

Table 2 - Descriptive Statistics of Scores

Category	Group A (Mean± Standard Deviation)	Group B (Mean± Standard Deviation)
Content	30.1 ± 2.1	30.6 ± 1.8
Language	22.0 ± 1.2	23.0 ± 1.4
Structure	22.6 ± 1.2	23.1 ± 1.5
Total	74.7 ± 3.9	76.7 ± 4.4

As shown in Table 2, Group B's average scores in all categories surpass those of Group A, with the most notable differences in language and structure. This indicates that using AI-generated drafts followed by student revisions may outperform independent writing in specific areas. The AI drafts likely offer a stronger starting point, encouraging students to focus on structural coherence and information sufficiency.

In contrast, Group A's texts display several deficiencies, including vague identity and context awareness, lack of content detail, verbose language, grammatical errors, and weak coherence and paragraph structure. Group B's final drafts suggest that AI-generated content can improve language fluency and prompt students to enhance paragraph structure and stylistic appropriateness.

However, Group B's scores show significant variance, indicating that while AI tools can elevate text quality, performance remains inconsistent. This may stem from over-reliance on AI drafts or ineffective revisions. While some students effectively refined the AI-generated content, others struggled, highlighting differences in language organization skills and revision proficiency.

4.1.2   Differences in Students' Scores Between Groups

This study used the t-test method to analyze whether there are significant differences in the average scores of content, language, structure, and overall scores between Group A and Group B ($p < 0.05$). The results (see Tables 3, 4, and 5) show that there is a statistically significant difference in language expression between the two groups. This suggests that AI-assisted drafts combined with human revisions are more effective in improving the quality of language expression. However, this may also be influenced by the students' language abilities, such as the accuracy of word choice, conciseness of expression, adherence to the stylistic features of practical writing, and considering the writer's identity and language environment.

In other aspects, the differences are not significant, which may be related to the sample size and other factors affecting text performance, such as the students' revision skills.

Table 3 - t-Test Results for Overall Scores of Group A and Group B

	Group A	Group B
Mean	74.56	76.93
Variance	15.05	19.38
Observations	15.00	15.00
Pooled Variance	17.22	
Hypothesized Mean Difference	0.00	

Degrees of Freedom	28.00
t Statistic	(1.57)
P(T<=t) One-Tail	0.06
Critical Value: One-Tail	1.70
P(T<=t) Two-Tail	0.13
Critical Value: Two-Tail	2.05

Table 4 - t-Test Results for Content Scores of Group A and Group B

	Group A	Group B
Mean	30.11	30.84
Variance	4.48	3.29
Observations	15.00	15.00
Pooled Variance	3.88	
Hypothesized Mean Difference	0.00	
Degrees of Freedom	28.00	
t Statistic	(1.01)	
P(T<=t) One-Tail	0.16	
Critical Value: One-Tail	1.70	
P(T<=t) Two-Tail	0.32	
Critical Value: Two-Tail	2.05	

Table 5 - t-Test Results for Language Scores of Group A and Group B

	Group A	Group B
Mean	21.95	22.98
Variance	1.43	1.85
Observations	15.00	15.00
Pooled Variance	1.64	
Hypothesized Mean Difference	0.00	
Degrees of Freedom	28.00	
t Statistic	(2.20)	
P(T<=t) One-Tail	0.02	
Critical Value: One-Tail	1.70	
P(T<=t) Two-Tail	0.04	
Critical Value: Two-Tail	2.05	

Table 6 - t-Test Results for Structure Scores of Group A and Group B

	Group A	Group B
Mean	22.49	23.11
Variance	1.39	2.15
Observations	15.00	15.00
Pooled Variance	1.77	
Hypothesized Mean Difference	0.00	
Degrees of Freedom	28.00	
t Statistic	(1.28)	
P(T<=t) One-Tail	0.11	
Critical Value: One-Tail	1.70	
P(T<=t) Two-Tail	0.21	
Critical Value: Two-Tail	2.05	

4.1.3 Analysis of Revision Types

This part analysed the revision behaviours of two groups of students in their writing, including addition(A), Deletion (D), Component Replacement (V), Movement (R), Language and Grammar (G), Logic and Coherence (L), Informational Accuracy (F), and Style and Sense of Identity (S), and collected data on a total of 840 revisions. The absolute number and percentage of amendments in each category are shown below:

Table 7 - Frequency of Modified Behavior in Group B

Revision Type	Frequency	Percentage
Behavioural Revisions		
Addition	192	22.9%
Deletion	122	14.5%
Movement	21	2.5%
Replacement	100	11.9%
Purpose Revisions		
Language and Grammar	116	13.8%
Logic and Coherence	71	8.5%
Information Accuracy	87	10.4%
Style and Identity Awareness	131	15.6%
Total	840	100%

The statistical results showed that, first, adding revisions (A) was the most common type of revision, indicating that students added more content to the AI text to improve the completeness and richness of the text, but also in some ways helping to generate a text with insufficient information. Second, revisions on stylistic style were also more frequent, which may reflect that students were more concerned about the relationship between discourse, identity awareness, and stylistic style than they were when writing independently. Third, the high proportion of deletion (D) revision behaviours and language and grammar (G) revisions may indicate that the AI-generated first drafts were not good enough in terms of word usage and expression, which may be related to how students guided the AI-generated texts to explicitly state the requirements regarding language expression in business correspondence. At the same time, students did not often use move (V) as a revision method or were influenced by revision habits. Some of them tended to delete the text and use the whole-sentence transcription as a revision strategy. This indirectly led to a higher number of additions (A) and deletions (D). Finally, fewer revisions were made to the logic and contextualization of the essays, which may reflect that the AI-generated first drafts performed better in this aspect, and that the revisions in this area required more logical thinking skills from the students themselves.

It can be seen that AI tools are effective in generating first drafts and assisting business letter writing, prompting students to pay more attention to the validity of the content, as well as the relationship between context and identity awareness and the text, but the effectiveness of the students' use of AI tools and the appropriateness of their revision behaviours remain to be explored.

4.1.4 *The relevance of the revised behaviour to the presentation of the text*

According to the results of linear regression analysis, there is a significant positive relationship between the number of revisions and scores. Specific results are as follows:

Table 8 - Regression Analysis of Revision Behaviours and Text Performance

Source	Degrees of Freedom	SS	MS	F	Significance F
Regression	8	231.25	28.91	4.32	0.04556
Residual	6	40.12	6.69		
Total	14	271.37			

Variable	Coefficient	Standard Error	t-Statistic	P-Value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	70.74	2.28	31.06	0.00	65.16	76.31	65.16	76.31
Addition	0.43	0.27	1.61	0.16	-0.23	1.10	-0.23	1.10
Deletion	0.51	0.28	1.82	0.12	-0.18	1.20	-0.18	1.20
Movement	1.69	0.67	2.52	0.05	0.05	3.33	0.05	3.33
Replacement	-0.24	0.39	-0.62	0.56	-1.18	0.70	-1.18	0.70
Language and Grammar	-0.32	0.28	-1.14	0.30	-1.00	0.37	-1.00	0.37
Logic and Coherence	-1.04	0.34	-3.06	0.02	-1.88	-0.21	-1.88	-0.21
Information Accuracy	0.26	0.47	0.56	0.60	-0.88	1.41	-0.88	1.41
Style and Identity Awareness	0.16	0.42	0.37	0.72	-0.88	1.19	-0.88	1.19

According to the regression analysis, the F-statistic of the model is 4.323 which is statistically significant (p=0.0455<0.05) which indicates that there is a significant effect of certain revision strategies on grades. According to the regression coefficient analysis, it can be seen that in terms of revision behaviour, the order of moving words and phrases significantly affects students' grades. In fact, the relationship between the number of revisions and scores is more complicated. On the one hand, deletion and addition of information, as well as revisions for information accuracy and text style and morphology have a positive effect on performance; on the other hand, however, revisions for logic and contextualization may have a negative effect on performance.

5. Discussion

5.1 Effectiveness of AI-assisted business letter writing

The statistical data in this paper show that AI assisted business letter writing is effective, especially in terms of language and structure.AI tools usually follow specific linguistic patterns and structural rules in generating text, which helps to ensure the grammatical accuracy and logical structure of the text. This is particularly important in business correspondence, where strict formatting and clear logic are emphasized, and the structural advantages of AI tools provide students with a good starting point for revising their texts, helping them to quickly construct a textual framework that follows basic business correspondence standards.

In addition, the language generation capability of the AI tool, especially its accuracy and richness in handling common expressions and professional terminology, may help to enhance the overall linguistic performance of the text, which can largely compensate for the inexperience of students or people entering the workplace. It also explains why the AI-assisted Group B was able to achieve better results than the independent human-written Group A on both linguistic and structural dimensions. At the same time, however, this may also be related to the fact that the participating students themselves had a slight lack of grammatical and structural mastery.

Regarding the variability of the scores, although Group B showed an advantage in several scoring dimensions, it also showed a greater variability in the scores. This variability may be related to the following factors:

First, students' familiarity with AI tools: Different students have different levels of mastery and utilization of AI tools, which may directly affect how they use the first drafts generated by these tools and make subsequent revisions. According to the conversation logs submitted by students, some students directly copied large portions of conversational information without effective filtering and organizing, which resulted in poor performance of AI tools in capturing effective information; some students misunderstood the context and information provided by the questions, which resulted in inaccurate information when giving instructions and affected the performance of the text.

Secondly, the results of AI tools may fluctuate when dealing with different topics or contents. Especially when dealing with complex or rare topics, the text generated by AI tools may not be accurate or detailed enough, and more manual revisions are needed.

Thirdly, students' revision skills: How students revise AI-generated first drafts, as well as their skills and judgment in the revision process, have a significant impact on the final performance of the text. Uneven revision ability of students may lead to high volatility of scores within the same group. Students may not have received more systematic, complete, and professional revision training, or may have made poor judgments about the accuracy of the text, which may have led some students to delete large portions of AI-generated phrases and complete the revisions by rewriting ("adding" revisions) instead.Some students in Group B may have been more adept at utilizing the resources provided by the AI and were able to effectively identify and correct deficiencies in the AI-generated content, while others may have been less aware of how to maximize the use of these tools, and may not have had the ability to use them to their advantage. understand how to maximize the use of these tools, or were overly reliant on AI-generated content and did not make enough revisions. This is partly a reflection that the first drafts were not good enough, and partly a sign that students did not make good use of the AI-generated first drafts.

The above findings present specific challenges and opportunities for teaching. First, teachers need to help students better understand and utilize AI tools for writing in their teaching to increase students' proficiency; second, teaching should emphasize the development of students' critical thinking and text revision skills, so that they can effectively evaluate and enhance AI-generated first drafts; in addition, developers of AI tools should consider how to reduce the variability of the tools in their application, e.g., by improving the algorithms to enhance the stability and accuracy of the tools on different topics and content generation. In addition, developers of AI tools should consider how to minimize the variability in the application of the tools, such as by improving the algorithms to enhance their stability and accuracy in different topics and content generation.

Thus, the overall strength and significant variability in the scores of Group B reflect the potential of AI-assisted writing to enhance language and structure, while also pointing to the complexity of its application. When adopting AI-assisted writing tools, teachers should pay attention to the training of students and the adjustment of teaching strategies in order to utilize the writing function of AI tools and their educational value, to enhance students' overall performance and skill level in business letter writing, and more importantly, to improve the efficiency of business communication in the future workplace life.

5.2   Revised Behavior and Textual Representation

By analysing the revision behaviours of Group B students, this paper explores the specific effects of various types of revisions on text quality. The data show that the most common types of revisions include addition and deletion behaviours, as well as revisions that address aspects of text style and sense of identity.

First, addition revisions usually involved inserting new information or details into the text to improve its completeness and richness. The high frequency of this type of revision suggests that although AI tools are capable of generating well-structured texts, the content provided often lacks sufficient depth or breadth. For example, in the context of business correspondence, more specific data support or more detailed case studies may be required, which are difficult for AI to accurately generate without sufficient contextual information. Therefore, when teaching students to use AI tools, they may need to pay extra attention to the specific data that should be included in the instructions or require the AI to generate relevant information based on the specified context.

Second, deletion of revisions involves removing redundant or irrelevant content to enhance the conciseness of the text. the AI-generated text generates repetitive or secondary information, or information that does not adequately match the context or students' expectations. Looking at the revisions in Group B, most of the deletions occurred in the form of improperly formatted correspondence, slightly vague and poorly targeted information. For example, when encouraging the recipients to participate in the activity, the purpose of writing may not be directly mentioned in the textual information, and AI usually performs less well in handling this aspect of writing. Therefore, the frequent revisions made by the students to a certain extent indicate that the AI tools do not perform well in using Chinese to express more subtle and implicit manners or emotions, and that manual revisions are particularly needed, which should also be the focus of teaching attention.

Thirdly, the more frequent revisions in terms of style and sense of identity on the one hand indicate that AI-generated texts are not sufficient in meeting specific language styles or specific writing purposes, and at the same time, it also shows that when students look at the texts critically, they will pay more attention to the language style and sense of identity which are easy to be neglected when writing independently.

Fourthly, although there were fewer logical and coherent revisions, this paper found that these types of revisions had a negative impact on textual performance. First, logical and coherent revisions usually require students to have strong logical thinking skills and in-depth content comprehension. Differences in students' abilities may lead to variations in the effectiveness of the revisions, or they may not fit well with the "added" phrases, thus destroying the coherence of the text itself and leading to unsatisfactory text performance.

By analysing the relationship between the types of revisions and the quality of the text, we can better understand the potential and limitations of AI-assisted writing. This includes how to utilize AI

tools more effectively to provide guidance during the teaching process, and to strengthen the importance of revision skills, such as how to evaluate and improve AI-generated texts, which is also very important for cultivating students' critical thinking and editing skills.

6. Conclusion

This research paper shows the effectiveness of AI-assisted business letter writing, its challenges, and the relationship between revision behaviour and text quality.AI tools have demonstrated some potential in teaching business letter writing, especially in improving concise expression and clear text structure. However, the limitations of AI tools in terms of depth of content, personalization of expression, and handling of complex logic are also evident. In addition, how students utilize AI tools and make text-based revisions is a key concern for future instruction.

The study showed that although AI tools were able to provide clearly structured texts, students still needed to add a lot of content or delete information in order to achieve better textual performance. In addition, the frequent revisions of style and sense of identity reflected the limitations of AI-sanctioned texts in matching the writing style of business documents. Besides, although students did not make many logical and coherent revisions, such revisions had a significant impact on the quality of the text. Therefore, cultivating careful logical thinking and improving the ability to revise are the keys to future business correspondence writing. In conclusion, AI writing tools can play a greater role in improving students' writing skills and teaching effectiveness.

Although this paper provides a comparative analysis of AI-assisted versus manual independent writing in the field of business correspondence, there are some limitations. For example, the relatively small sample size may affect the broad applicability of the results. In addition, the diversity of participants' backgrounds and writing skills may have had an impact on the findings.

Future studies will increase the diversity of the sample and consider the background of the participants to validate the findings of this paper. In addition, students' subjective experiences of using AI tools, specific operational strategies, and the differences between the performance of the AI first draft and the revised final draft will also be included in the study to examine the effectiveness of the revisions. In addition, the effects of different types of AI writing tools on text quality and their applicability to different writing tasks need to be further discussed and analysed.

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25 - Examining ChatGPT Models as L2 Academic Spoken English Dialogue Partners: A Corpus Linguistics Approach

Koki Sekitani
sekitani.koki@toyoeiwa.ac.jp
Toyo Eiwa University, Japan

Masaaki Ogura
mogura@omu.ac.jp
Osaka Metropolitan University, Japan

Takeshi Sato
satoken@people.kobe-u.ac.jp
Kobe University, Japan

Abstract
This study examines the use of ChatGPT, with a primary focus on its capacity to generate academic spoken English. While previous research on ChatGPT for L2 learning has primarily concentrated on its writing abilities, this study aims to assess the quality of conversational data generated by ChatGPT. To this end, we compared discourse data from the Michigan Corpus of Academic Spoken English with output produced by the ChatGPT-4o model. Specifically, we assessed language use in both the corpus and ChatGPT in academic discourse between a non-native student and professors, focusing on lexical diversity, lexical sophistication, syntactic complexity, and readability. The analyses revealed that ChatGPT-generated discourse exhibited a more diverse lexicon and longer clauses. Additionally, different tendencies were observed between the discourses of the student and the professors, such as contrasting results in readability. The findings offer novel insights into enhancing AI's interactive capabilities with L2 users by aligning them more closely with the dynamics of human spoken communication.

Keywords: ChatGPT in academic discourse, L2 learning and AI-generated language, Lexical and syntactic complexity, AI as a conversational partner, Comparative corpus analysis

1. Introduction

This study examines the authenticity of the academic spoken English discourse generated by ChatGPT by comparing it to that of an academic spoken English corpus. ChatGPT has been rapidly and widely adopted by L2 learners to enhance their proficiency and fluency. A number of studies have investigated the impact of ChatGPT on L2 learning with respect to writing (e.g., Yang & Li, 2024). For example, Su et al. (2023) show that ChatGPT provides valuable feedback at various stages of the L2 writing process such as brainstorming, revision, and proofreading. Mizumoto et al. (2023) also point out that writing assessment with ChatGPT demonstrates comparable reliability to that of humans.

Nevertheless, some studies have pointed out the possibility that ChatGPT could serve as an L2 oral interaction partner for learners. This is because it allows learners to speak with reduced pressure and anxiety (Javier & Moorhouse, 2023; Hayashi & Sato, 2024). They will not worry about their L2 errors or negative feedback from interlocutors, which would otherwise lead to poor L2 performance (Tsiplakides & Keramida, 2009). Since ChatGPT will instantly provide elaborate and contextually relevant response within a very short time, it will simulate dynamic interaction experiences such as

role-playing in different settings (Javier & Moorhouse, 2023). Such real-time interactions will be carried out without time and location constraints and without the risk of negative reactions from interlocutors who joined it even at midnight. The environment will provide personalized learning opportunities (Shi, 2024), which will allow for increased exposure to the target language. Such experiences will help learners to improve their contextual L2 knowledge and skills, as well as facilitate the improvement in L2 listening and speaking proficiency (Al-Khasawneh, 2023). ChatGPT just implemented voice input, although this service is currently available for paid subscribers. However, in the near future it will become widespread and popular among L2 learners and teachers and will also have a significant impact on the development of L2 listening and speaking skills.

In consideration of the potential of ChatGPT for L2 oral interactions across a variety of settings, our study aims to investigate the extent the spoken language generated by ChatGPT aligns with authentic spoken language. This study focuses on academic spoken discourse, in which suitable interlocutors are often difficult to find. To compare the two discourses, data were extracted from the Michigan Corpus of Academic Spoken English (MICASE), which contains a variety of spoken language interactions. Thus, this study examines the lexical and syntactic complexity, readability, and content of the language output from MICASE and ChatGPT-4o, a widely used, paid model as of October 2024.

2. Method

2.1 Corpus Data

A skit titled "Social Psychology Dissertation Defence" in MICASE was selected for analysis. The skit consists of 12,000 words and lasts 75 minutes. It includes spoken interactions between a doctoral candidate and four professors serving as reviewers. They pose questions to the postgraduate student about the research, and the student responds to each one. The criteria for this selection were as follows: the main speaker (Ph.D. student) is a non-native speaker of English from an East Asian country, which is close to the authors' country; the discourse contains several authentic interactions between the candidate and professors; the dissertation defence represents one of the most challenging L2 activities for academic purposes.

2.2 Data Generation Process for ChatGPT-4o

We generated ten spoken skits using the same prompt, aligned with the settings of the corpus data. These settings included the number of characters, the linguistic background (one speaker is a non-native English speaker), the geographical background (a university in an Anglophone country), the academic field (social psychology), the situation (a Ph.D. defense with interactions between students and professors), and the number of words in the discourse. Since ChatGPT-4o could not generate the entire discourse at one time, we prompted it to generate the discourse step by step. To avoid potential copyright infringement, the original corpus data was not included in our prompts.

2.3 Indices for Analysis

2.3.1 Lexical diversity

We used *Text Inspector*, a web-based lexical data analysis tool, to conduct statistical analyses of the skit data. This tool provides indices for measuring lexical diversity.

2.3.2 Lexical sophistication

Text Inspector was also employed to analyze the proportion of CEFR-level words in each skit.

2.3.3 Syntactic complexity

In addition to lexical complexity, we analyzed syntactic complexity. First, we counted the total number of words, clauses, and Analysis of Speech Units (AS-units; Foster et al., 2000). The AS-unit is an augmented version of the T-unit, an independent clause, or a dependent clause connected to or embedded in an independent clause (Foster et al., 2000). Examples of one T-unit are: (a) "I like birds," (b) "I liked the movie we saw yesterday," and (c) "If it rains tomorrow, I will go to see a movie." The AS-unit builds on the T-unit, including independent phrases that do not contain verbs, such as (d) "At the museum." Examples (a) to (d) all contain one AS-unit, whereas (e) "I have a bird and its name is Pupu," contains two AS-units because it has two independent clauses connected by the coordinating conjunction "and."

Then, we calculated the ratios of words per clause, words per AS-unit, and clauses per AS-unit. Higher values for these measures indicate more complex utterances. These three metrics were used to assess syntactic complexity.

2.3.4 Readability

We analyzed the data with three types of readability indices: Flesch Reading Ease, Flesch-Kincaid Grade, and Gunning Fog Index. The Flesch Reading Ease (FRE) is a readability metric for English texts. This metric evaluates how easy or difficult a text is to read. This index considers two factors: the number of syllables per word and the number of words per sentence. The FRE score ranges from 100 to 0. Higher values indicate easier readability, while lower values suggest more difficult texts. The formula for calculating FRE is expressed as follows:

$$FRE = 206.835 - (1.015 \times ASL) - (84.6 \times ASW)$$

ASL is the average sentence length (the number of words per sentence), and ASW is the average number of syllables per word.

The Flesch Kincaid Grade is a readability metric designed to indicate the level of education needed to understand a given text. Developed in the U.S., the score corresponds to a U.S. school grade level, meaning a score of 8.0 suggests that an eighth-grade student should be able to understand the text. The formula for the Flesch-Kincaid Grade Level is:

$$Grade\ Level = (0.39 \times ASL) + (11.8 \times ASW) - 15.59$$

The Gunning Fog Index calculates the readability of English texts by estimating the number of years of education required to understand a text. The Gunning Fog Index is calculated using the following formula:

$$Gunning\ Fog\ Index = 0.4 \times (Average\ Sentence\ Length + Percentage\ of\ Words\ with\ Three\ or\ More\ Syllables)$$

3. Results

3.1 Quantitative Index Comparison Analysis

To compare the utterances in a doctoral dissertation defense in MICASE with those generated by ChatGPT-4o, we first calculated the means and standard deviations for ten ChatGPT-4o samples of the student's and professors' utterances separately. We then conducted one-sample *t*-tests on indices of lexical and syntactic complexity for each set of utterances. Tables 1 and 2 present the descriptive statistics and *t*-test results.

Table 1 - Comparison of Lexical and Syntactic Complexity in Student Utterances: MICASE vs. ChatGPT-4 in Doctoral Dissertation Defenses

Index	Measurement	MICASE	ChatGPT-4o (*n*=10)		Difference	*t*	*p*	*d*
			M	*SD*				
Lexical diversity	Token count	2184	2442.10	1089.23	258.10	0.75	.473	0.24
	Type count	552	705.90	215.33	153.90	2.26	.050	0.72

	Type/token ratio	0.25	0.31	0.07	0.06	3.00	.015	0.95
	VOCD	97.95	129.03	10.95	31.08	8.97	<.001	2.84
	MTLD	54.90	115.07	11.80	60.17	16.12	<.001	5.10
Lexical sophistication	A1 type %	33.76	24.80	3.53	−8.96	−8.02	<.001	−2.54
	A2 type %	14.23	14.29	1.20	0.06	0.17	.872	0.05
	B1 type %	16.06	19.23	2.12	3.17	4.72	.001	1.49
	B2 type %	11.31	18.84	2.04	7.53	11.66	<.001	3.69
	C1 type %	4.20	6.38	1.16	2.18	5.91	<.001	1.87
	C2 type %	2.19	3.29	1.00	1.10	3.50	.007	1.11
Syntactic complexity	Word count	3058	2410.30	1069.66	−647.70	−1.92	.088	−0.61
	Clause count	471	273.80	120.05	−197.20	−5.19	<.001	−1.64
	As-unit count	319	144.50	59.83	−174.50	−9.22	<.001	−2.92
	Words/clause ratio	6.49	8.81	0.39	2.32	18.77	<.001	5.94
	Words/AS-unit ratio	9.59	16.57	0.98	6.98	22.43	<.001	7.09
	Clauses/AS-unit ratio	1.48	1.88	0.10	0.40	12.87	<.001	4.07
Readability	Flesch Reading Ease	54.55	31.44	7.62	−23.11	−9.59	<.001	−3.03
	Flesch-Kincaid Grade	12.52	13.88	1.21	1.36	3.56	.006	1.12
	Gunning Fog Index	15.95	17.27	1.41	1.32	2.97	.016	0.94

Table 2 - Comparison of Lexical and Syntactic Complexity in Professors' Utterances: MICASE vs. ChatGPT-4 in Doctoral Dissertation Defences

Index	Measurement	MICASE	ChatGPT-4o (*n*=10)		Difference	*t*	*p*	*d*
			M	*SD*				
Lexical diversity	Token count	6283	1280.30	667.88	−5002.70	−23.69	<.001	−7.49
	Type count	1075	428.20	142.43	−646.80	−14.36	<.001	−4.54
	Type/token ratio	0.17	0.37	0.08	0.20	7.57	<.001	2.39
	VOCD	91.83	99.69	7.64	7.86	3.25	.010	1.03
	MTLD	50.42	94.57	6.28	44.15	22.24	<.001	7.03
Lexical sophistication	A1 type %	24.14	31.38	3.71	4.58	6.17	<.001	1.95
	A2 type %	17.15	15.11	1.32	−2.04	−4.87	<.001	−1.54
	B1 type %	17.97	17.06	1.67	−0.91	−1.73	.119	−0.55
	B2 type %	13.79	16.85	1.52	3.06	6.37	<.001	2.02
	C1 type %	3.63	5.77	0.95	2.14	7.12	<.001	2.25
	C2 type %	3.90	2.80	0.93	−1.10	−3.73	.005	−1.18
Syntactic complexity	Word count	8515	1279.60	675.55	7235.40	−33.87	<.001	−10.71
	Clause count	1303	176.50	92.86	−1126.50	−38.36	<.001	−12.13
	As-unit count	741	120.40	58.40	−620.60	−33.61	<.001	−10.63
	Words/clause ratio	6.53	7.22	0.42	0.69	5.19	<.001	1.64
	Words/AS-unit ratio	11.49	10.46	0.83	−1.03	−3.95	.003	−1.25
	Clauses/AS-unit ratio	1.76	1.45	0.07	−0.31	−14.69	<.001	−4.65
Readability	Flesch Reading Ease	48	51.74	3.81	3.74	3.11	.013	0.98
	Flesch-Kincaid Grade	16.97	9.14	0.65	−7.83	−37.92	<.001	−11.99
	Gunning Fog Index	20.51	12.49	0.92	−8.02	−27.66	<.001	−8.75

The results indicate that ChatGPT-4o generally demonstrated greater lexical diversity in student responses compared to MICASE, as shown through Type/Token Ratio, VOCD, and MTLD metrics. A comparison of vocabulary level ratios by CEFR revealed that ChatGPT-4o used a higher proportion of lower-frequency, advanced vocabulary. Regarding syntactic complexity, ChatGPT-4o incorporated longer clauses and AS-units, using AS-unit structures that contained a greater number of dependent

and embedded clauses. For readability, the findings consistently indicate that ChatGPT-4o's responses were more challenging to read compared to the Michigan Corpus. The Michigan Corpus scored higher on the Flesch Reading Ease, while ChatGPT-4o achieved higher values on the Flesch-Kincaid Grade and Gunning Fog Index, which is considered to reflect greater textual complexity.

For professor responses, ChatGPT-4o again displayed higher lexical diversity across Type/Token Ratio, VOCD, and MTLD metrics. The CEFR-based comparison of vocabulary levels revealed a complex pattern: ChatGPT-4o utilized a greater amount of A1, B2 and C1-level vocabulary, whereas MICASE included more A2 and C2 levels. At the C1 level, ChatGPT-4o surpassed the Michigan Corpus, though the pattern reversed at the C2 level, where the Michigan Corpus had a higher proportion. In terms of syntactic complexity, ChatGPT-4o outputs tended to produce longer clauses. However, AS-units in MICASE were generally longer and contained a higher number of dependent and embedded clauses. Readability scores show that ChatGPT-4o achieved higher Flesch Reading Ease scores, while the Michigan Corpus scored higher on the Flesch-Kincaid Grade and Gunning Fog Index, which indicates that utterances of the professors were more difficult to read than those generated by ChatGPT.

3.2 Observations on Content

The following are comparative content analyses of key characteristics between ChatGPT-4o's generation in L2 academic spoken English contexts and MICASE.

3.2.1 Linguistic patterns and syntax

ChatGPT-4o's responses demonstrated a high frequency of participle clauses with adverbial meaning compared to those in MICASE. This allows for a more formal and concise expression of ideas that aligns with academic standards. Additionally, ChatGPT-4o interactions were notable for their minimal use of fillers and interruptions. Unlike MICASE, ChatGPT-4o exhibited almost no rephrasing, repetition, or interruptions. The use of fillers such as "um" was minimal. This results in a smooth and uninterrupted conversational flow. Furthermore, ChatGPT-4o outputs were grammatically accurate, in contrast to the natural, often imperfect spoken language observed in MICASE.

3.2.2 Discourse themes and research focus

The themes in ChatGPT-4o interactions often centered on international comparative research, with the United States frequently serving as a point of comparison. The discussion generally followed a consistent structure. The main chair guided the exchange with questions about research objectives, definitions of key terms, comparisons with existing theories, methodological details (such as sample size and selection methods), practical implications, and research limitations. This structured format ensures thorough and balanced discussions across topics, unlike MICASE, where spontaneous topic shifted and varied discourse patterns were more common.

3.2.3 Citation and research focus

In contrast to MICASE, ChatGPT-4o interactions did not include explicit citations or references to prior research. The discussions tended to focus on empirical studies, with most studies adopting a mixed-methods approach that combined qualitative and quantitative research. Quantitative findings were rarely referenced in responses, while qualitative case examples were commonly used to illustrate key points. When quantitative analysis was mentioned, it was mainly on methodological aspects rather than specific numerical results.

3.2.4 Interactional dynamics and questioning style

ChatGPT-4o interactions featured consistently logical and structured student responses, with students demonstrating full comprehension of all questions posed. Unlike in MICASE, there were no misunderstandings or requests for clarification, even for indirect questions such as "You mean…?" or "You are saying that…?" Notably, negative comments or criticisms were absent, and the defense always concluded successfully, with unanimous pass judgments. Once a pass was granted, the defense typically ended with a congratulatory statement, "Congratulations, Dr. [name]," to which the student responded with gratitude, often saying, "Thank you so much!"

Moreover, turn-taking was highly organized; the chair skillfully moderated to ensure balanced participation. Professors did not interject in each other's questions or add remarks, in contrast to the more fluid and overlapping exchanges found in MICASE.

3.2.5 Student recognition

When the student's gender was unknown, the pronoun "they" was consistently used, though this usage may seem somewhat out of place during the pass/fail deliberations among professors.

4. Discussion

The findings of the present study indicate both the strengths and limitations of AI language models in mimicking human academic discourse. While ChatGPT-4o produces advanced language with high lexical diversity and complex syntax, it might not fully capture the naturalness and interactive nature of human communication. Even so, ChatGPT can produce text of sufficient quality and serve as a convenient tool for learners to study academic English. Overall, since it tends to produce English that is more complex than students' utterances but less complex than professors', it can be considered useful as learning material. Given that ChatGPT has been demonstrated to be an effective tool for L2 learning as long as users are aware of its advantages and disadvantages (Chen, 2024), the findings of the present study are important in understanding its strengths and potential challenges as an interlocutor in academic spoken discourse.

This study has limitations in that a small sample size of ChatGPT-4o outputs and its focus on specific academic contexts may affect the transferability of the findings. Future research should explore larger datasets and a variety of academic settings to further investigate the capabilities and scope of AI language models.

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26 - Improving L2 Reading Efficiency Through Chunk-Based Reading: An Eye-Tracking Investigation

Kotaro Hayashi
hayashik@cs.tut.ac.jp
Toyohashi University of Technology, Japan

Takeshi Sato
satoken@people.kobe-u.ac.jp
Kobe University, Japan

Abstract
This study explores the impact of chunk-based reading and gaze fixation training on L2 English reading speed and comprehension. Chunk reading, which involves processing text in meaningful multiword units, has been widely recognized for enhancing fluency and comprehension. This research hypothesizes that training learners to fixate their gaze on chunk centers can improve reading efficiency by enabling the processing of chunks as unified units. Using an eye-tracking tool, 42 Japanese university students of varying English proficiency (CEFR A2 and B1) participated in a controlled experiment. Participants completed reading tasks with and without chunk-focused training, and their eye movements and reading outcomes were analyzed. Results indicate that lower-proficiency learners (A2) benefited most, showing significant reductions in eye fixations, faster reading speeds, and improved comprehension post-training. In contrast, higher-proficiency learners (B1) displayed minimal improvement, suggesting chunk-based strategies are particularly effective for foundational language processing. Findings highlight the pedagogical potential of integrating eye movement strategies into L2 instruction, particularly for less proficient learners. These results offer practical insights for optimizing L2 reading strategies and underscore the need for tailored approaches based on learner proficiency.

Keywords: Chunk-based reading, Gaze fixation training, L2 reading comprehension, Eye-tracking technology, Proficiency-based strategies

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1.   Introduction

Chunk reading, also known as slash or phrase reading, involves reading a passage by dividing it into meaningful multiword units of information that are manageable at a single time (Miller, 1956). Chunking divides a sentence into smaller, meaningful units, comprising several words that form a cohesive word group (Nation, 2011) or meaningful phrase (Kadota, 2001). Due to its potential to improve reading and listening fluency, L2 learning settings have widely adopted this strategy.

In chunk reading, readers segment sentences into meaningful units by visually "slashing" or breaking them down. These chunks typically contain seven plus or minus two words, a concept famously described as the "magic number" (Miller, 1956), or represent lexical bundles that can be spoken within a two-second span (Baddeley, 1992, 2002). Numerous studies have revealed chunk reading as a key facilitator of fluency (Le & Nguyen, 2014; Yamashita & Ichikawa, 2010). As Nation (2011) argue, chunk reading enables learners to process texts in multi-word units, reducing the number of eye fixations and accelerating reading speed (Sutz, 2009).

 Beyond improving speed, chunk reading has also been associated with enhanced reading comprehension (Pulido, 2021; Yubune, 2010). By reducing the cognitive load on working memory, chunk reading allows readers to allocate more cognitive resources to comprehension. This, in turn, strengthens inferencing and predictive reading strategies, leading to more effective overall reading

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(Anderson, 1999). Additionally, chunk reading may enhance listening skills (Yubune, 2010), which further reinforces its value for language learning. Moreover, successful reading experiences foster higher self-efficacy among learners (Samuels, 2008), promoting sustainable, motivated learning.

Despite these documented benefits, several key challenges remain unaddressed in the current literature. One persistent issue is how to effectively train learners in chunk reading. For instance, L2 learners whose first language (L1) differs structurally from English, such as Japanese learners, often struggle with chunk-based reading due to differences in word order (Hijikata, 2005). Another challenge involves teaching learners to identify and process chunks as cohesive units. While some learners may naturally develop a visual scanning pattern conducive to chunk reading, others require explicit instruction on how to visually group chunks (Rayner, 1998).

We need further research to understand the individual components of chunk reading and its varied efficacy among learners. As previous studies suggest (Wood, 2007), chunk reading may not be equally effective for all learners, and individual differences may influence the success of this strategy. Therefore, our present study aims to explore methods for training L2 learners in shifting their visual scanning patterns to facilitate chunk reading. Additionally, it seeks to investigate the individual factor that may impact the efficacy of chunk reading as a L2 learning strategy. Based on the above discussion, this study poses the following research questions.

1. Does training with a chunk reading tool designed to reduce eye fixations lead to a measurable decrease in the number of eye fixations during reading among L2 learners?
2. After undergoing chunk-reading training, do L2 learners demonstrate improved reading speed and enhanced reading comprehension compared to their performance prior to training?
3. Does L2 proficiency influence the effect of chunk reading training on reducing eye fixations during L2 reading?

2. Method

2.1 Participants

A total of forty-two Japanese university students participated in the study. Twenty-one students from a university of science and technology (α), whereas an additional 21 students from another science-focused university (β). Participation was entirely voluntary, and compensation was provided for the time dedicated to the study. The research was approved by the research ethics board of both universities, and all participants have signed the consent form. The participants demonstrated varying English proficiency levels: those from the university α were at the CEFR B1 level, as indicated by their TOEFL ITP® test scores. In contrast, the participants from the university β demonstrated an average proficiency level of A2, as evidenced by their TOEIC ® L&R scores. Furthermore, all participants completed the EF SET, a free English proficiency test, prior to the experiment. The mean score for the university α with A2 level was 68.9 and S.E. was 2.9, while that of the other university with B1 was 55.1 and S.E. was 2.8.

2.2　Treatment

The participants were instructed in chunk reading with the aid of a computer-based reading aid tool designed to minimize the number of eye fixations per chunk. The tool displayed passages in consecutive chunks, with the center of each text chunk on the screen (see to Figure 1 for clarification). The participants were instructed to focus their attention on the center of each chunk and to move their eye gaze steadily downward as additional chunks presented. By shifting the participants' reading strategy from word-by-word reading to chunk-based reading, this design aimed to enhance reading comprehension by reducing the eye fixation durations.
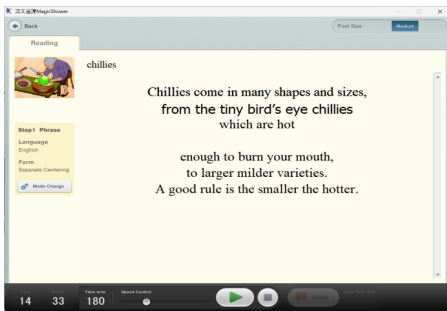
Figure 1 - Reading aid tool

For the treatment, three passages were selected from Nation's (2018) book. The three passages (thereafter, passage 1, 2 or 3) had the same word count and vocabulary level, designed for reading at a rapid pace. The passages addressed scholarly topics, but we selected two that were less directly related to scientific or technological subjects to prevent the participants from relying on their prior knowledge of the subject to answer comprehension questions. The participants had to read the entire passage to correctly answer the questions. One passage was read before and during treatment, while the other passage was read just after the treatment. The order of the passages was counterbalanced.

2.3   Procedure

Participants visited the author's office (university α) or the experimental room (university β) at their respective universities, where the research setup was the same: each room was equipped with a 32-inch computer screen displaying each reading passage, a Windows notebook with the chunk-reading aid tool, and Tobii Pro Glasses 3 for eye tracking, which was connected to a separate Windows PC to record eye movement data.

Participants sat on the front of the display with a resolution of 3840×2160. We conducted the calibration of the Tobii Glasses3 prior to the experiment. The experiment had four phases. First, the subjects read either passage 1 or 2 (We will refer to this as Reading 1). After reading, they completed a 10-question test related to the passage they read. Secondly, they utilized the tool to practice chunk-based reading using the reading passage they read in Reading 1. Third, the participants read either passage 1 or 2 they did not read in Reading 1 (Reading 2). Upon completion of this reading, they took a 10-question test related to the passage they had just completed. Finally, they read passage 3 (Reading 3). After finishing this reading, they took a 5-question test related to the reading they completed.

3.   Hypotheses

Training with a chunk reading tool is hypothesized to have the following effects.
1.   Training with a chunk reading tool will help the participants reduce in the number of their eye fixations during reading.
2.   After training, the participants will exhibit improved reading speed and comprehension compared to their pre-training performance.
3.   The L2 proficiency influences the effect of chunk reading training on reducing eye fixations during L2 reading at both universities.

4.   Results

4.1   Reading time

To assess the reading time, we conducted a two-way repeated-measures ANOVA (Alpha level is 0.05). Figure 2 shows the results of the reading time. Regarding the reading times, significant main effects were revealed in the reading factor $F_{2, 60}=5.812$, $p<0.01$, $2=.098$. There is marginally interaction effect between readings × universities $F_{2, 60}=2.58$, $p<0.10$, $2=.003$. We conducted

multiple comparisons with the Holm methods that show no significant difference is found in the reading factor within univ. α $F_{2, 60}$=.815, p=.448, 2=.026 and significant differences were found in the reading factor within univ. β $F_{2, 60}$=7.440, p<0.01, 2=.199. On the other hand, significant differences were found in the reading factor within univ. β: reading 1 > reading 2 (p<0.05) and reading1 > reading2 (p<0.01). No significance was found between reading 1 and reading 2 (p=.635). Thus, Prediction 2 was partially supported.
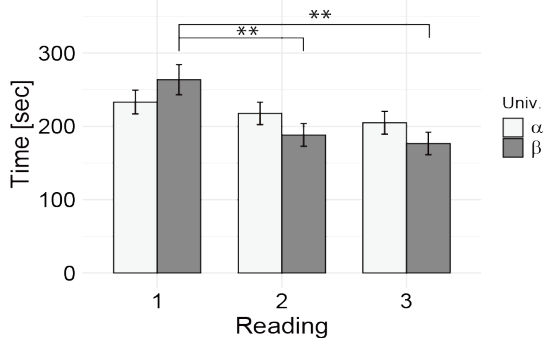

Figure 2 - Result of reading time

4.2   Question score

To align the scores with the other readings, we doubled the results from Reading 3. We conducted a two-way repeated-measures ANOVA (Alpha level is 0.05) to assess the question score. Figure 3 shows the results of the question score. Regarding the reading times, significant main effects were revealed in the university factor $F_{2, 60}$=23.461, p<0.01, 2=.136. There is no interaction effect. Thus, Prediction 2 was not supported.
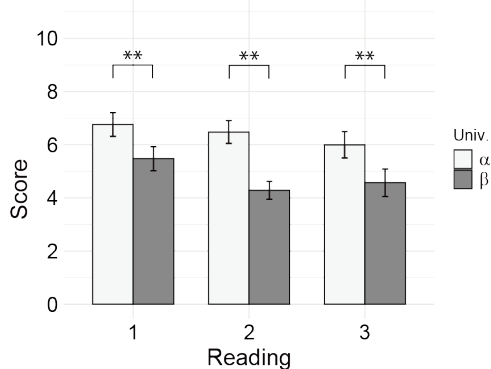

Figure 3 - Result of question score

4.3   Eye tracker data

Tobii Pro Lab software enabled the projection of gaze data onto snapshots of English text from the gaze and video data recorded with Tobii Glasses 3 (Figure 4). We projected the fixation points onto a 1920x1080 image and analysed the gaze data based on accurate projection calculations.
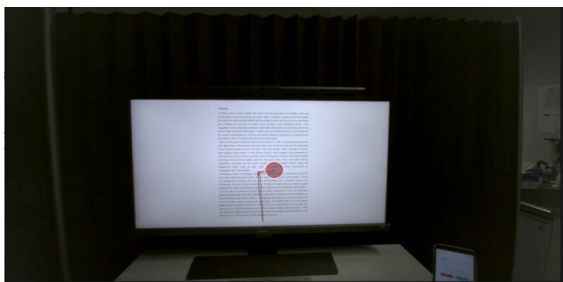

Figure 4 - Fixation data projection

We use the participants' gaze fixation duration from these projected eye tracker data. Figure 5 shows an example of fixation space. The text (680 × 1080 pixels) is divided into five predefined spaces (136 pixels tall, 1080 pixels wide). We obtained the fixation duration of each Space by using Tobii Pro Lab and performed chi-squared test of independence between each university and space condition. The tests revealed significant differences between universities and readings. Table 2 and Table 3 shows the results of fixation duration at in each space and readings in each university.
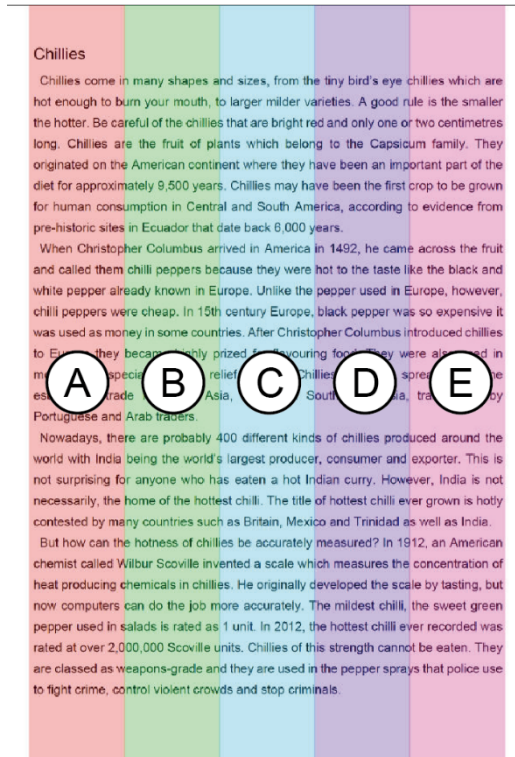

Figure 5 - Five spaces of display

Table 1 and 2 present the observed frequency and adjusted residual for the tests, respectively. If the adjusted residual score for a specific subgroup is greater than 1.96, the subgroup differs significantly (p<0.05) from the overall group percentage. The tests revealed no significant difference between the readings and spaces in univ. α students (28=10.646,df=8, p=.223, Cramer's V=.025). Conversely, the tests revealed significant differences between behaviors and spaces in univ. β students (28=122.350,df=8, p<0.01, Cramer's V=.007). Furthermore, the tests revealed significant differences between universities and spaces in reading 1 (28=15.628,df=8, p<0.01, Cramer's V=.004), in reading 2 (28=79.820,df=8, p<0.01, Cramer's V=.117) and in reading 3 (28=75.533,df=8, p<0.01, Cramer's V=.119).Given these findings, prediction 1 was partially supported, while prediction 3 was supported.

Table 1 - Eye tracker result (participants × spaces in each university)

	A	B	C	D	E
(a) Univ. α					
Reading1	663.150	939.421	943.800	942.696	514.089
	1.983*	-1.181	0.009	-0.386	-0.169
Reading2	364.130	601.828	601.879	622.497	306.876
	-1.876	0.070	0.741	1.659	-1.095
Reading3	322.976	522.887	477.465	472.216	286.859
	-0.320	1.301	-0.795	-1.309	1.357
(b) Univ. β					
Reading1	715.837	1197.705	1188.451	982.477	583.647
	4.541**	5.102**	-9.899**	0.467	2.047*
Reading2	430.009	665.523	1170.796	708.895	394.347

Reading3	-1.681	-5.735**	6.294**	0.348	-0.132
	384.146	753.246	1081.310	653.806	346.247
	-3.247**	0.250	4.414**	-0.862	-2.099*

Fixation duration and adjusted residual [sec] (*: p<0.05, **: p<0.01)

Table 2 - Eye tracker result (participants × spaces in each reading)

	A	B	C	D	E
(a) Reading1					
Univ. α	663.150	939.421	943.800	942.696	514.089
	1.563	-2.359*	-2.029*	2.795**	0.474
Univ. β	715.837	1197.705	1188.451	982.477	583.647
	-1.563	2.359*	2.029*	-2.795**	-0.474
(b) Reading2					
Univ. α	364.130	601.828*	601.879	622.497	306.876
	2.015*	4.002**	-8.779**	3.517**	0.684
Univ. β	430.009	665.523	1170.796	708.895	394.347
	-2.015*	-4.002**	8.779**	-3.517**	-0.684
(c) Reading3					
Univ. α	322.976	522.887	477.465	472.216	286.859
	3.739**	1.421	-8.324**	2.055*	3.309**
Univ. β	384.146	753.246	1081.310	653.806	346.247
	-3.739**	-1.421	8.324**	-2.055*	-3.309**

Fixation duration and adjusted residual [sec] (*: p<0.05, **: p<0.01)

5. Discussion

This study validated the effect of chunk-based reading training using eye-tracking technology to monitor changes in eye movements and reading performance. Additionally, it examined L2 proficiency differences by comparing students from two universities with varying L2 proficiency levels (B1 and A2).

The results of the reading time analysis indicated that chunk-based reading training benefited lower-proficiency learners, whereas no change was observed in higher-proficiency learners. This may suggest that higher-proficiency learners have already developed a well-established approach to reading, while lower-proficiency learners are less accustomed to reading English texts. Consequently, chunk-based reading training may be particularly beneficial for lower-proficiency learners. However, no significant differences were identified between the universities or reading levels in terms of question score results. This suggests no inherent correlation between reading speed improvement and content comprehension.

Eye-tracking data indicated that more proficient learners do not exhibit a fixation bias toward specific points in the passages, likely because they are segmenting sentences appropriately as they read. While overall fixation time decreased from Reading 2 onward, the difference was not statistically significant. An increase in reading speed is likely attributable to participants' constant exposure to English passages during the experiment. In contrast, before chunk-based reading training, less proficient learners tended to fixate at the beginning of sentences, reflecting a common tendency among beginners to start reading from the left edge of the page. After the training, however, their fixation points shifted more toward the center of the text, suggesting that the chunk-based reading training helped participants consciously control their gaze.

One limitation of this study is that the chunk-based reading training was administered only once and for a relatively brief period. Extending the training over a longer duration might yield positive effects for higher-proficiency L2 learners as well. Furthermore, prolonged training could potentially influence content comprehension.

6. Conclusion

This study aimed to verify the effectiveness of chunk-based L2 reading training and eye movement control using eye-tracking technology, as well as to examine its influence on L2 proficiency. Based on the findings, responses to each research question (RQ) are as follows:

For RQ1, no notable reduction in eye fixations after the training was observed for all learners. However, learners with lower proficiency levels demonstrated a decrease in eye fixations during reading after utilizing the training tool and successfully centralized their eye gaze within each chunk. Thus, RQ1 was partially confirmed.

Regarding RQ2, the impact of the chunk-based reading training was evident only in terms of enhanced reading speed for lower-proficiency learners, with no observable effect on reading comprehension or higher-proficiency learners. The findings suggest that centralizing eye gaze may facilitate reading speed, though this is not consistent across all learners. Lower-proficiency learners particularly benefited from the chunk-based reading training. Hence, RQ2 was also partially supported.

As for RQ3, findings demonstrated that lower-proficiency (A2) learners significantly benefited from the eye-fixation training for chunk reading, as evidenced by a reduction in eye fixations and faster reading speeds. Hijikata (2005) previously asserted the efficacy of the chunk reading strategy for intermediate L2 learners; however, this study refines that claim, demonstrating that lower-intermediate learners derive greater benefits from the training and achieve superior performance.

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27 - Exploring Korean Passive Sentence Processing in Chinese L2 Learners: An Eye-tracking Study

Changkyung Song
pg6886hj@snu.ac.kr
Seoul National University, South Korea

Hyeyun Jeong
tosirihy@snu.ac.kr
Seoul National University, South Korea

Sixuan Zhu
zhusixuan@snu.ac.kr
Seoul National University, South Korea

Hojung Kim
renata88@snu.ac.kr
Seoul National University, South Korea

Abstract

This study investigates the processing of Korean passive sentences by native Korean speakers and advaned Chinese learners of Korean, using eye-tracking technology. Passive sentences are challenging because the mapping between thematic roles and syntactic structure does not align, unlike in active sentences where agents typically appear as subjects. In addition, Korean's use of morphological markers and flexible word order further complicates sentence processing. This study explores which sentence constituents impose higher cognitive demands and whether these demands differ between the two groups. It also examines how word order affects sentence processing and if its impact varies across groups. The results show that Chinese learners, like native speakers, relied on case markers and experienced longer processing times at agent and patient arguments rather than the verb. However, unlike native speakers, who were unaffected by word order changes, learners showed higher cognitive load when processing sentences with scrambled word order. These findings underscore the importance of real-time processing research in understanding how learners' sentence processing differs from native speakers, offering insights into second language acquisition.

Keywords: Korean passive sentences, Eye-tracking technology, Word order processing, L2 acquisition, Thematic roles and case markers

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1. Introduction

Passive sentences are known to be challenging for second language learners due to the differences in case markings and word order compared to active sentences. In active sentences, the agent typically takes the nominative case while the patient is marked as accusative. However, in passive sentences, the patient is marked as nominative, and the agent appears in the oblique case (Bock & Levelt, 1994; Hyams et al., 2006). Moreover, the agent usually follows the patient, deviating from the usual event structure and thereby increasing cognitive load (O'Grady & Lee, 2005).

As an SOV language, Korean requires integrative processing to construct meaning after encountering the verb. This process can introduce cognitive load, as learners may initially interpret a nominative-marked noun phrase as the agent but need to reassign it as the patient once they

encounter the final passive verb (Son et al., 2022). Mitsugi (2017) found that in Japanese—a language with an SOV structure similar to Korean—native speakers were able to assign thematic roles using case markers before reaching the verb in the incremental processing process, while learners struggled to use case markers as efficiently to predict these roles. As an agglutinative language with a well-developed system of case particles, Korean allows flexible word order, enabling both the typical patient-agent and the less common agent-patient order in passive sentences. These characteristics of Korean passives may pose challenges for learners whose native language, like Chinese, follows a fixed SVO word order. This study, therefore, aims to use eye-tracking methods to examine in real time how Chinese learners process Korean passive sentences.

Previous studies have shown conflicting findings regarding how Chinese learners process Korean passive sentences. Jeong (2014) reported that Chinese learners process dative passive sentences more quickly and accurately than nominative passive sentences. In dative passives, the agent appears and is marked by the particle '에게(eykey)' (e.g., " 오빠에게 잡혀요(oppa-eykey caphyeyo)" - "[someone is] caught by the brother."). In contrast, nominative passives include only the patient, marked by the particle '이/가(i/ka)' (e.g., "언니가 잡혀요(enni-ka caphyeyo)" - "the sister is caught [by someone]."). Jeong interpreted this as possibly due to Chinese learners' reliance on native language transfer through the isomorphic mapping strategy (O'Grady & Lee, 2005) or their incomplete acquisition of the polysemous functions of the nominative particle '이/가(i/ka)' in both active and passive contexts, having instead learned only the simpler use of '에게(eykey)'. In contrast, Kim (2021) reported that learners process passive sentences with canonical word order—where the patient appears as the first noun—more effectively, highlighting the importance of case markers and verb morphology in processing Korean passives. However, Shin and Park (2023) found results consistent with Jeong (2014), indicating that learners struggle more with non-canonical word orders, a finding that diverges from the isomorphic mapping hypothesis. These conflicting findings make it unclear what cues learners rely on when processing Korean passive sentences. Furthermore, these studies employed tasks such as picture-sentence verification, where participants listen to or read a sentence and choose the matching picture, and sentence acceptability judgments, collecting judgment outcomes and reaction times. However, these tasks did not directly capture the real-time processing that occurs as learners read sentences.

This study aims to investigate the real-time processing patterns of Chinese learners of Korean in passive sentences with varying word orders, using eye-tracking to compare these patterns with those observed in active sentences and in native Korean speakers. First, we will examine which components in passive sentences impose greater cognitive load on Chinese learners and native speakers. Next, by comparing the processing of canonical and non-canonical word orders in both active and passive sentences, we seek to analyze the effect of word order on passive sentence processing in both groups. Through this analysis, we aim to derive implications for second language education. Based on this discussion, the research questions for this study are as follows:

RQ1: Which components in passive sentences impose greater cognitive load on Chinese learners and native Korean speakers?

RQ2: Are Chinese learners and native Korean speakers differently affected by word order when processing active and passive sentences? For each group, which type of passive sentence—canonical or non-canonical word order—imposes greater cognitive load?

2. Theoretical background

2.1 Passive Constructions in Korean

Passive constructions are often grouped with causative constructions under the grammatical category of voice due to their shared feature of a grammatical shift in subject hierarchy (Yeon, 2011). Shibatani (1985), a typologist, explains that the prototypical feature of passive constructions involves the promotion of the original object from a transitive clause to the subject position, while the original subject is demoted to an oblique. Compared to active sentences, passive sentences thus involve one fewer argument.

Other prototypical features of passive constructions, as outlined by Shibatani (1985), include the following: (1) The defocusing of the agent as a primary pragmatic function. (2) Semantically, the

subject is affected, and the predicate requires both an agent and a patient. (3) Morphologically, the verb carries a passive marker. Passive structures are common in nominative-accusative languages, including Korean, which is also a nominative-accusative language (Whaley, 2008).

The scope of Korean passives includes not only derivational passives but also syntactic constructions such as those using -아/어지다(a/ecita) and lexicalized passives formed with verbs like 되다(toyta) (become), 받다(patta) (receive), and 당하다(tanghata) (suffer). However, this study will focus exclusively on derivational passives. The following examples illustrate Korean derivational passives:

> (A) 경찰이 도둑을 잡았다.
> (A) kyengchal-i totwuk-ul cap-ass-ta
> police-NOM thief-ACC catch-PST-DECL
> "The police caught the thief."

> (B) 도둑이 경찰에게 잡혔다.
> (B) totwuk-i kyengchal-eykey cap-hi-ess-ta
> thief-NOM police-DAT catch-PASS-PST-DECL
> "The thief was caught by the police."

In Example B, a passive suffix (-hi-) attaches to the verb 잡다 (capta) (to catch), forming the passive verb 잡히다 (cap-hi-ta) (to be caught). This is one of several passive suffixes in Korean (-이/히/리/기-) (-i/hi/li/ki-), which vary depending on the verb.

Another key feature is the use of case markers due to the agglutinative nature of Korean. In Example A, the active sentence, the subject 경찰 (kyengchal) (police) takes the nominative marker -이 (i), while the object 도둑 (totwuk) (thief) takes the accusative marker -을 (eul). However, in Example B, the object of the active sentence (도둑, totwuk) is promoted to the subject position, receiving the nominative marker -이 (i). Meanwhile, the original subject (경찰, kyengchal) is demoted to an oblique position with the dative marker -에게 (eykey). Depending on the animacy of the agent, Korean allows various oblique markers, such as -에게 (eykey), -에 (ey), or -에 의해 (ey uyhay). In this case, -에게 (eykey) is used because the agent (경찰, kyengchal , police) is animate.

These complexities—such as the selection of passive suffixes, case markers, and constraints based on animacy—demand significant cognitive resources when processing passive sentences in Korean.

2.2 Theoretical Accounts of Passive Processing

Typically, agents appear as subjects, patients as direct objects, and recipients as indirect objects. However, in passive constructions, the agent is marked as an oblique argument, which disrupts general cognitive expectations (Bock & Levelt, 1994). This discrepancy has long attracted researchers' attention to understanding how passive sentences are processed.

For example, Hyams et al. (2006), studying children's grammatical development, suggested that children initially struggle with passives because they tend to map external arguments (e.g., agents) to the subject position. Based on this, they proposed the Canonical Alignment Hypothesis (CAH), which posits that non-canonical mappings in passives result in processing difficulties. VanPatten (2004), focusing on adult second language (L2) learners, introduced the First Noun Principle (FNP). He argued that L2 learners tend to assign the first noun in a sentence as the subject or agent, regardless of its actual thematic role.

The difficulty of processing passives has also been explored in the field of agrammatic aphasia. O'Grady & Lee (2004) questioned the validity of existing models such as the Canonical Order Models (COM) and trace-based theories, specifically the Trace Deletion Hypothesis (TDH) and the Double Dependency Hypothesis (DDH). While these models agree that passive constructions are harder to process than active ones, they offer different explanations. COM attributes the difficulty to the non-canonical order of patient-agent, TDH suggests that passives are challenging due to the presence of noun phrase traces, and DDH argues that multiple dependencies within passive sentences increase processing difficulty. O'Grady & Lee proposed the Isomorphic Mapping Hypothesis (IMH), which suggests that passives are hard to process because the argument order does not reflect the event structure (agent-theme sequence).

In the case of Korean passives, one major debate concerns how the flexible word order of Korean affects passive processing. Specifically, in Korean, an agent can precede a patient even in passive sentences, raising the question of whether these non-canonical word orders cause additional difficulty. Table 1 is a summary of key predictions from various hypotheses.

Table 1 - Summary of key predictions from various hypotheses

Hypothesis	Processing tendencies	Difficulty of scrambled passive
Canonical Alignment Hypothesis (Hyams et al., 2006)	Maps agents to subject positions	Hard
First Noun Principle (VanPatten, 2004)	Assigns first noun as subject/agent	Hard / Easy
Canonical Order Models (Schwartz et al., 1980)	Prefers agent-patient sequence	Easy
Trace Deletion Hypothesis (Grodzinsky, 2000)	Considers first noun as agent	Easy
Double Dependency Hypothesis (Mauner et al., 1993)	Feels difficulty with sentences involving multiple dependencies	Hard
Isomorphic Mapping Hypothesis (O'Grady & Lee, 2004)	Feels difficulty when argument order differs from event structure	Easy / Hard (with derivational passives)

Beretta et al. (2001) found that Korean speakers performed poorly on scrambled passives, suggesting that their results support the DDH over the TDH or COM. In contrast, O'Grady & Lee (2004:98) argued in favor of the IMH, suggesting that the difficulty of scrambled passives depends on the presence of a passive suffix. Specifically, when a passive suffix is present, such as in the derivational passive 잡히다 (caphita) (to be caught), learners focus on the passive marker rather than on case markers, which complicates mapping the first noun to its appropriate role. In contrast, passives without a suffix (e.g., 아이에게 개가 맞았다, ai-eykey kay-ka macassta , The child was hit by the dog) are easier to process because the argument order mirrors the event structure. These findings align with research on Japanese, another agglutinative language that relies heavily on case markers. According to Mitsugi (2017), native Japanese speakers use case markers in incremental processing to assign thematic roles before encountering the verb, pre-activating structural representations. However, L2 learners struggle to efficiently use these markers, relying more on the verb's morphological information. Therefore, the processing of Korean passives involves not only challenges related to argument structure and thematic role assignment but also the proper use of word order, case markers, and passive markers as cues.

2.3   Processing of Korean Passive Sentences by Chinese Learners

Previous studies on the processing of Korean passive sentences by Chinese learners have yielded conflicting results. Jeong (2014), using a picture-sentence verification task, found that Korean native speakers process nominative passive sentences (e.g., "언니가 잡혀요(enni-ka caphyeyo)" – "The sister is caught [by someone]") more quickly and accurately, whereas Chinese learners tend to process dative passive sentences (e.g., "오빠에게 잡혀요(oppa-eykey caphyeyo)" – "[Someone] is caught by the brother") more effectively. Jeong (2014) interpreted these results in terms of Chinese learners' use of word order and isomorphic mapping strategies, as well as their incomplete acquisition of the nominative marker "이/가(i/ka)." However, since arguments were omitted in each passive sentence in this study, it does not sufficiently address the cognitive load typically induced by two arguments or the effect of word order on passive sentences. Therefore, further research is needed to clarify the inconsistent findings with Bretta et al. (2001) and O'Grady & Lee (2004), who report difficulties in processing scrambled word orders in suffixal passives.

Conversely, Kim (2021) found that Chinese learners process Korean passive sentences according to word order patterns, where the subject marked by case particles appears as the first noun phrase, rather than based on agent-patient word order. A sentence-reading and picture-selection task revealed that low-proficiency Chinese learners scored significantly lower in recognizing scrambled word-order sentences compared to canonical word-order sentences. This trend was observed across proficiency groups, with high-proficiency learners and native Korean speakers outperforming low-

proficiency learners. The findings suggest that learners struggle with scrambled word-order sentences due to influence from their native language, Chinese, which has a relatively fixed arrangement of sentence components.

Shin and Park (2023) examined Chinese learners' acceptability judgments of Korean passive sentences, with a focus on the Isomorphism Hypothesis and the role of language-specific mechanisms, such as case marking and verbal morphology. Their results showed that learners took longer to judge the acceptability of canonical word-order passive sentences compared to scrambled ones, indicating a higher cognitive load for the canonical word-order passive sentences. This was interpreted as supporting the Isomorphism Hypothesis, suggesting that processing becomes more challenging when the agent follows the patient, resulting in a non-isomorphic semantic and syntactic structure. However, in terms of acceptability judgments, learners rated non-canonical passive sentences as less acceptable than canonical ones, which contrasts with the response time findings.

In summary, Jeong (2014) and Shin & Park (2023) reported that Chinese learners experience more difficulty with canonical word-order passive sentences, where isomorphism between event representation and syntactic structure is absent. On the other hand, Kim (2021) found that Chinese learners struggle with scrambled word-order passive sentences where the subject appears later, due to the transfer of sentence component arrangement from their native language. Given these conflicting findings, it remains challenging to draw definitive conclusions about the cues that Chinese learners rely on when processing Korean sentences. Furthermore, previous studies used static research tools, such as picture-sentence verification tasks, sentence reading, and picture selection tasks, and acceptability judgment tests, which limit direct observation of real-time processing. This study, therefore, aims to observe the real-time processing of Korean passive sentences by Chinese learners using eye-tracking methodology, comparing their patterns with those of native Korean speakers. Specifically, it will examine how word order influences processing when reading passive sentences without omitted arguments, analyzed in comparison to active sentences.

3. Methodology

3.1 Participants

This study included a total of 70 participants: 37 Chinese learners of Korean and 33 native Korean speakers. Participants were recruited via university online bulletin boards and Chinese student communities. All participants were adults aged 18 to 35 with corrected vision suitable for eye-tracking experiments. Chinese Korean language learners were selected based on the criterion that both they and their parents are native speakers of Chinese. The participants were currently enrolled in graduate programs, universities, or university-affiliated language education institutions in South Korea, and had achieved levels 5-6 on the Test of Proficiency in Korean (TOPIK), which ensured they had studied the passive grammar structures typically introduced at the intermediate level. Native Korean speakers were recruited based on the criteria that both they and their parents are native speakers of Korean and that they had not lived abroad for more than one year before the age of 18. Detailed information regarding the participants' age, gender, and Korean language study duration can be found in Table 2 below.

Table 2 - Participant information

Group	N	Gender (M÷F)	TOPIK (level 5/ level 6)	Duration of Korean Language Study (years)
Chinese Korean learner	37	5/32	6/31	6.66
Native Korean speaker	33	16/17	N/A	N/A

3.2 Eye-tracking Methodology

In this study, eye-tracking methodology was employed to investigate the processing of Korean passive sentences by Chinese learners of Korean. Eye-tracking is a methodology that records eye movements to analyze attention and cognitive processes. It is useful for exploring cognitive processes

that occur in real-time, such as language processing, by identifying information processing methods and cognitive load through eye movement patterns, including fixation and saccade (Rayner, 1998). This method has also been widely used in second language research (Conklin & Pellicer-Sánchez, 2016; Dussias, 2010; Godfroid, 2020).

Text-based eye-tracking research has the advantage of recording eye movement data while participants read sentences naturally, as they would in real life (Godfroid, 2020). Unlike self-paced reading (SPR) tasks, eye-tracking allows for regressions and skips, making it a more ecologically valid method by addressing the limitations of SPR, which makes it difficult to observe later integration processes (Paolazzi et al., 2022). In particular, since Korean is an SOV language, integration processing is necessary for meaning formation after encountering the verb. Therefore, this study selected a text-based eye-tracking methodology to closely observe the sentence processing patterns, including regressions, that occur while learners read Korean passive sentences.

In eye-tracking, various metrics are used to analyze cognitive processes. More difficult texts in reading result in more fixations, longer fixation times, and regressions, while eye movements become shorter (Conklin et al., 2018). This study employs three metrics: dwell time, fixation count, and regression count. Dwell time refers to the duration the eyes remain in the area of interest (AOI), encompassing both fixation and non-fixation times. Generally, a longer dwell time indicates a greater focus of attention (Hu & Aryadoust, 2024). Fixation count measures the number of times the eyes remain in a specific area, commonly employed in sentence processing research focusing on lexical or grammatical areas of interest. This metric serves as an important measure of processing difficulty in conjunction with temporal indicators, complementing the analysis of temporal metrics (Godfroid, 2020). Regression count denotes the number of times the eyes move backward to revisit a previous area, which serves as a significant indicator of difficulties or confusion in lexical, syntactic, or discourse processing, leading to sentence reanalysis (Godfroid, 2020).

3.3   Materials

In this study, nine passive verbs were selected to construct sentence stimuli based on the International Standard Curriculum for Korean Language for level 4 and below. The chosen verbs are '물리다(mwullita)' (to be bitten), '잡히다(caphita)' (to be caught), '먹히다(mekhita)' (to be eaten), '묶이다(mwukkita)' (to be tied), '밀리다(millita)' (to be pushed), '밟히다(palphita)' (to be stepped on), '붙잡히다(pwuthcaphita)' (to be caught), '안기다(ankita)' (to be hugged), and '쫓기다(ccochkita)' (to be chased). Other vocabulary outside of passive verbs was adjusted to level 5 and below according to the Internationally Accepted Korean Language Curriculum (National Institute of Korean Language, 2017). The reason for adjusting the difficulty of the vocabulary is to prevent the processing patterns of sentences from being influenced by difficult vocabulary that the learners have not yet acquired. Additionally, the selected verbs needed to meet the criteria of having animate nouns as agents and passive subjects and also had to sound natural when used in active sentences.

Target items were created by producing four sentence stimuli for each of the nine passive verbs, modifying them according to sentence type (active, passive) and word order (canonical, scrambled), resulting in a total of 144 sentence stimuli. Modifiers were placed before the subject and object to create a gap between the two noun arguments. To ensure that a single participant would not read similar sentences repeatedly, the four conditions of each sentence stimulus were divided into a counterbalanced list, randomly assigning participants to one of four sets.

To prevent participants from recognizing the target items, filler items were created in a similar format using the case marker '에게(eykey)' in causative and dative sentences, totaling 36 items—18 causative and 18 active sentences using transitive verbs. Furthermore, to maintain participants' attention on the reading task, comprehension questions were devised for all items to assess their understanding of the sentence content. The ratio of correct answers ("true") to incorrect answers ("false") was kept the same for the comprehension questions, and the questions related to the target items were designed not to include content directly related to the interpretation of the agent and passive subject arguments. In summary, each participant viewed a total of 72 items: 36 target items and 36 filler items. Table 3 below provides examples of the target items used in this study.

Table 3 -Example of target item

	Condition	List	Sentences
물리다 (to be bitten)	Active* Canonical	A	까만 고양이가 하얀 쥐를 물었다. kkaman koyangi-ka hayan cwi-lul mwul-ess-ta black cat-NOM white mouse-ACC bite-PAST 'The black cat bit the white mouse.'
	Active* Scrambled	B	하얀 쥐를 까만 고양이가 물었다. hayan cwi-lul kkaman koyangi-ka mwul-ess-ta white mouse-ACC black cat-NOM bite-PAST 'The white mouse was bitten by the black cat.'
	Passive* Canonical	C	하얀 쥐가 까만 고양이에게 물렸다. hayan cwi-ka kkaman koyangi-eykey mwul-li-ess-ta White mouse-NOM black cat-DAT bite-PASS-PST 'The white mouse was bitten by the black cat.'
	Passive* Scrambled	D	까만 고양이에게 하얀 쥐가 물렸다. kkaman koyangi-eykey hayan cwi-ka mwul-li-ess-ta black cat-DAT white mouse-NOM bite-PASS-PST 'The white mouse was bitten by the black cat.'

Note. The AOI (Area of Interest) was set into five zones for each word in the sentence: adj-agent, agent, adj-patient, patient, and verb.

3.4   Procedure

2 questions, and the total duration of the experiment ranged from approximately 15 to 30 minutes.

3.5   Data Analysis

Before performing data analysis, outliers were removed. Data from two Chinese learners with comprehension question accuracy rates below 80% were excluded, resulting in final analyses of data from 35 Chinese learners and 33 native Korean speakers. Additionally, dwell times below 100 ms or above 3000 ms were excluded from the analysis. Data points for dwell time, fixation count, and revisits that fell beyond ±2.5 standard deviations from the group mean were considered outliers and replaced with the mean value. Methods for handling outliers include the accommodating approach, which treats outliers as meaningful data and incorporates them into the analysis, and the discordancy approach, which views outliers as errors or noise, removing or adjusting them (Barnett & Lewis, 1994). In this study, outliers were considered noise and were replaced with the mean value.

Statistical analysis began with an ANOVA and Bonferroni post hoc tests to examine eye movement patterns across the five AOIs in passive sentences for each group. Subsequently, to assess differences in dwell time, fixation count, and revisit metrics specifically within the agent and patient AOIs, which exhibited significant differences from other areas in the initial ANOVA, a linear mixed-effects model was applied. This model included group, word order, sentence type, AOI length, and AOI difficulty as fixed effects, with participant and stimulus as random effects, and was followed by a Tukey post hoc test. Interactions among group*word order, group*sentence type, word order*sentence type, and group*word order*sentence type were also analyzed to explore the combined effects of word order and sentence type on processing. The statistical software R was used for all analyses.

4.   Results

### 4.1   Eye Movement Patterns in Areas of Interest (AOI) by Group

First, examining the dwell time in the Areas of Interest (AOIs) for native speakers (NS) and learners (L) in passive constructions reveals the following table 4.

Table 4 - Mean Dwell Time in AOIs by Group (ms) (Standard Deviation)

Name (order)	Adj-agent Mean(SD)	Agent Mean(SD)	Adj-patient Mean(SD)	Patient Mean(SD)	Verb Mean(SD)
NS (N=594)	304.06 (365.76)	927.87 (761.72)	353.76 (455.78)	756.68 (743.79)	316.9 (421.11)
L (N=630)	993.51 (675.72)	1419.75 (699.67)	1078.02 (704.87)	1309.45 (668.35)	1019.07 (625.64)

Note. NS = Native Speaker, L = Learner, 1 = Adjective of the agent area, 2 = Agent area, 3 = Adjective of the Patient area, 4 = Patient area, 5 = Verb area.

The average dwell time by group is visualized in Figure 1 below.
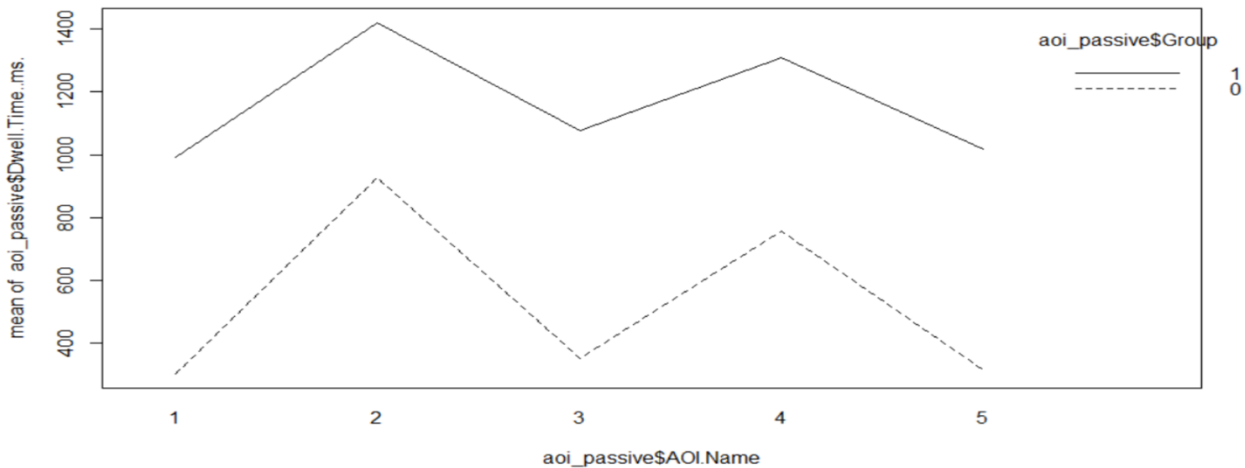
Figure 1. Mean Dwell Time in AOIs by Group (ms) **Note**. Group 0 = Native Speaker, Group 1 = Learner, 1 = Adjective of the agent area, 2 = Agent area, 3 = Adjective of the Patient area, 4 = Patient area, 5 = Verb area.

Both native speakers and learners exhibited longer dwell times in the agent (2) and patient (4) regions compared to the adjective regions for the agent (1), patient (3), and the verb region (5). An analysis of variance (ANOVA for heterogeneity) showed significant differences in dwell times across AOIs for native speakers (p < .001), which was also true for learners (p < .001).

Post-hoc Bonferroni analyses indicated that for native speakers, the differences between the agent region (2) and other regions (1, 3, 4, 5) were all significant (2-1, p < .001; 2-3, p < .001; 2-4, p < .001; 2-5, p < .001). The patient region (4) also showed significant differences from the other regions (1, 2, 3, 5) (4-1, p < .001; 4-2, p < .001; 4-3, p < .001; 4-5, p < .001). For learners, the agent region (2) exhibited significant differences from all other regions (1, 3, 5) except for the patient region (4) (2-1, p < .001; 2-3, p < .001; 2-5, p < .001). The patient region (4) also showed significant differences from other regions (1, 3, 5) except for the agent region (2) (4-1, p < .001; 4-3, p < .001; 4-5, p < .001).

Therefore, since the agent and patient regions had significantly greater dwell times than the other regions, further analysis focused on these two areas.

4.2   Eye Movement Patterns by Group Based on Sentence Type and Word Order

The results of examining eye movement patterns by group according to sentence type and word order are as follows. Both native speakers and learners exhibited higher values for dwell time, fixation count, and revisit count in sentences with atypical word orders compared to those with typical word orders in both active and passive constructions. This can be summarized in Table 5 below.

Table 5 - Average dwell time, fixation count, revisit count by group based on sentence type and word order

		Dwell time(ms) (M, SD)	Fixation count (M, SD)	Revisits (M, SD)
NS(N=594)	Act*Can	646.64 537.13	2.63 1.68	1.04 1.18
	Act*Scr	700.68 577.49	2.83 1.99	1.16 1.11
	Pass*Can	816.51 650.75	3.24 2.16	1.32 1.29
	Pass*Scr	868.04 850.48	3.47 3.08	1.52 1.74
L(N=630)	Act*Can	1121.97 637.68	4.23 2.27	2.06 1.46
	Act*Scr	1295.83 685.55	4.81 2.28	2.5 1.52
	Pass*Can	1324.26 657.68	4.86 2.35	2.43 1.56
	Pass*Scr	1404.94 711.7	5.1 2.45	2.73 1.65

Note. NS = Native Speaker, L = Learner, Act = Active, Pass = Passive, Can = Canonical Order, Scr = Scrambled Order, M = Mean, SD = Standard Deviation.

The effect of word order across sentence types was examined using a linear mixed-effects model. The interaction between group and word order was significant for dwell time (p = .039 < .05). Tukey's post hoc analysis revealed that the effect of word order was not significant for native speakers (estimate = -55.6, SE = 37.5, z = -1.483, p = 0.44 > .05). However, for learners, the effect of word order was significant (estimate = -129.1, SE = 36.6, z = -3.527, p = .003 < .05), indicating an increase of 117.17 (ms) in dwell time when atypical word order was used. These results are summarized in Table 6.

A significant interaction between group and word order was also found for fixation count (p = .042 < .05). Tukey's post hoc analysis showed that the effect of word order was not significant for native speakers (estimate = -0.210, SE = 0.129, z = -1.628, p = 0.36 > .05). In contrast, the effect of word order was significant for learners (estimate = -0.393, SE = 0.126, z = -3.117, p = .009 < .01), suggesting an increase of approximately 0.37 fixations for atypical word order. These results are summarized in Table 7.

Furthermore, the interaction between group and word order was significant for revisit count (p = .016 < .05). Tukey's post hoc analysis indicated that the effect of word order was not significant for native speakers (estimate = -0.153, SE = 0.0874, z = -1.747, p = 0.30 > .05). However, the effect of word order was highly significant for learners (estimate = -0.366, SE = 0.0853, z = -4.296, p < .0001), indicating an increase of approximately 0.32 revisits for atypical word order. These results are summarized in Table 8.

Table 6 - Summary of the linear mixed effects model for dwell time

Fixed effects						Random effects		
	Estimate	Std. Error	CI	t	p		Variance	sd
(Intercept)	215.18	69.3	79.33 – 351.03	3.11	0.002	σ^2 (Residual)	312671.4	559.17
Group	477.48	69.79	340.67 – 614.30	6.84	<0.001	τ_{00} Participant (Intercept)	65343.5	255.62
word order	57.93	47.03	-34.27 – 150.13	1.23	0.218	τ_{00} Stimulus (Intercept)	14415.6	120.06
sentence type	115.87	50.21	17.44 – 214.30	2.31	0.021	τ_{11} Participant.sentence.type	29746.4	172.47
AOI length	117.58	12.8	92.50 – 142.67	9.19	<0.001	τ_{11} Participant.word.order	20015.2	141.47
AOZI difficulty	34.02	19.36	15.66 – 52.38	3.63	<0.001	τ_{11} Participant.sentence.type:word.order	18650.1	136.57
Group* word order	117.17	56.79	5.84 – 228.50	2.06	0.039	τ_{11} Stimulus.AOI.length	507.5	22.53
Group*sentence type	29.52	61.63	-91.29 – 150.34	0.48	0.632	τ_{11} Stimulus.AOI.difficulty	2628.2	51.27
word order* sentence type	-4.67	61.02	-124.30 – 114.96	-0.08	0.939	τ_{11} Stimulus.AOI.length:AOI.difficulty	259.6	16.11

Group* word order * sentence type	-87.31	72.05	-228.55 – 53.94	-1.21	0.226

Note. Formula: Dwell.Time..ms. ~ Group * word.order * sentence.type + AOI.length + AOI.difficulty + (1 + sentence.type * word.order | Participant) + (1 + AOI.length * AOI.difficulty | Stimulus), marginal R^2=0.17, conditional R^2=0.41, ICC= 0.20, Observations= 4896, N of stimuli= 144, N of participant = 68

Table 7 - Summary of the linear mixed effects model for fixation counts

Fixed effects						Random effects		
	Estimates	Std. Error	CI	t	p		Variance	Std. Dev.
(Intercept)	0.84	0.23	0.38 – 1.29	3.59	<0.001	σ^2 (Residual)	3.9	1.97
Group	1.61	0.22	1.18 – 2.04	7.3	<0.001	τ_{00} Participant (Intercept)	0.61	0.78
word order	0.23	0.15	-0.06 – 0.52	1.56	0.118	τ_{00} Stimulus (Intercept)	2.22	1.49
sentence type	0.38	0.17	0.05 – 0.71	2.25	0.024	τ_{11} Participant.sentence.type	0.32	0.57
AOI length	0.55	0.05	0.45 – 0.64	11.08	<0.001	τ_{11} Participant.word.order	0.13	0.36
AOI difficulty	0.06	0.03	-0.00 – 0.13	1.92	0.055	τ_{11} Participant.sentence.type:word.order	0.27	0.52
Group* word order	0.37	0.18	0.01 – 0.73	2.03	0.042	τ_{11} Stimulus.AOI.length	0.14	0.37
Group*sentence type	0.02	0.21	-0.40 – 0.43	0.07	0.942	τ_{11} Stimulus.AOI.difficulty	0.65	0.81
word order* sentence type	-0.04	0.21	-0.46 – 0.38	-0.18	0.854	τ_{11} Stimulus.AOI.length:AOI.difficulty	0.05	0.22
Group* word order * sentence type	-0.37	0.26	-0.88 – 0.13	-1.44	0.149			

Note. Formula: Fixation.Count. ~ Group * word.order * sentence.type + AOI.length + AOI.difficulty + (1 + sentence.type * word.order | Participant) + (1 + AOI.length * AOI.difficulty | Stimulus), marginal =0.16, conditional =0.38, ICC= 0.42, Observations= 4896, N of stimuli= 144, N of participant = 68

Table 8 - Summary of the linear mixed effects model for revisits.

Fixed effects						Random effects		
	Estimates	Std. Error	CI	t	p		Variance	Std. Dev.
(Intercept)	0.51	0.16	0.20 – 0.82	3.2	0.001	σ^2 (Residual)	1.65	1.28
Group	1.02	0.15	0.73 – 1.32	6.8	<0.001	τ_{00} Participant (Intercept)	0.29	0.54
word order	0.12	0.11	-0.09 – 0.33	1.14	0.256	τ_{00} Stimulus (Intercept)	1.2	1.1
sentence type	0.21	0.1	0.00 – 0.41	1.97	0.049	τ_{11} Participant.sentence.type	0.09	0.3
AOI length	0.17	0.03	0.10 – 0.23	5.15	<0.001	τ_{11} Participant.word.order	0.11	0.33
AOI difficulty	0.01	0.02	-0.03 – 0.05	0.62	0.536	τ_{11} Participant.sentence.type:word.order	0.2	0.45
Group* word order	0.32	0.13	0.06 – 0.57	2.41	0.016	τ_{11} Stimulus.AOI.length	0.09	0.3
Group*sentence type	0.08	0.13	-0.17 – 0.33	0.64	0.524	τ_{11} Stimulus.AOI.difficulty	0.26	0.51
word order* sentence type	0.06	0.15	-0.23 – 0.35	0.41	0.681	τ_{11} Stimulus.AOI.length:AOI.difficulty	0.02	0.14
Group* word order * sentence type	-0.2	0.18	-0.56 – 0.15	-1.12	0.261			

Note. Formula: Revisits ~ Group * word.order * sentence.type + AOI.length + AOI.difficulty + (1 + sentence.type * word.order | Participant) + (1 + AOI.length * AOI.difficulty | Stimulus), marginal =0.16, conditional =0.35, ICC= 0.48, Observations= 4896, N of stimuli= 144, N of participant = 68

5.   Discussion and Conclusion

This study compared the differences in processing passive and active sentences with varying word orders between Chinese learners of Korean and native Korean speakers. The discussion focuses on addressing the two research questions raised in the introduction.

The first research question explored which sentence components create processing demands for Chinese learners and native Korean speakers in passive sentences. Both groups exhibited more eye movements in the agent and patient regions than in the verb region. In a study on Japanese passive sentences—an SOV language similar to Korean—Mitsugi (2017) found that native Japanese speakers used case markers to pre-assign thematic roles, enabling incremental processing before reaching the verb. In contrast, L2 learners tended to rely more on verb information than on case markers. However, this study observed that advanced Chinese-speaking L2 learners, like native speakers, paid greater attention to the agent and patient regions than to the verb and effectively processed Korean passive sentences using case markers. Since this study examined integrated processing measures, such as dwell time and regression counts, further research is needed to separate early and late processing stages to determine whether Chinese learners of Korean can predict thematic roles in passive

sentences using case markers before reaching the verb. Additionally, expanding the research to examine whether intermediate learners show processing patterns similar to those of advanced learners would be beneficial.

The second research question examined the effect of word order on each group's processing of active and passive sentences. Results from the linear mixed-effects model showed that both groups had significantly longer dwell times, more fixations, and more regressions when processing passive sentences compared to active sentences. However, responses to word order differed between groups: native Korean speakers showed no significant differences based on word order, while Chinese learners of Korean experienced greater cognitive load with non-canonical word orders. This suggests that learners are more sensitive to the position of the nominative marker than to the agent's position, finding non-canonical orders more challenging. According to the Canonical Order model and TDH introduced in Chapter 2, non-canonical passive sentences—where the first noun serves as the agent—should theoretically be easier to process than canonical passive sentences. However, learners seemed to experience greater difficulty because the nominative marker appears later in the sentence. O'Grady and Lee (2005) suggested that processing non-canonical passives becomes challenging for learners when they focus on the passive suffix and then map the first noun phrase as the theme. However, this study found that even advanced learners, despite focusing on the agent and patient regions where case markers appear rather than on the passive verb itself, still encountered difficulties with non-canonical word orders. This suggests that these hypotheses alone may not fully account for the sentence processing patterns of Chinese learners of Korean.

Additionally, compared to previous studies on the processing of Korean passive sentences by Chinese learners, the results of this study align with those of Kim (2021) but contrast with those of Jeong (2014) and Shin & Park (2023). Jeong (2014) analyzed single-argument passive sentences with either the agent or patient omitted, possibly explaining the differences from this study, where passive sentences containing both arguments were used. Meanwhile, Shin & Park (2023) found that learners rated canonical passive sentences as more acceptable than non-canonical ones, but also showed longer response times when judging canonical passives. This may indicate a greater cognitive load for canonical passives; however, it is also possible that learners quickly processed non-canonical passives with low acceptability by immediately recognizing them as incorrect, while engaging in more cognitive processing for the acceptable canonical passives. Additionally, variations in participants' proficiency levels across studies may account for differences in findings. Jeong (2014) included intermediate and advanced learners, while Shin & Park (2023) included learners ranging from beginner to advanced levels. In contrast, this study focused solely on advanced learners, suggesting that those with higher proficiency in processing Korean passive sentences may be more sensitive to nominative markers and word order.

This study offers several implications for second language research. First, it highlights the need for a deeper exploration of the roles that thematic roles and case markers play in processing passive sentences. While VanPatten's (2004) First Noun Principle and the Canonical Alignment Hypothesis by Hyams et al. (2006) help explain the challenges second language learners encounter with typical passive sentences, these theories fall short of fully accounting for the difficulty differences between canonical and non-canonical word orders in languages like Korean, where agent-patient order is flexible. Thus, further research across different languages and proficiency levels is needed to determine whether mismatches in thematic roles or case markers impose a greater cognitive load.

Second, this study emphasizes the importance of task type. The eye-tracking sentence reading task employed in this study produced results that differed from those of the picture-sentence verification task in Jeong (2014) and the acceptability judgment task in Shin & Park (2023). This suggests that task selection can influence outcomes in second language processing research. It is crucial to analyze how task complexity and cognitive demands affect processing strategies, and further studies should compare results using a variety of tasks simultaneously.

Third, research is needed to explore the impact of proficiency on processing patterns. It is important to investigate how learners' processing patterns change as their language abilities develop.

For instance, in this study, advanced Chinese learners demonstrated a tendency to use case markers effectively, similar to native speakers. In contrast, beginner and intermediate learners may still rely on isomorphic cues from event structure instead of case markers, which could lead to difficulties in processing passive sentences.

Fourth, in second language education, it is essential to expose learners to a variety of passive structures, including non-canonical word orders, to foster their implicit knowledge of passive constructions. Teaching diverse sentence structures that reflect the flexible word order of Korean can be beneficial, and this approach can also be applied to the instruction of other languages with flexible word orders, such as Japanese and Turkish.

Finally, second language processing research is crucial for understanding how the differences in processing between native speakers and learners account for the different final outcomes that learners achieve compared to native speakers, as well as the slower and less stable development of L2 learners (Hopp, 2022). While learners' language processing remains an opaque process that is difficult to assess externally, studies employing real-time observation methods, such as eye-tracking, can illuminate this process and provide deeper insights into second language acquisition.

Abbreviations
NOM Nominative ; ACC Accusative ; DAT Dative ; PST Past Tense ; PASS Passive ; DECL Declarative

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28 - Parents' attitudes towards teaching and learning of Chinese as a heritage language in Japan

Junhai Guo

guo.junhai.841@m.kyushu-u.ac.jp
Kyushu University, Japan

Abstract

The swift rise in the population of children with foreign nationalities in Japan, driven by globalization, underscores the pressing need for education in their mother tongue, or heritage language. Maintaining the heritage language not only fosters children's identity formation and strengthens familial bonds but also promotes bilingualism and contributes to shaping a multicultural society by enhancing proficiency in a second language. Despite its importance, research on heritage language education in Japan remains underdeveloped compared to English-speaking countries like the U.S., Canada, and Australia. This paper aims to address the following questions using a mixed-method approach, including a questionnaire survey and semi-structured interviews with Chinese mothers: 1) What are the attitudes and beliefs of parents regarding the teaching of Chinese as a heritage language? 2) What strategies do parents use to teach the Chinese language at home? The results indicate that maintaining proficiency in Chinese is a valuable tool for fostering a sense of Chinese identity in children. It also highlights that "returning to China with the child regularly" is one of the most used strategies for teaching the language. A cross-sectional study examining both parents' and children's attitudes toward the teaching and learning of Chinese as a heritage language in Japan is necessary to gain a comprehensive understanding.

Keywords: Heritage language education, Bilingualism, Parental attitudes and strategies, Chinese identity formation, Multicultural society in Japan

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1. Introduction

Japan has seen shifts in its population dynamics, especially with a significant rise in foreign residents in recent year. According to Immigration Services Agency of Japan, the number of foreign residents in Japan reached approximately 3.4 million as of in May 2023[#1]. Japan's relatively stable economy and high quality of life make it an attractive destination for many Chinese nationals. The relatively close geographical proximity and cultural ties between China and Japan make it a more accessible and appealing option compared to farther English-speaking countries. Over time, the Chinese population has grown exponentially, reaching 820,000 and becoming the largest ethnic community in Japan. This growth has made Japan an important destination for Chinese international migration, especially since the mid-1980s.

The movement of people across countries, driven by internationalization, has introduced new issues and challenges in various fields, including heritage language (HL) education for immigrants and their children. Heritage language education for immigrant children has become an increasingly urgent global issue. Family language policy plays a critical role in maintaining a heritage language, which is largely influenced by parental attitudes and ideologies. Because it "provide a window into parental language ideologies" and "reflect broader societal attitudes and ideologies about both languages and parenting" (King et.al., 2008:907). However, research on Chinese heritage language (CHL) education has predominantly focused on English-speaking countries such as the United States, the United Kingdom, and Australia, due to the significant increase in Chinese emigration to these regions. In contrast, issues related to CHL education in other parts of the world, such as Japan, have received relatively little attention. Therefore, this study aims to explore the current situation of teaching and learning of Chinese as a heritage language in Japan by addressing the following questions:

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1) What are the attitudes and beliefs of parents regarding the teaching of Chinese as a heritage language?
2) What strategies do parents use to teach the Chinese language at home?

2. Literature review

2.1 What is a heritage language?

There has been no universally agreed-upon the definition of a HL. Rothman (2009) describes it as "a language spoken at home or otherwise readily available to young children, which is not the dominant language of the larger (national) society" (p. 156). Recently, this term has been broadened to include meanings such as 'community language,' 'home language,' and 'mother tongue/native language' (Shin, 2013; Kagan et al., 2017). Nakajima (2017) refers to it as the "native language of the parents and, for the child, the language inherited from them," but distinguishes it from the mother tongue, stating that "although it is the first language a child learns, much like a mother tongue, it often does not fully develop due to the dominance of the local language" (pp.5-6). Regarding the CHL, Wu (2002) describes it as pertaining to individuals who were exposed to Chinese outside the formal education system, typically within their home or community. Li and Ma (2018) further clarify that the term 'Chinese heritage language' primarily refers to students growing up in countries where the dominant language is not Chinese (p.13). Building on these definitions, this study uses the term 'heritage language' to refer to a language spoken at home, such as Mandarin Chinese, that is not the dominant language of the society.

2.2 Why heritage language education is important?

The importance of teaching and learning of a HL has been addressed in various aspects. Learning and maintaining a heritage language helps individuals connect to their cultural roots, traditions, and family history. It fosters a sense of identity and belonging, allowing them to participate more fully in cultural practices and communicate with family members who may speak the HL. In a study of Chinese American adolescents, Tse (2001) found that those who maintained their heritage language reported a stronger sense of cultural identity and connection to their ethnic community. The study revealed that these adolescents felt more integrated into their cultural group and had a deeper understanding of their cultural practices. Majima et al. (2010) further emphasizes that promoting the HL education will help the foreign pupils to build their self-esteem and establish a positive identity.

Heritage language education plays a crucial role in fostering home-based bilingualism and in turn can enhance cognitive and academic ability such as language learning. Cummins' theory of language interdependence emphasizes that the cognitive and academic skills developed in a child's first language can positively impact the learning and proficiency of a second language (Cummins 1980, 1984). Cummins (2001:17) further argues that "the level of development of children's mother tongue is a strong predictor of their second language development".

Foreign language education in Japan tends to focus heavily on English, often neglecting the importance of multilingual education. As Mu (2008) and Takahashi (2019) have mentioned, language education for foreign children in Japan has traditionally prioritized Japanese language acquisition and "adaptation" education, while support for their mother tongues and academic studies is often overlooked. Kubota (2019) further warns that the focus on English, given its role as a global lingua franca in international communication and business, has resulted in insufficient promotion of other languages. Many issues related to HL teaching, such as securing resources for studying HLs remain unaddressed (Saito, 2005). He (2010) calls for the urgency of HL research, noting that there is a significant gap in understanding how parents implement native language education for their children and the challenges they face.

3. Methodology

3.1 Instrument

In this study, a mixed-method approach was utilized, combining a questionnaire survey with semi-structured interviews. The questionnaire featured both multiple-choice and open-ended questions, aimed at exploring attitudes toward CHL education and various teaching methods. The semi-structured interviews were conducted to obtain detailed and in-depth insights from participants about their experiences and perspectives on CHL teaching and learning.

3.2 Participants

A snowball sampling method was employed, utilizing referrals from acquaintances. The study included 14 Chinese mothers, aged 30 to 49, residing in Fukuoka City, Japan. Among the participants, four are married to Japanese husbands, and ten are married to Chinese husbands. All participants hold a bachelor's degree. The primary reason for their move to Japan was to pursue studies, except for one participant who relocated for marriage. All their children were born in Japan. One participant works part-time, while the remaining are full-time homemakers.

3.3 Procedures for data collection

Upon data collection, participants received both written and verbal explanations detailing the research objectives, methods, and procedures for handling data. Consent for recording was also obtained. Data collection involved a Zoom interview lasting approximately one hour. The interview was recorded, transcribed, and subsequently coded using a thematic coding approach.
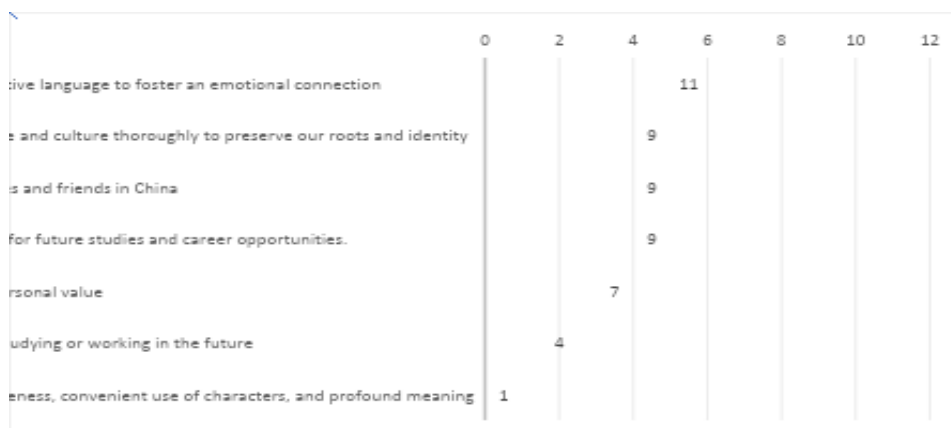
4. Results

4.1 Strong attitudes toward the teaching and learning of CHL.

The questionnaire survey aimed to uncover the attitudes and beliefs of parents regarding the teaching and learning of CHL at home. All 14 participants demonstrated strong attitudes toward CHL instruction. Figure 1 shows their responses, with numbers and percentages in brackets representing the count of respondents and their respective percentages.

1. To communicate with my child in my native language to foster an emotional connection (14, 100%)
2. It is important to study Chinese language and culture thoroughly to preserve our roots and identity (9, 64%)
3. To be able to communicate with relatives and friends in China (9, 64%).
4. The Chinese language will be important for future studies and career opportunities. (9, 64%).
5. Being multilingual can enhance one's personal value (7, 50%).
6. Preparing my child return to China for studying or working in the future (7, 28.5%).
7. The Chinese language has rich expressiveness, convenient use of characters, and profound meaning (1, 7.1%).

Figure 1. Attitudes and beliefs of parents regarding the teaching and learning of CHL

Turning to the results of the semi-structured interviews on attitudes toward CHL education and specific teaching methods, a 42-year-old mother of two daughters mentioned that,

> I hope my child can learn Chinese. As a Chinese mother, I don't want to waste this valuable language resource. I want to build my child's confidence in speaking Chinese and help them take pride in being bilingual.

Another mother, in her 40s with one daughter, said:

> I consider myself to be more old-fashioned. I believe that if you are a Chinese, you should never forget your roots. No matter where you go, even if you are born in Japan, you are still Chinese. Therefore, learning Chinese and understanding Chinese culture are essential.

As illustrated by these two extracts, both mothers had strong attitudes toward teaching the language, with a greater emphasis on Chinese culture, history, and maintaining their roots.

4.2   The most used strategies for the teaching and learning of CHL

Figure 2 presents the most used strategies for teaching Chinese. As illustrated in the figure, the most frequently employed strategies are as follows:
1.   Regularly returning to China with my children (14 answered, 100%).
2.   Keeping the practice of speaking Chinese with my children as much as possible (13, 93%).
3.   Encouraging my children to interact with family members in China online (11, 78.6%).
4.   Encouraging my children to watch Chinese TV shows, anime, etc. (10, 71.4%).
5.   Encouraging them to listen to or read Chinese storybooks using apps. (10, 71.4%).
6.   Buying Chinese storybooks for my children (9, 64.3%).
7.   Enrolling them in Chinese language classes (8, 57.1%).
8.   Teaching my children using Chinese textbooks myself (6, 42.9%).
9.   Hiring a tutor for private lessons (5, 35.7%).
10. Enrolling them in online classes (5, 35.7%)
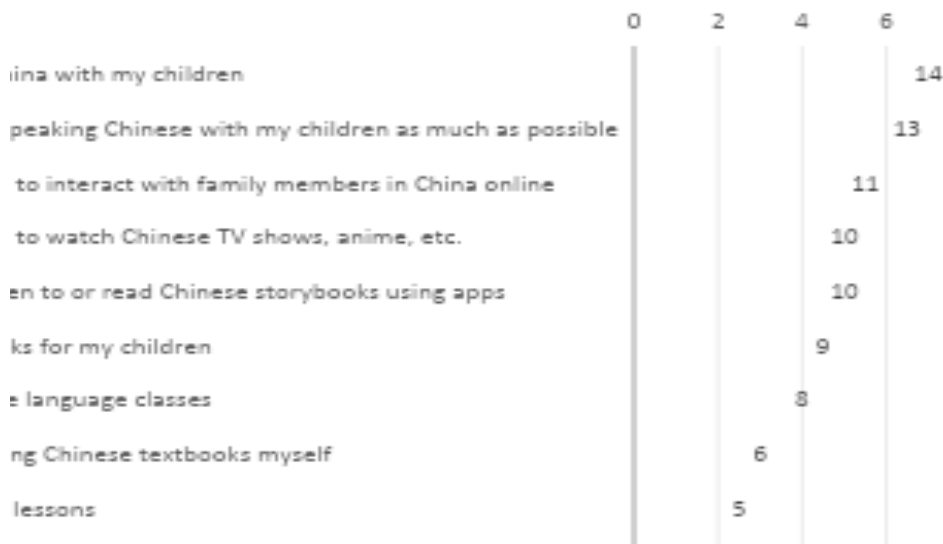11. Asking grandparents to come to Japan to care for the child (3, 21.4%)

Figure 2. Most used strategies for the teaching and learning of CHL

As shown in Figure 2, the most used strategies for teaching and learning of CHL were "Regularly returning to China with my children" (14, 100%), followed by "Keeping the practice of speaking Chinese with the children" (13, 93%), "Encouraging my children to interact with families in China as much as possible" (11, 78.6%), "Encouraging my children to watch Chinese TV shows, anime, etc." (10, 71.4%) and "Encouraging them to listen to or read Chinese storybooks using apps" (10, 71.4%) respectively.

The effectiveness of "Regularly returning to China with my children" is also concretely reflected in the interview, as illustrated below:

> I think the most effective way to improve your child's Chinese language skills is to take them back to China for a month or two. Let them play with other children, enjoy their favorite foods, and watch Chinese cartoons without any stress. Don't even worry about it; just let your child play with other children, eat the foods and watch the Chinese cartoons they like. (a 30-year-old mother with one daughter)

> ...we used to go back almost every year, and sometimes her dad would take her to their grandparents' house. I believe this is really the best way to learn the language. The child can experience and hear many things that they can't in Japan... (a 40-year-old mother of two sons)

5. Discussion

The first two responses regarding attitudes toward the teaching and learning of Chinese as a heritage language indicated a desire to foster a close emotional bond with their children using their native language. They also highlighted the importance of maintaining and strengthening social connections with relatives and friends in China, underscoring a commitment to preserving cultural and linguistic heritage. This reflects a positive attitude toward both maintaining emotional connections and emphasizing the value of cultural preservation in parenting. These views support the claims that promoting heritage language education helps pupils build self-esteem and establish a positive identity (Majima et al., 2010; Tian and Sakurai, 2017) and that such education enhances children's awareness of their identity (Sasaoka, 2022).

Pertaining to the most used strategies for teaching Chinese as a heritage language, "regularly returning to China with my children" was ranked highest. This strategy provides immersive language learning, cultural exposure, and social interaction, leveraging the immersion effect to enhance language acquisition and cultural understanding. When children are in China, they benefit from a real-life context that encourages them to use the language naturally. Being in China also provides opportunities to experience the culture and interact with local people, which facilitates their language learning. This approach underscores the importance of acquiring a mother tongue during early

childhood or youth. As Au et al. (2008:1009) mentioned, "childhood language experience can remain accessible after years of disuse."

The geographical convenience of Japan plays a significant role in facilitating heritage language education. The flight time between Japan and China typically ranges from about 2 to 4 hours, which is considerably shorter and more affordable compared to flights from North America or Europe. This makes regular travel between Japan and China an effective option for heritage language education. In contrast, traveling from North America or Europe to China can be burdensome due to longer flight times and higher costs, which can be a significant financial strain for families in these more distant regions. Therefore, while regular travel between Japan and China is a feasible model for teaching Chinese heritage language (CHL), similar strategies might also be beneficial in neighboring countries such as Korea or Southeast Asian countries.

The latter three strategies reflect the use of IT technologies, particularly since the outbreak of COVID-19, which led to the development of various online learning tools and educational activities despite the challenges posed by the pandemic. This result supports Said (2021)'s view that regular use of technology can be an important and effective tool for sustaining family ties and maintaining heritage language. It also addresses King (2022)'s call to explore the role of modern technology in heritage language education.

4. Conclusion

Both quantitative and qualitative surveys showed that all Chinese mothers had a strong attitude towards the teaching and learning of CHL. Building a strong sense of Chinese culture, roots, and identity were major concerns for parents. Additionally, the utilitarian value of the language was also crucial. The second major finding was that consistently traveling back to China with their children is one of the most used strategies for teaching the language and is considered the most effective approach. Other effective strategies include maintaining regular conversations in Chinese with the children and promoting interactions between the children and family members through online platforms. For future research, a cross-sectional study examining both parents' and children's attitudes towards the teaching and learning of Chinese as a heritage language in Japan is necessary to gain a comprehensive understanding.

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