Guidelines for the students' projects and research reporting formats

UPSKILLS Intellectual output 3.3

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Executive Summary

The first aim of Task 3.3. is to provide guidelines to the project consortium partners for **formulating student research projects** based on the contents of the learning blocks developed in Task 3.2. UPSKILLS students' projects carry 1-3 ECTS (25-75 hours of study) and function as an addition to the learning content created in T3.2. The main purpose of the projects is for students to apply the acquired skills and techniques in an independent research project. This means that the lecturer provides either no or very limited intermediate feedback.

The *Guidelines for Students' Projects and Research Reporting Formats* offer instructions for teachers to define project learning outcomes, assessment, and evaluation strategies. Additionally, we provide practical guidance for issues like managing research data during the project and depositing research outputs in a public research data repository. Considerable emphasis is placed on research reporting by providing teachers with templates for various reporting formats that can be adapted and shared with students. We distinguish between long formats (e.g. standard research reports) and shorter formats, e.g. blog posts, oral and recorded presentations, and posters. Project reporting skills in different forms and for various audiences will benefit students in the workplace regardless of their career path. For guidance and templates, see the relevant sections in this document.

These guidelines complement the general *Guidelines for the UPSKILLS Learning Content Creation* created by Gledić et al. (2021) in the part that concerns students' projects and showcases for student projects. They are also a valuable addition to the guidelines created in Intellectual Output 2, namely:

- *Research-Based Teaching: Guidelines and Best Practices* created by Simonović, M. et al. (2023)
- *Integrating Research Infrastructures into Teaching: Recommendations and Best Practices. The Case of CLARIN* by van der Lek, Fišer, D. et al. (2023)

1. Introduction

As part of **Task 3.2,** the UPSKILLS consortium partners develop learning content blocks on various topics and publish them on the Moodle platform. Each block is complemented with an additional 1-3 ECTS (25-75 hours of study) student project, which can be designed following the guidelines in this document. The main purpose of the projects is to teach the students to apply the **acquired research skills** and **techniques** in an **independent research project** and **report on their findings** using a recommended research reporting format. The lecturer will provide either no or very limited intermediate feedback during the project. Additionally, the students could be encouraged to **share their project outputs** in an open research data repository, such as Zenodo or CLARIN, to familiarise themselves with best practices in open science. Adapted versions of the student projects developed in this task can be conducted during the UPSKILLS Summer School that will be organised at the end of the project in Petnica, Serbia, in July 2023.

Student projects can be conducted individually or in a group, and they can be implemented in the curricula in three ways:

1. As an **obligatory** part of the course for all students;
2. As an **optional** part of the course that students may do for extra credits;
3. As a **full-fledged** course that can be assigned to students with the necessary previous knowledge (e.g., because they completed the relevant course at some previous point).

When creating projects for students, we encourage building on **the topics** and **examples** used in the learning content and also encourage students to **use research infrastructures, repositories and tools (e.g. concordancers)** to discover language data that they can reuse in their projects or deposit and publish new project outputs. After selecting the format of the final deliverable, clear instructions need to be provided to guide students through producing the final deliverable. This document provides lecturers with a few templates for different research reporting formats they can choose from and further adapt to meet the learning needs of their students. Lecturers who involve students in UPSKILLS research-based projects can **showcase** their students' work on the UPSKILLS project website using the **blog post format for research reporting**. The students participating in the **summer school projects** can showcase their work through oral presentations and posters, which they can then publish on Zenodo[1], a public research data repository. This way, students learn about the added value of open science and how to reach research communities outside their classroom.

These guidelines aim to complement the general guidelines for UPSKILLS learning content creation (Gledić et al. 2021) in the part that concerns the organisation of the students'

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[1] https://zenodo.org/

projects and suggestions for research reporting formats. They are also a valuable addition to the guidelines created in Intellectual Output 2, namely:

- *Research-Based Teaching: Guidelines and Best Practices* (Simonović et al. 2023)
- *Integrating Research Infrastructures into Teaching: Recommendations and Best Practices. The Case of CLARIN* (van der Lek, Fišer et al. 2023)

The rest of this document is organised as follows. In **Section 2**, we address the learning outcomes of student projects. **Section 3** guides the project outline and timeline and a detailed research report template with suggestions for lecturers regarding the instructions they could create to guide students through every step of their research project. The same template can be used for a blog post but would need to be slightly adapted to the digital environment. **Section 4** includes recommendations for the evaluation of a research report. The same evaluation can be adapted to assess other reporting formats suggested in **Section 5**. The alternative formats for research reporting are especially relevant for lecturers who want to showcase their students' work on the UPSKILLS website. Finally, the **Annex** contains a template for the lecturers to describe the research projects they want to include in UPSKILLS learning content.

2. Learning outcomes

The research projects' learning outcomes are based on the overall outcomes of the learning content block developed by the UPSKILLS consortium partners in Task 3.2. The outcomes should target the specific knowledge and skills covered in one or more learning content blocks. Additionally, the learning outcomes should include outcomes related to research reporting and taken into account when planning the evaluation of the student's work.

Below we quote the formulation of the predefined learning outcome concerning research reporting from the UPSKILLS research-based teaching guidelines (Simonović et al., 2023), which can be used as a starting point when defining the relevant learning outcome for your learning content.

Students will be able to implement established conventions in research reporting, such as
- *the ordering of thematic units in an article/report,*
- *clarity of statements,*
- *organisation of the presentation,*
- *amount of text and graphical items on a slide/handout,*
- *terminology,*
- *citing conventions.*

We now turn to the steps in creating the instructions for students.

3. Creating instructions for students

When creating the instructions for the students, it is essential to include a project plan and a timeline for the project, and provide instructions and templates for the final deliverable that they will produce. In projects with a strong focus on research reporting, the final deliverable can consist of one or more reporting formats: a standard research report, or a combination of a written report and a classroom presentation. Where appropriate, the written report format can be replaced with a blog post or a poster presentation, which students can use to showcase their work outside the classroom. This section includes guidance for creating the **project outline and timeline** and a template for a **written research report** with explanatory notes, which teachers can further adapt based on their classroom needs. See Section 5 for examples of alternative research reporting formats and templates.

Once the deliverable format has been selected, providing the students with a template is helpful. If the written research report is selected, we recommend using the research-report template created by Tanja Samardžić and Maja Miličević Petrović within the course "Introduction to Research in Linguistics: Theory, Logic, Method".[2] This template can be easily adapted to accommodate most types of research reports in language-related disciplines. If the lecturer chooses the blog post as the main deliverable, the students can follow the same structure of the research report template but adjust the style and elements to best fit the digital environment. For example, the writing style could be less formal and academic, and scientific jargon should be avoided to reach a wider audience. Blog posts are also ideally suited to take full advantage of hypertext and multimedia affordances. The blog post format is recommended to showcase the students' work on the UPSKILLS website. See Section 5 for further suggestions that can be turned into a student template.

The **first step** in creating the instructions for students consists of **adjusting the structure of the deliverable** to accommodate the project. **In the second step,** the lecturer can pre-fill the template with instructions and suggestions for students. This enables the lecturer to get a complete overview of the activities that have to be performed by the students to complete the project. The **third step** is then making an outline and timeline of the project. Now, in **the fourth step,** the final version of the deliverable template can be created. Finally, when producing **the final version of the instructions**, creating a single document in which the outline/timeline precedes the commented template is recommended.

3.1 Project outline and timeline

This section gives an overview of the **general steps involved in the research process,** which can be used to create a **project outline and timeline**. The timeline will help the lecturer monitor the student's progress during the project and give intermediate feedback, if

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[2] https://phil.openedx.uzh.ch/courses/course-v1:PHIL+Movetia101+2046/info

necessary. Additionally, the students can use the timeline to plan their work and meet the final deadline. The general steps involved in the research process are:

1. Identifying the problem
2. Reviewing literature
3. Setting research questions, objectives, and hypotheses
4. Choosing the study design
5. Deciding on the sample design
6. Collecting data
7. Processing and analysing data
8. Report on the findings using the format recommended by the teacher

One advantage of a step-by-step overview of the project is that it allows the lecturer to state **how much independence the students are given** in conducting each project phase. For instance, in projects where the research problem is already predefined, the first step from the example above can be replaced by the problem statement. When it comes to predefining certain aspects of the project, the lecturer generally has **two options** that should be clearly distinguished in the instructions: either an aspect of the project is **predefined in the instructions,** or the students need to **make choices and justify them in the report**.

When it comes to projects that require **intermediate feedback** from the lecturer, an effective strategy is for the lecturer to use the project outline or timeline. This can involve indicating which instructions should be followed before the feedback point and those that come after it. One practical approach is to use colour coding, where specific steps are assigned distinct colours to provide visual clarity. Additionally, many instructors have discovered the value of conducting an initial meeting with the student and subsequently requesting them to complete the initial version of the template within a week, incorporating the points discussed during the meeting. In this particular scenario, it is advantageous for the student to fill in the sections determined by the lecturer. This approach allows for assessing the student's understanding of the task and helps foster a habit of written reporting.

A further aspect that often needs to be addressed separately is research **data management**. Especially in cases where the research project serves as a basis for the BA or MA thesis, students might be required to write a **research data management plan** before they start working on their research project. Each university might offer a general course on research data management. For discipline-specific guidelines in research data management and archiving, lecturers are referred to Section 5 in *Recommendations and Best Practices for Integrating Research Infrastructures into Teaching* by van der Lek, Fišer, D. et al. (2023).

3.2 Research-report template with explanatory comments

This section shows an example of a research report template with suggestions for the lecturers regarding the type of instructions they could include under each rubric to guide the

students. The template can be further adapted by the UPSKILLS project partners who decide to create a project assignment for the students.

[The text between square brackets contains instructions and should be deleted in the final version of the research report.

The lecturers can add further general remarks about how these instructions should be used, e.g. include a word limit (e.g. max. 8000 words).]

1. Introduction:
- definition/description of the phenomenon
[Short definition/description by the lecturer or
instructions in which domain the target phenomenon should be looked for and how the choice should be justified.]

- preliminary research question: What do you want to learn about this phenomenon? or
- preliminary definition of a research problem: What do you want to solve?
[Defined by the lecturer or
instructions on how it should be defined (if possible, using examples from the course).]

- motivation: why does society (or at least your research community) need to know about your study
[If necessary, a good example of what counts as a good argument (if possible, using examples from the course).]

2. The goal:
- precise definition of what you try to achieve
[Defined by the lecturer or
instructions on how it should be defined (if possible, using examples from the course).]

- why this is not trivial
[If necessary, a good example of what counts as a good argument that something is not trivial (if possible, using examples from the course).]

3. State of the art:
- what is already known about the phenomenon
[Explicit references to the course literature or other familiar references, or
a list of references to be used, or
leaving it to the students to find the relevant literature]

- theories
[Specifying which aspects should be presented.]

- concepts
[Specifying which aspects should be presented.]

- the gap: what the others got wrong or missed (and your study will fix)
[If necessary, a good example (if possible, from the course) of what counts as a good example of the gap.]

4. Your approach:
- your research question/problem
[If necessary, a good example (if possible, from the course) of what counts as a good research question.]

- expected or possible answers (hypotheses)/proposed solutions (in case of a research problem)
[If necessary, a good example (if possible, from the course).]

5. Data and methods:
- what research data/datasets you used and why
[Predefined or specifying that this choice should be justified.]

- how you decided what you need
[Remove if the dataset is predefined.]

- how you searched for any suitable existing research data/datasets, e.g. Google, literature research repositories, research data repositories, data journals
[Remove if the dataset is predefined.]

- if no suitable existing research data/datasets were identified, describe how you collected it yourself
[Specifying that this choice should be justified.

Remove if the dataset is predefined.]

- how you organised the research data
[Predefined or specifying that this choice should be justified.
Addressing formats and standards, if relevant.]

- how you cleaned/preprocessed/annotated/enriched the research data
[...]

- what analyses you applied and why
[Predefined or specifying that this choice should be justified.]

- what tools you used to perform the analyses
[Predefined or specifying that this choice should be justified.]

- how you archived the dataset and where it can be accessed
[What should the students do with the datasets after the projects?
Option 1: Archive it in the institutional repository.
If your institution has a repository, give clear instructions on what the students should do and include the relevant links.

Option 2: Encourage the students to find and choose a specialist research data repository to deposit their research outputs in order to make them available to the research community. See ***Integrating Research Infrastructures into Teaching: Recommendations and Best Practices. The Case of CLARIN*** *(van der Lek, Fišer et al., 2023) and the accompanying learning content,* [*Introduction to Language Data: Standards and Repositories*]*.]*

6. Findings:
- counts, percentages, and outcomes of statistical tests, often given in tables
or graphs
[If necessary, specify which aspects should be presented.]

- descriptions of these tables and graphs
[If necessary, specify which aspects should be presented.]

- and/or clear statements containing new facts established in your study
[If necessary, specify which aspects should be presented.]

7. Interpretation:
- relate the findings to the starting expectations/hypotheses
[If necessary, give a good example of how this can be done.]

- explain how your findings improve the knowledge about the phenomenon you
studied
[If necessary, a good example of how this can be done.]

8. Discussion:
- obstacles
[If necessary, a good example of what counts as an obstacle (if possible using examples from the course).]

- limitations
[If necessary, a good example of what counts as a limitation (if possible using examples from the course).]

- alternative explanations - speculations
[If necessary, a good example of what counts as an alternative explanation (if possible using examples from the course).]

- broader relevance
[If necessary, hints at the broader domain.]

9. Conclusion
- synthesis, the main message of your study
 [If necessary, specify which aspects should be presented. Examples: what you have learnt from the project and why it is important]
- Possible future lines of research

10. References
[Clear instructions on citing conventions to be used.]

11. Annexes
[Clear instructions on what should be here, e.g.,
-datasets
-consent forms]

👉**TIP:** As part of the Intellectual Output 2, our consortium partners from the University of Zurich developed an **interactive research tracker** to help students and teachers track progress throughout the stages of a project. The tool can be downloaded from the UPSKILLS project website. Please refer to:

- Samardžić, T., Berthouzoz, M. (2023). Research Tracking Tool. In UPSKILLS Project. Intellectual Output 2.2. Integrating Research Infrastructures into Teaching. CC BY 4.0.

4. Evaluation and grading

The evaluation and grading matrix suggested in this section considers the research report as a final deliverable as this is the most common format. The evaluation depends on the specific learning outcomes and instructions for students. When creating the evaluation matrix, lecturers can use the following **evaluation form** (adapted from the UPSKILLS research-based teaching guidelines, Simonović et al. 2023) as a starting point.

The evaluation form can be accommodated to any of the other formats presented in Section 5, where we also provide some additional tips for evaluation.

	Grade
Step 1 Give a grade on each of the criteria below that apply to the work produced in your course. **Step 2** Give the final grade.	
Criterion	Grade
General	
Comprehensibility Is the output comprehensible for the intended audiences (e.g., can a group of students present their research in a way comprehensible to other students)?	
Coherence Is the output internally coherent (no contradictions, consistent terminology etc.)?	
Exploiting conventions Does the output use the conventions typically used in the field?	
Research-related	
General understanding of the research design Does the output reflect a clearly defined and plausible research design?	
Formulation of research questions and hypotheses Are the research questions and hypotheses clearly defined in terms of variables?	
Formulation of predictions of the null hypothesis and alternative hypothesis Are the predictions of the null hypothesis and alternative hypothesis clearly defined?	

Validity of the used research design Does the used research design fit the research question?	
Familiarity with the relevant resources, tools and infrastructures presented in class Does the output reflect sufficient familiarity with the relevant resources, tools and infrastructures presented in class?	
Selection of data sources and research techniques Is the selection of data sources and research techniques sufficiently justified?	
Selection of the data analysis method Is the selection of the data analysis method sufficiently justified?	
Inferring theoretical consequences from the specific data analysis results Does the output reflect the ability to infer broader theoretical consequences from the analysis results?	

Table 1. Evaluation form for research reports (only general aspects)

5. Formats for research reporting

In a world saturated with information, it has become increasingly common to use various formats for research reporting, such as **presentations, posters, blog posts, videos, infographics or case studies** to draw attention to one's research findings. Such formats help researchers and students engage with the research community and the broader public. By writing a blog post or preparing to give a presentation at a conference, students may feel more motivated to reflect upon the quality of their work and improve their communication, writing and technical skills. Furthermore, a blog post may help the students promote their work to future potential employers and encourage young people to take an interest in science. Finally, good research reporting skills in different formats and targeting different audiences will also be helpful in the workplace.

Lecturers may complement or replace the standard research report format shown in Section 3 with one of the formats proposed in this section and include them in the evaluation. For example, the research report could be complemented with either a presentation, short video, poster or infographic summarising the key findings of the research project. Alternatively, the students could be asked to deliver their research findings through a blog post, video or a mini-website. Such formats make it easier for the students to distil complex research into something more accessible for the readers.

Regardless of the digital format the lecturer selects for the final deliverable, the following questions should be taken into consideration when creating the deliverable:

- Who is the target audience, a specialised audience or a broad audience?
- Which elements from the research report would be most interesting for the audience, e.g. the methodology, the tools, the dataset?
- How do you structure the delivery format (text or video) to convey the desired message?

When preparing the content, students should be encouraged to *tell a story* using visuals to make their content appealing and engaging, keep the colour scheme simple, include neat tables, graphs and charts to present their research findings, and include quotes from the participants involved in the research project to demonstrate authenticity.

Below we give an overview of the formats for research[3] reporting and templates that the lecturers can adapt further and share with the students. As each university might provide students with guidelines for research dissemination formats, this section is only meant to provide a broad overview, share some best practices and point the lecturers and students to valuable resources.

5.1 Oral presentation

Encouraging students to present their research both orally and in a written report enhances their presentation, communication and writing skills. The classroom presentation should ideally come first so students can implement the feedback received from their peers.

Based on a workshop[4] organised by CLARIN ERIC for PhD students and early-stage researchers, we have compiled the tips below on how to give a presentation, which can be shared with the students.

How to Present Effectively
Any kind of presentation (short or long) should focus on five main elements: 1. **Capture the audience's attention** with a question, a story or a shocking fact and give the audience a couple of seconds to react. Once the audience is engaged, the title slide can be shown, followed by a brief introduction and overview of the contents. 2. **Introduce the challenge/problem** and make it as concrete as possible, showing examples.

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[3] For more examples of research reporting formats, see Short formats for research communication - Research Retold.

[4] Hans Van de Water from the company Floor is Yours coached the students on presenting their research results clearly and convincingly.

> 3. **Present the solution to the problem**, highlighting the most essential elements (max. 3). Depending on the audience type and their expectations, the presentation could focus either on the content analysis and the findings or the tools and methods used during the research
> 4. **Explain why the solution is relevant** to the audience.
> 5. **Memorably close the presentation**, including a summary of the main lessons learnt, why they are relevant, and new steps/ideas for research.

Guidelines for Creating Presentation Slides

- The presentation should match the content and/or visuals on the slides.
- The slides should contain as little text as possible, focusing on the essence. Generally, using no more than **20 words per slide** is recommended, but this is not always possible.
- The standard text size should be at least 24 pt, keywords could be written in another well-readable colour to capture the audience's attention.
- Basic animation could be used to present steps in the process.
- Enough time should be reserved to rehearse the presentation.
- Using speaker notes in PowerPoint as an aid should be avoided; a separate set of cue cards could be used instead.
- If need be, a handout for the audience with additional information could be created. The handout could be the research report, the paper, or a copy of the slides.

👉**TIP:** For more inspiration and guidance, see the links below.

- [A lazy researcher fills his slides with a lot of text | The Floor is Yours: The Floor is Yours](#)
- [Slide design for dummies | The Floor is Yours: The Floor is Yours](#)
- [Slide design for Dummies Part II | The Floor is Yours: The Floor is Yours](#)
- [How Word is your PowerPoint? | The Floor is Yours: The Floor is Your](#)

5.2 Blog post

Reporting research project results in a blog post format requires digital communication and writing skills that are much sought after in the present-day job market. Therefore, we recommend the consortium partners invite the students participating in the UPSKILLS research-based classrooms to showcase their work by writing a blog post, which will be

featured on the UPSKILLS website. By writing and publishing blog posts, students learn how to disseminate their research results outside the classroom, reaching the broader scientific community and the general public. Blog posts can be stand-alone but also a derivative or even an alternative format to a classical project report. They can be equally evaluated by the teacher and commented upon by peers.

When writing a blog post, it is important to consider the target audience. The post can follow the same structure as a research report (see section 3), but with a style adapted for digital reading. Unlike written research reports and journal articles, blog posts can be written more engagingly, addressing the readers directly and involving them in the discussion. The core story could focus only on a specific part of the project, instead of the entire project, that is most interesting for the reader. High-quality multimedia, such as videos, graphs, images, charts and tables, need to be included to make the blog post visually appealing and draw the attention of the audience.

5.2.1 Template

Here is a template for a blog post that the lecturers can adapt further and share with their students.

Structure and style
- Depending on the complexity of the research project, the length of a blog post can vary between 500 and 1000 words.
- Keep the writing style simple (e.g. avoid scientific jargon, passive voice, repetition, unnecessary words) and the paragraphs short and to the point to increase the impact on the readers. Unlike research reports and journal articles that use academic writing, blog posts can be written in a more informal and conversational tone. They may include personal opinions and challenges encountered during a research project.
- Include a few strong keywords in the text to improve the findability of the blog post by search engines.
- Write the acronyms in full the first time they are used.
- Multimedia elements, such as tables, graphs and images, should be neat and named.
- Avoid scientific references: Include all sources and references as hyperlinks in the text. If the sources are not online, they can be listed at the end of the blog post.
- References to different sections of the blog post should be made using cross-references (links to other parts of the exact text), and references to related blog posts on the same site or third-party websites should be made using hyperlinks.

Headline
- A short, catchy sentence (max. 60 characters) describing the central message of your blog post. A tool such as [Sharethrough Headline Analyser](#) could be used to check how the content of the headline can be improved.

Opening
- Start with a quote, shocking fact, or research question that introduces the topic and catches the reader's attention.
- The project should be described briefly, focusing on the problem/challenge, solution and its relevance for the research community and/or society.

Main body

The main body should support the main message and consist of

- More context about the problem/challenges and the research questions, e.g. a few short paragraphs based on the key findings and arguments.
- A brief description of the dataset, the data collection and processing methods.
  - If the used datasets are publicly available, hyperlinks should be included. The datasets available in public repositories usually contain a unique identifier.
  - To increase authenticity, a short reflection on the quality of the dataset could be included.
  - The dataset should be visualised in an attractive way using multimedia elements, such as graphs, images and tables. Still, they should be neat and simple to understand by the general public.
  - Instead of describing the data and methods in textual form, a short video (3 min max) could be created to demonstrate how the datasets were used to answer the research questions.
- The end of the main body should outline the core findings, arguments and conclusions. The results should be visualised as well.

Conclusion

The conclusions should summarise the overall research experience, e.g.

- The personal learning experience.
- The relevance of the findings for the audience and/or society.
- Suggestions for next steps/future research/new ideas.Examples of research blog posts

5.2.2 Examples of Scientific Blog Posts

Here are a few examples of research projects described in a blog post format that can inspire lecturers and students.

Example 1: Semparl - Cities in Parliament

This is an [example][5] of a blog post written by participants from the [Helsinki Digital Humanities Hackathon][6]. The blog post is structured similarly to a project report and targets a scientific audience.

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[5] [Semparl – Cities in parliament – Helsinki Digital Humanities Hackathon (wordpress.com)](#)
[6] [Helsinki Digital Humanities Hackathon (wordpress.com)](#)

1. Introduction
    a. Background
    b. Research questions
    c. Summary of the key findings
2. Dataset
    a. Description of dataset
    b. Data extraction
    c. Data visualisation
3. Analysis
4. Results and Discussions
5. Further research
6. References

Example 2. Using a Monitor Newspaper Corpus to Trace Changing Language as a Result of COVID-19

This is an [example](#)[7] of a project written as a short impact story on the CLARIN infrastructure website. The story is simply written, targeting the general public. The structure consists of

- A brief introduction to the project
- Methodology describing the dataset and the methods used
- The outcome of the project
- An overview of the CLARIN tools and resources used in the project

Example 3. Newspapers as Data: Virtual Student Showcase

In this [example](#)[8], undergraduate students from different disciplines were introduced to computational analysis using digitised historical newspapers. Highlights of their work were presented on a website in the following format:

1. The lecturer briefly described the course and the goal of the learning activity.
2. The students recorded a video (3-5 min long) presenting how they used the dataset to answer the research questions.

5.3 Video presentation

Video presentations can be stand-alone or integrated into blog posts, classroom or conference presentations reporting on research findings. The video should focus on a specific problem or solution and be 3-5 min long. The video can consist of a set of slides with static

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[7] [Using a Monitor Newspaper Corpus to Trace Changing Language as a Result of COVID-19 | CLARIN ERIC](#)
[8] [Newspapers as Data: Virtual Student Showcase (arcgis.com)](#)

images, graphs, tables, etc., with voice-over using a screen or video capture software. More ambitiously, videos can also be short movie clips of the relevant phenomena or subjects.

5.3.1 How-To

Based on our personal experience with recording presentations, we recommend the following tips when recording a presentation.

Step 1. Preparing to record
Creating a short video presentation of 3-5 min involves a lot of preparation. Here are a few pointers:

- To ensure the recording goes smoothly, the students should first familiarise themselves with the screen recorder and video editing tool. See a few recommendations below.
- After selecting and testing the software, writing a good script that aligns with the slide content is essential. Such an exercise will help the students organise their thoughts and increase their confidence when presenting.
- Once the script is ready, enough time should be set aside for rewriting and delivering the presentation to ensure the recording will sound as natural as possible. Some breaks for pauses should be included, just as in a live presentation.
- Editing your video after filming is crucial to producing a high-quality recording that you can publish. Most free video editing software supports this step.

Step 2. Recording the presentation
Each provider of video capture software will have a technical guide to teach its users how to record a presentation. Hence, we will not include any technical guidelines here but just general recommendations based on our experience interviewing researchers and teachers at CLARIN.

- The recording should be in a quiet room with a good internet connection.
- The room should ideally have natural light for self-recording, and the recording should occur at eye level. If recorded outside or in a real-world setting, ensure any background noise and backdrop will not be distracting. The background should be as neat as possible to avoid distracting the viewer.
- The presenter needs to speak clearly, take pauses where needed, and look directly into the camera lens. Simple animation can be included to visualise steps in a process.
- Multiple takes and editing may be needed depending on the desired result and the confidence to present in front of a camera.
- The length of a video presentation varies depending on its purpose. It should be shorter for blog posts or live presentations, around 1-3 minutes, whereas recordings

for thesis or poster presentations can be 5-8 minutes long. The teacher or conference organiser will provide the exact parameters.

● The recording should be saved in a format compatible with the content management system and exported. Confirming the compatibility beforehand is recommended, although .mp4 is generally a popular and versatile format.

5.3.2 Examples of video capture and editing software

There is a wide range of video capture software from which the students can choose. The list below contains a few recommendations for user-friendly video capture and editing tools.

● Screencast-o-Matic (Windows/Mac)
  ○ It is browser-based and can be used on both Windows and macOS.
  ○ It integrates with Moodle LTI, Canvas, Google Drive, Google Classroom, and YouTube.
  ○ The website provides user-friendly tutorials to help you get started.
● TechSmith Capture (Windows/Mac)
  ○ Very simple and easy to use to create basic screenshots and screen recordings for narrating the steps to solve a problem
  ○ A 5-minute video can be created for free.
  ○ Step-by-step tutorial on how to record a PowerPoint presentation with Camtasia: How to Record a Presentation (with Audio & Video) | Blog | TechSmith
● Microsoft PowerPoint
  ○ Step-by-step tutorial by Microsoft: Record a presentation (microsoft.com)
● Zoom
  ○ It can be used to self-record a video presentation, see this step-by-step tutorial: Using Zoom to Record Presentations.pdf (ou.edu)
  ○ If needed, editing needs to be done with a separate tool.

👉**TIP:** More useful tips and resources can be found on the web, e.g.

- Creating a Video Presentation for a Virtual Conference | Undergraduate Research Center (ucdavis.edu)
- Top 12 Best Free Video Recording Software in [2022 Updated] - EaseUS
- Presentation Script Writing Training | Presentation Experts
- Recording tips – Help Desk (goreact.com)

5.4 Poster

A scientific poster is a printed or digital document that combines textual and visual elements in an eye-catching way to present research results at a conference and encourage interaction with the viewers. Consequently, a poster serves as a valuable **networking** and **communication tool** that students should be acquainted with at the outset of their academic journey. This early exposure equips them with the ability to disseminate the results of their student projects outside the classroom, connecting with the broader scientific community and eliciting constructive feedback on their endeavours.

In the classroom, posters could complement or replace the written report format. Assessment could involve peer evaluation of the poster presentations, allowing students to collectively contribute and give feedback. Posters are usually evaluated on two aspects: (1) technical aspect (%) and (2) presentation (%). The weight depends on the evaluator, which may include the teacher or an evaluation committee of a group of students.

5.4.1 Template

Below we suggest a structure for the poster content, which lecturers could further adapt based on the nature of the designed student project.

The Structure

A typical poster will include the same parts as a research report:

- Title
- Introduction
- Data and methods
- Results
- Conclusions
- References, Acknowledgments and Contact information

Length and Format

- If the students prepare a poster for a conference, the organisers usually provide specific guidelines about the length, layout (horizontal or vertical), and size of images. The length of a poster varies between 200 and 800 words. Less is more.

The Title

- The title must be informative, short, meaningful and easy to understand by laypersons.
- Include any words students should avoid in the titles and/or some examples of good titles.

Introduction

- The introduction should provide minimum but meaningful background information, e.g. research questions, issues or a shocking fact that captures the viewers' attention.

Data and Methods
- The data and methods should be described briefly, using figures, tables and/or images to illustrate the experimental study. Figures are usually preferred to tables.
- Mention if the students should include the statistical analysis to address their research questions.

Results
- The results should be presented logically using visually appealing elements (e.g. charts, figures, tables, images).

Conclusions
- A brief discussion of the relevance of the findings to the audience or about other similar research.
- Include ideas for possible next steps.

Optionally, posters can also include a list of the key references, cited literature, acknowledgements and contact information (e.g. website address, email address, QR code where a PDF version of the poster can be downloaded).

👉**TIP:** For more inspiration, templates and copyright-free photos, see the collections of links below.
- [Creating a poster in 4 clear steps | The Floor is Yours: The Floor is Yours](#)
- A collection of ready-made templates that the students can download from [OSF | Better Scientific Poster](#)
- [How to create a research poster in Canva](#)

5.5 Finding copyright-free images

Royalty-free professional photos for presentations and posters can be found on the following websites:
- Images:
  - www.unsplash.com (free images)
  - https://pixabay.com
  - www.compfight.com (contains "creative commons" images)

- ○ www.storyset.com (free images)
- ● Icons:
    - ○ www.thenounproject.com (free icons, attribution required)
    - ○ https://www.flaticon.com
- ● Templates for graphic design (e.g. infographic and poster templates)
    - ○ https://www.fiverr.com/categories/graphics-design
    - ○ https://www.canva.com/

6. Publishing and sharing project outputs

Acquaint students with research data repositories and best practices in open science by asking them to publish the UPSKILLS project outputs (presentation, poster, corpus, piece of code) in a public research data repository. Through publication, students will learn how to prepare their files for depositing, describe their project outputs and resources meaningfully, choose an appropriate licence and cite their work. This section provides general guidance for **publishing and sharing general research outputs**, such as presentation slides and posters, and **publishing and sharing language and linguistic resources**, such as corpora, produced in the UPSKILLS student projects.

👉**TIP:** For a more detailed introduction to research data repositories, please refer to the Integrating Research Infrastructures into Teaching Guidelines available on the UPSKILLS project website (van der Lek, Fišer et al., 2023).

6.1. Publishing and sharing general research outputs

General research outputs, such as reports, presentation slides, posters, and graphics, can be uploaded to a general, multidisciplinary research data repository, such as Zenodo[9] or FigShare[10]. These repositories are free to use by the academic community, automatically assign a unique identifier (e.g. DOI[11]), support versioning and offer step-by-step guidelines on preparing and uploading data.

Zenodo is an open, cost-free repository for all scholarship, enabling researchers, scholars and students from all disciplines to share and preserve their research outputs, regardless of size or format. If you are unfamiliar with this repository, watch this short OpenAire tutorial to learn how to use and upload files.
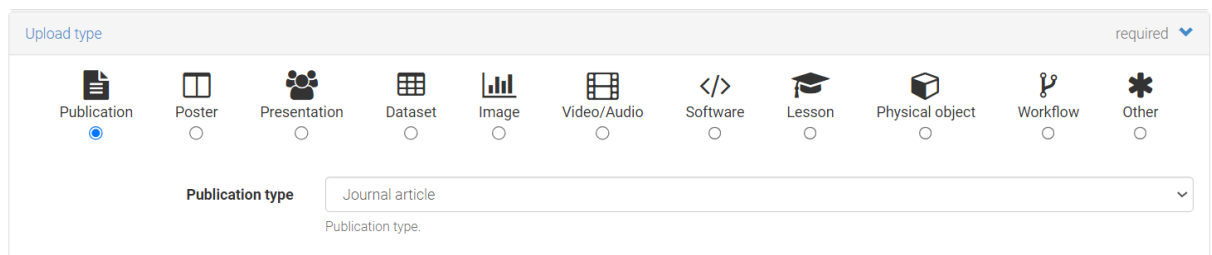
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[9] Zenodo - Research. Shared.
[10] figshare - credit for all your research
[11] Digital Object Identifier

To upload project presentations, students should proceed as follows:

1. Create an account on [Zenodo](#) or sign in with their GitHub or ORCID[12] account.
2. Once you can access Zenodo, go to **Communities** and search for the **UPSKILLS Zenodo Community[13]**.
3. Click **View** and then on **New Upload**
4. Select the type of files to upload, e.g. poster, presentation, or dataset.

5. Describe the context in which the file was created, e.g. name and date of the event, project, summary of your findings, etc.
6. Fill in the required metadata to describe entry
7. Choose an open licence, e.g. *Creative Commons 4.0 International[14]*. All materials produced in the UPSKILLS project are published under this CC licence. It is one of the most used licences in research practice, and it means that others can reuse and adapt your work provided they give proper attribution and indicate if they make changes to your content.
8. Add contributor (s)
9. Publish

6.2. Publishing and sharing language resources

Language resources (e.g. a corpus, a lexical resource) produced during the project should ideally be deposited in a FAIR domain-specific repository (e.g. CLARIN repositories[15]) to acquaint the students with the main steps in the **language resource lifecycle.** FAIR is a set of guiding principles proposed by Wilkinson M. et al. (2016), and they stand for *findability, accessibility, interoperability and reusability* of digital resources. A FAIR research data repository helps make research data findable by assigning a **unique and**

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[12] MA students pursuing a PhD are recommended to create an [ORCID](#) account to distinguish. themselves from other researchers.
[13] This community has been set up especially for the dissemination of the UPSKILLS deliverables.
[14] https://creativecommons.org/licenses/by/4.0/
[15] [Depositing Services | CLARIN ERIC](#)

persistent identifier (PID), such as a handle or a DOI, to each repository entry and providing a **standard metadata schema** that the depositor can use to describe the resource.

Based on the depositing guidelines of the CLARIN Slovenian repository, we provide an overview of the metadata (and instructions) that students would be required to fill in when depositing a corpus in a CLARIN research data repository.

To view and browse for language resources in the CLARIN repositories is free of charge and does not require registration. To deposit language resources, however, depositors need to sign in using their university credentials or CLARIN account. If this is not possible, a CLARIN account can be requested via this account registration form. See the Integrating Research Infrastructures into Teaching Guidelines (van der Lek, Iulianna., et al., 2023) for additional information, especially *Section 2.2. Accessing CLARIN.*

Step 1: Fill in basic information about the submission
- Title of the resource (e.g. *A multilingual comparative corpus UPSKILLS project; Glossary of banking terms*)
- References (*not applicable for the student projects, leave empty*)
- Date issued (*this will be the date of submission*)

Step 2: Fill in the name of the author (s)
- Include all the students who participated in the creation of the resource
- Add one contact person whom the repository curator can contact in case of questions about the submission
- Add information about the funding agency. (e.g. The students producing a resource as part of their USPKILLS summer school projects should add the *Erasmus+ Programme (Strategic Partnerships for Higher Education)*.

Step 3: Describe the resource
- Add a **description** about the resource (about half a page maximum). For example, in the case of corpora, briefly describe how it has been compiled.
  - What type of corpus is it? (e.g. parallel, comparable, learner corpus)
  - Does it focus on a specific domain (e.g. banking, legal, medical, language learners?)
  - What text types were collected, how many and in what languages? In the case of parallel corpora, it is important to indicate which language corresponds to the original or translated texts.
  - Has the corpus been annotated? If yes, what types of annotations?
  - Does the corpus include personal or sensitive data? If yes, have such data been anonymised?
  - How can others reuse the corpus for teaching or research purposes?
- Add the **language (s)** of the resource

- Include a few meaningful **keywords** describing the resource and which the repository users might use to search for your resource: e.g. *UPSKILLS, student project, near-synonyms.*
- **Size of the resource** (e.g. in the case of a corpus, provide the number of tokens)
- **Media type (**e.g text or audio)

Step 4: Upload your files

On your laptop, browse for the files you need to upload. As a best practice, recommend the students to check the formats accepted by the repository before they start working on their project. The CLARIN Standards Information System provides an overview of all the formats and file types accepted by the CLARIN repositories. Teachers and students can use the system to learn about different standards and formats used to describe language resources.

Step 5: Select the licence

After uploading the files, the students will be prompted to select a licence. If you do not know what licence to select, use the CLARIN License Selector together with your students to find a suitable licence. In the case of the UPSKILLS project, all learning content and resources are published under CC-BY-4.0.

Step 6: Leave a note

This last field can contain any other additional information about the resource that the repository manager should be aware about, e.g. "*This resource has been created by students in the UPSKILLS Summer School projects.*"

Step 7: Save and share the submission with the repository manager. The repository manager will review the submission and get back to the contact person in case of questions.

As an example of a well-described resource that can be shared with the students, please look at this corpus published in the CLARIN.SI repository:

➔ *Erjavec, Tomaž; et al., 2021, Linguistically annotated multilingual comparable corpora of parliamentary debates ParlaMint.ana 2.1, Slovenian language resource repository CLARIN.SI, ISSN 2820-4042, http://hdl.handle.net/11356/1431*

For more information and learning content related to the use of research data repositories in language research and archiving, see *Integrating Research Infrastructures into Teaching: Recommendations and Best Practices* (van der Lek, I.,

Fišer, D., et al. 2023) and the UPSKILLS learning content on *Language Resources: Standards and Repositories*.

7. Conclusions

This document provides guidelines and useful tips for UPSKILLS lecturers designing and conducting research projects with BA students in linguistics and other language-related fields in a research-based teaching context at their university or as part of the UPSKILLS summer school. The student projects are designed for an additional 1-3 ECTS (25-75 hours of study) as part of their UPSKILLS learning block. **Section 2** and **3** provide recommendations for learning outcomes, project planning, and a detailed research report template for teacher guidance. **Section 4** contains a grading template, and **Section 5** offers alternative research reporting formats and templates. Finally, **Section 6** provides step-by-step guidelines for depositing, publishing, and sharing project outputs in Zenodo, a general repository, or CLARIN, a disciplinary repository for language and linguistic data.

References

Gledić, J., Assimakopoulos, S., Buchberger, I., Budimirović, J., Đukanović, M., Kraš, T., Podboj, M., Soldatić, N. & Vella, M. (2021). UPSKILLS guidelines for Learning Content Creation. Zenodo. https://doi.org/10.5281/zenodo.8302296

CLARIN Standards Information System. https://clarin.ids-mannheim.de/standards/index.xq

CLARIN.SI Repository. Depositing Guidelines. https://www.clarin.si/repository/xmlui/page/deposit

Samardžić, T., Berthouzoz, M. (2023). Research Tracking Tool. In UPSKILLS Project. Intellectual Output 2.2. Integrating Research Infrastructures into Teaching. CC BY 4.0.

Simonović, M., Arsenijević, B., van der Lek, I., Assimakopoulos, S., ten Bosch, L., Fišer, D., Kraš, T., Marty, P., Miličević Petrović, M., Milosavljević, S., Tanti, M., van der Plas, L., Pallottino, M., Puskas, G. & Samadžić, T. (2023). *Research-based Teaching: Guidelines and Best Practices*. UPSKILLS Intellectual Output 2.1. Project Deliverable. https://doi.org/10.5281/zenodo.8176220

van der Lek, I., Fišer, D., et al. (2023). Integrating Research Infrastructures into Teaching: Recommendations and Best Practices. The Case of CLARIN. UPSKILLS Intellectual Output 2.2. Project Deliverable. https://doi.org/10.5281/zenodo.8114407

Wilkinson, M., Dumontier, M., Aalbersberg, I. et al. (2016). *The FAIR Guiding Principles for scientific data management and stewardship*. Scientific Data 3, 160018. https://doi.org/10.1038/sdata.2016.18

Annex

Template for Project Description

This template is for content creators to produce a description of a students' project that will be included in the UPSKILLS learning materials.

Basic information

Title of the project	
Project abstract (*one paragraph describing the scholarly goal of the project*)	
Deliverable format for research reporting (*e.g. research report, blog post, poster, other*)	
Workload (in ECTS)	
Level (BA/MA)	
Time commitment (*required from the student*)	
Time commitment (*required from the teacher*)	
Feedback plan (*at which stage in the project, you plan to give intermediate feedback to the students*)	
Prerequisites *(if knowledge from other UPSKILLS learning content blocks is required*)	
Recommended background knowledge (e.g. basic ICT skills, basic programming skills, academic writing skills, proficiency in English)	
Designers	
Designers' affiliations	

Learning outcomes
[List the learning outcomes of the research project taking into consideration the overall learning outcomes of your UPSKILLS learning content block.]

Instructions for the students
[Include here more detailed instructions for students, including the outline of the project and the feedback plan, timeline and deliverable template. When implemented in university settings, the timeline of the project should be aligned with the syllabus due dates.]

Assessment
[Briefly describe how you will assess the project and selected deliverable format.]

Showcase (if available)
[If lecturers plan to showcase students' work on the UPSKILLS website, they should use a blog post format for all projects to maintain uniformity. For summer school projects, the same template can be used with students invited to showcase their work through a live presentation using either slides or a poster. The presentations and posters can be converted to PDF and published on the Zenodo research data repository.]