#### **Research Article**

# CHALLENGES IN PLURILINGUAL EDUCATION



## Linguistics

**Keywords:** Plurilingualism, Assessment, Innovation, new approaches, pre-service training, in-service training, meaningful communication, CLIL program.

Antonio J. Sosa Alonso	University of La Laguna, Spain
Zeus Plasencia Carballo	University of La Laguna, Spain

### Abstract

Plurilingual education is considered as a natural development of our Early Childhood and Primary pupils or Secondary students in their progress towards a linguistic mastery in second language learning. The relevance of certain aspects such as assessment, innovative approaches, trends, new proposals, as well as imitation (as basic learning method) is highlighted. Teaching through a Plurilingual approach requires several conditions regarding training, curriculum and meaningfulness of language that are described and analyzed to offer some conclusions.

Bilingual education is very often confused with language training and, of course, these two concepts are very closely related, but they are definitely not synonyms. In fact, the main difference between second language (L2) training and bilingual education is that the former simply aims students to learn a new language, whereas the latter pursues the acquisition of curricular content by means of a foreign language (García, 2009). What is more, this type of bilingual approaches "equates language learning with 'learning through language', without disregarding the added benefits that may be brought about by [...] 'learning about language'" (Escobar Urmeneta, 2019).

The truth is that this bilingual approach, led by teaching practices such as CLIL or partial linguistic immersions at schools, provides a very useful environment for our students to develop their linguistic skills in a foreign language, under a controlled linguistic context, where the linguistic structures and functions that are going to be worked on in the classroom have been selected by the teacher in order to get a certain set of concepts and skills that enable our learners to communicate on a given content or topic. At this respect, Cenoz (2015) states that "the basic idea behind the integration of content and language is that languages are not learned first and then used but that they are learned by being used" (p.17).

In our path towards the functional mastery of a second language, certain elements, such as educational research and innovation, methodological approaches or didactic trends, among others, must be considered. Thus, conceive the following aspects as a sample of those challenges every language trainer should tackle with:

**1. Educational Research Based Upon Assessment.** A teacher or a professor is not only a person who leads and coordinates the work within a classroom or along a certain activity; furthermore, he or she has to be a researcher who tries to find out how the learning process can be

improved or uplifted. In this perpetual search the teacher must develop a regular scientific method in which a thesis has to be proposed in order to increase the level of acquisition of contents in his or her subject, trying to enhance several aspects in the students' attitude, such as motivation, interest, respect towards the subject and also towards the own linguistic production or that of his or her classmates'. But the starting point for this is not a whimsical or arbitrary one, nor it is based upon simple intuition; it must necessarily be the assessment: the assessment of the students and the evaluation of the teaching method itself, the process and the didactic proposal. At this point, it is worth mentioning that different subject curricula, as it is the case of the Spanish educational system, cope with traditional assessment (hetero-assessment), as well as self-assessment and coassessment-from a more student-centred perspective-; however, those supportive documents do not specify either the assessment of the instructor's performance or the validity of the learning situation(s) put into practice throughout the teaching-learning process. That is why the collection of information drawn out from our students' work, together with our observation, may depict a reality defined by our methodological approach. This moment is the most important in order to start creating new learning situations in class since they are the source where information comes out from. We know if our proposal is correctly developed when we verify that the students' productions evolve accordingly to our expectations and those of the curriculum, or not. If that is not the case, then we shall introduce some changes, review the curriculum, check how we proceeded and introduce as many changes as necessary in order to improve it. Likewise, it is paramount to consider that the assessment tools designed for non-bilingual groups are not usually suitable for those students undergoing bilingual or Plurilingual education plans (Otto & Estrada, 2019).

**2. Innovation**. The changes we pinpointed in the former paragraph belong mainly to the sphere of innovation. Innovation is often defined as a change in which we try to improve something deeply within the structure or the nature of it:

Educational innovation considers many aspects such as the technological, the didactic, the pedagogical and the human one. [...] It implies the deployment of a significative change within the teaching-learning process. [...] Furthermore, the levied change must be related to the quality of that new improved element, its contribution to the teaching-learning process and its relevance to the educational institution and external groups of interest <sup>1</sup> (Venegas, 2018, p.37).

Innovation needs, therefore, some **specific training** and, in many occasions, it also makes necessary the **development of new tools or resources** in order to accomplish with the

<sup>&</sup>lt;sup>1</sup> Own translation: "La innovación educativa contempla diversos aspectos: el tecnológico, el didáctico, el pedagógico y, muy importante, el aspecto humano. [...] Implica la implementación de un cambio significativo en el proceso de enseñanza-aprendizaje. [...] Además, la diferencia percibida debe estar relacionada con la calidad de novedad del elemento mejorado, la aportación del valor de este al proceso de enseñanza-aprendizaje y la relevancia que la innovación propuesta aportará tanto a la institución educativa como a los grupos de interés externos"

needs of new educational approaches. This is the case of Information and Communication Technologies (ICT). New technologies require a specific training and an explicit knowledge about its own operating and handling. They also involve new devices, expressions and languages and they change so swiftly that it may seem that innovation is an issue that only concerns these ICT gadgets. But innovation is more than that. It has a significant presence on almost every aspect in life: clothing, arts, diverse services, vehicles, construction, farming, etc. Hence, it is common that we integrate the innovative phenomenon as a natural principle in our lives. Thus, we are accustomed to see it every day on almost everything, but sometimes we are unable to truly accept it in the sphere of education. At this respect, when applied to instruction, we should refer to them as TLK (Technologies for Learning and Knowledge) (Enríquez, 2012), as they imply "the change from 'learning of technology' into 'learning with technology'" (Marín & Vidal, 2019, p.38).

In relation to the aforesaid unacceptance, mostly, when parents look for a school to register their children, their idea of 'school' clings back to that of their childhood. In other words, they will agree with any approach that fits in their past academic experience—at least, two or three decades of difference with their children's—, which makes parents' thoughts be mainly conservative towards the school and its educational proposal. Most parents do not like a scholar environment for their children they do not understand or one that lies out of their control and awareness. However, they do understand these TLK are the tool for their children to achieve both personal and professional development; therefore, digital literacy is required (Sánchez-Antolín, Andrés & Paredes, 2018).

But innovation does not always imply technical or technological changes; moreover, it does not require a huge investment in order to be carried out. There are many examples of innovative actions around the world that have been developed with very low budgets, such as:

- Literacy campaign through troops of teachers and professors in Cuba: in the '60s decade the Cuban Government designed an intervention with teachers and professors who went across the whole island teaching mathematics and how to read and write to the illiterate population who were about a 41% by that time (González & Reyes, 2010). In a very short lapse of time, this percentage got reduced to a 4%. This constituted a very effective yet cheap innovative action.
- Recently the German Government has decided to offer university students the opportunity to study their careers absolutely for free ("Study in Germany for free: What you need to know", n.d.). This initiative is addressed to public Universities and of course, these Universities have refused to any trace of luxury or frill.

Of course, there are many other examples that involve a very high budget, such as the *robot-teacher 'Engkey'* instituted by the South Korean Government; a very uncommon project has been carried out in a school near Seoul: English lessons for primary students were taught by a group of lady-faced robots remotely controlled from Philippines by English speaking flesh and bone teachers. The aim was to avoid younger children to feel shy when speaking a foreign

<sup>&</sup>lt;sup>2</sup> Own translation: "el cambio del 'aprendizaje de la tecnología" al 'aprendizaje con la tecnología"

language to other persons. It is needless to say that the project was far too expensive to be maintained throughout a long period of time and the objective was too restricted for such a wasteful disbursement.

The Content Language Integrated Learning (CLIL) approach is one of these low-cost resources that enhance significantly the educational systems, as it provides a second language to learners that guarantee competitiveness to the prospective professionals. Dalton-Puffer (2011) defines it as it follows: "CLIL can be described as an educational approach where curricular content is taught through the medium of a foreign language, typically to students participating in some form of mainstream education at the primary, secondary, or tertiary level" (p.183). Moreover, it fosters their intelligences and broadens the labour markets for them and thus, the possibilities of getting a job and a future in a relatively short time lapse. Of course, we cannot describe this system as purely and truly 'bilingual', as it is not an approach based upon *linguistic immersion*, but *linguistic intensification*, as it partially affects to specific subject curricula. In fact, Escobar Urmeneta (2019) explains that "CLIL can hardly be considered 'a method' strictly speaking, as there is no such thing as a specific inventory of teaching rules, restricted to CLIL, nor a defining list of steps to follow when implementing CLIL in the classroom" (p.9). Consequently, there is still a lot to say about this newly incorporated educational trend.

**3. New Approaches.** The quest for a new teaching has been constant along the history of education; it has become an endless search for better results and a continuous struggle seeking for optimization –or streamlining– in terms of effort, time, motivation, etc. This has made teachers and professors all around the world develop new abilities and points of view, some of which hit the target -others could have definitely been carried out much better, though-, but generally speaking, every new idea contributed adding a new step to innovation in language learningteaching. In the earlier years, notional-functional methods constituted the natural evolution of those traditional (but -due to its interest- highly effective) teaching strategies used by the 'Modern Language teachers' who carried out their work during the 70's and the 80's decades, and who made the difference in second language learning. Later, some innovative principles coming from the sphere of brain research led the path, and more recently new approaches based upon neuroscience and competence work try to provide new ways to learn and practice a second language using complete information, real contexts, different levels of language, utilizing a crossdiscipline method that tries to involve different subjects in a unique but complex and elaborate task. All this arranged and put together according to different social circumstances such as layout, grouping, cooperative working, uplifted activities...

## **4. Trends.** These are the following trends concerning Plurilingual education:

a. *Technological advances* have caused the incorporation of a whole set of devices to scholar duties, such as computers, projectors, e-beams, tablets, etc. These gadgets trigger a very high feeling of motivation in the students and they also have the power to turn a learning situation into a game-like experience. Of course, this must be controlled in order to reach positive aims,

without making the school become a theme park. And if in any case it happens to turn into it, there will be no bad consequences or misconception about education, as these attitudes can counter the effects of the rest of activities that seem much more attractive to the learners (use of the mobile phone, game consoles, etc.). Recently, many different uses and learning trends and teaching/learning strategies have arisen under the influence of the TLK, E-learning, U-learning, B-learning, T-learning, P-learning, Flipped Classroom, WebQuests, Gaming, Social Learning, etc., in order to adapt to present-day teaching-learning necessities required by the  $21^{st}$  century learners.

b. *Multiple Intelligences*: throughout most of the 20<sup>th</sup> century, the study of human intelligence has been encouraging the development of different means designed to measuring, studying, explaining and depicting the intellectual capacity. In the decade of the 80's, Howard Gardner (1983) launched a revolutionary concept that led into a radical change in the conception of intelligence: this faculty is, in point of fact, a cluster; a compound made of different aspects. Initially, Gardner's description referred to eight different talents or intelligences: musical, visual, intrapersonal, naturalistic, mathematical, linguistic, interpersonal and kinaesthetic (Gardner, 1983). Nowadays, it has been proven that human intelligence is a conglomerate that integrates over twenty different intelligences. Each one of them is defined by actions that can be easily identified and classified. These actions can be used to design and enrich activities, complex tasks and projects that, starting with the so-called lower order thinking skills (LOTS) (Bloom, 1956), lead the students towards the development of higher order thinking skills (HOTS) (Bloom, 1956), enhancing the learning process and supplying the perfect background for competence work.

**5.Basic Method.** Imitation is the mother of learning. Recently we have had the opportunity of attending a very interesting lecture on didactics of jazz music given by a renowned Spanish musician: Joan Chamorro. He is the driver of a totally new concept in jazz music teaching, and at the same time he runs a jazz academy in Barcelona. This academy is based upon the idea of working with the instrument from the very first contact. All the students aged approximately 8 to 21 have to perform with the academy's Big Band: The Sant Andreu Jazz Band. They play with different levels from beginners to proficient instrumentalists, nobody feels forced to overplay and the sheets or scores are adapted to everyone's stage. The solos are completely copied from great musicians and imitated from the beginning to the end<sup>3</sup>.

The 'miracle' comes through a very simple method: students listen to the original track and they copy the solo with all its features (expression, dynamics, voicings, etc.), so they internalize the creative process followed by the original musician. After these first steps, they can split the different elements that constitute the piece: rhythmical cells, harmonic resources, melodies, phrases, etc. and instantly these elements become part of their musical vocabulary and can be used on different contexts, depending on the situation, the demands, and the circumstances. The method is easy to understand, as they base their work upon trying to copy the best with the highest fidelity.

\_

<sup>&</sup>lt;sup>3</sup> Watch the experience here: <a href="https://www.youtube.com/watch?v=kdNUhlhdpqM">https://www.youtube.com/watch?v=kdNUhlhdpqM</a>

When trying to teach linguistic skills our brain operates in an exactly identical way, and it follows an absolutely parallel path to the one described for the musical context. It happens exactly like explained by Noam Chomsky (1965) in his *Generative Grammar Theory*, where he states that creativity allows children to use their linguistic skills to understand new utterances never heard before, as well as to create new utterances in accordance with the needs of the context: the elements extracted from the linguistic messages they have heard are split and interiorized exactly like young musicians used to do in the former example. This process is also similar to the one followed by young children when learning new vocabulary: "fast mapping" is a mechanism through which little learners achieve new vocabulary by connecting new meanings to a set of mental maps of words that are somehow related one to each other (Ellis-Weismer, Venker, Evans& Moyle, 2013). Therefore, the relationships depend on the learners, their previous experiences and the way they process the information, as well as their ability to conform to the usual forms of expression from another language.

- **6. Plurilingualism and Teaching.** We all agree on the fact that the basis for a substantial and long-lasting Plurilingual project lies on the joint work of the educational administrations as well as on the figure of the teacher. Though both agents are closely related, it is usually the latter the visible tip of the iceberg in this Plurilingual Ocean, and the one who receives further attention and surveillance most of the time. His/her leading role throughout the teaching-learning process may interfere, either positively or negatively, attending to his/her pre-service training on the content-language concern. In the following lines, this and other topic-related issues will be developed:
- c. Academic training. Teaching is a quite complex discipline which copes with diverse agents, approaches, methodologies, contents, and emotional and interpersonal matters which require special attention and, of course, training. In the case of Plurilingual teaching, specific methodological treatment and distinct qualifications are required, independently from any help needed concerning language (Järvinen, 2009). Thus, a particular Plurilingual teacher profile needs to be defined and trained prior actual service (Coyle, Hood & Marsch, 2010; Madrid & Pérez Cañado, 2012; Navés, 2009).

First and foremost, in terms of mastery, there is a significant difference between the primary and secondary teacher who undertakes Plurilingual teachings. The former usually shows strong rooted teaching skills due to his/her generalist profile, whereas the latter is usually mainly an expert of a given subject. On the contrary, the secondary teacher often shows higher qualifications in terms of linguistic competence –language certifications–, whereas the generalist teacher does not (Escobar Urmeneta, 2019; Durán Martínez, 2017; Durán Martínez & Beltrán Llavador, 2016). However, at this respect, there is a wrong perception about how a high linguistic certification (C1-C2 according to the CEFRL<sup>4</sup>) enables professionals to teach properly in a given

\_

<sup>&</sup>lt;sup>4</sup> Common European Framework of Reference for Languages.

Plurilingual teaching context (Delicado & Pavón, 2016). Consequently, in the case of CLIL, the *European Framework for CLIL Teacher Education* states that:

Teachers undertaking CLIL will need to be prepared to develop multiple types of expertise: among others, in the content subject; in a language; in best practice in teaching and learning; in the integration of the previous three; and, in the integration of CLIL within an educational institution (Marsh *et al.*, 2011, p.3).

Therefore, there is no doubt that those types of expertise Marsh *et al.* (2011) mention need to go hand in hand with linguistic proficiency in the L2 and adequate methodological skills in Plurilingual education contexts, grounded, of course, on the solid knowledge of the subject content (Pavón & Ellison, 2013).

All in all, the growing widespread of the bilingual and Plurilingual phenomenon worldwide demands specific academic training intended to pre-service and in-service teachers (Contero Zayas & Arco, 2018) connected with the aforesaid linguistic teaching contexts. This support should be given by educational administrations (Durán & Beltrán, 2016; Levy, 2015; Lova Mellado, Bolarín Martínez & Porto Currás, 2013) as well as by institutions such as universities, which "should pay more attention to providing their students with the knowledge, skills, strategies and tools necessary in bilingual education" (Delicado & Pavón, 2016, p.40).

d. Meaning vs. meaningful. As aforementioned, there is no doubt about the importance of initial teacher training in Plurilingual contexts as language is not used as a mere code of transmission but as a vehicle for curricular content (Escobar Urmeneta, 2019; Herranz, 2017; López, 2019). Nevertheless, despite being able to speak the foreign language is a condition, it is not sufficient in this type of teachings (López, 2019). That is why developing specific Plurilingual teaching skills is a must in non-native linguistic teaching contexts. This entails the learning of bilingual or Plurilingual pedagogies where not only translating subject-content from non-bilingual groups is an alternative (Otto & Estrada, 2019, Contero et al., 2018), but the adaptation and facilitation of those contents by the instructor, who acts as guide and facilitator throughout the whole teaching-learning process.

According to Escobar Urmeneta (2019), Plurilingual approaches need to focus its instruction on meaning rather than on form. Thus, they may provide plenty of meaningful exchanges in order to consolidate content-learning by means of a real and effective use of the target language. At this respect, Mohan (1985) states that "in subject matter learning we overlook the role of language as a medium of learning. In language learning we overlook the fact that content is being communicated" (p.1). Therefore, the goal is to achieve certain balance among language and content without sacrificing one against the other.

e. Curriculum. The need for constant training of teachers, as well as the fostering of meaningful learning in Plurilingual teaching contexts has been central throughout this paper thus far. However, at State level, Plurilingual projects demand the shaping of an adequate design and implementation of a bilingual/Plurilingual curriculum that supports the specific needs of didactic programs in foreign languages. The following lines are devoted to focus on the distinctive case of Spain and the bilingual programs, specifically CLIL programs that are being developed throughout the country. Regardless CLIL programs are bilingual-specific, there is no inconsistency with the Plurilingual tone along this paper.

In the case of Spain, multiple schools across its geography have included bilingual sections at all educational stages, adopting the CLIL methodology. Its commitment with the introduction of a foreign language in the classroom life makes of Spain one of the European leaders concerning CLIL teachings (Durán Martínez, 2017).

In Spain, the regional Governments are responsible of certain education competencies and policies. Hence, bilingual projects may differ from one region to another, depending on its own diversity and special characteristics. However, despite the effort made by regional administrations, the aforesaid heterogeneity in bilingual models and programmes conceals a general impact on learners undertaking bilingual studies when compared at regional levels. Thus, a State-level regulation for bilingual programmes could be a suitable option to develop and apply (Herranz, 2017). In other words, regions and the Ministry of Education should coordinate to set patterns of action alike over the whole territory. In that way, a holistic approach of both content-language subjects and subjects in mother tongue may avoid curriculum fragmentation and provide unity and meaningfulness to the students' teaching-learning process (Halbach, 2008).

The European Framework for CLIL Teacher Education (2011) puts it clear: "a curriculum defines an educational programme" (Marsh et al., p.3). Additionally, the framework states that the "curriculum development is also a means for building high quality CLIL programming" (Marsh et al., p.4). Hence, specific guidelines and policies for bilingual education from the educational administration are needed (Otto & Estrada, 2019) to carry out homogeneous, effective and quality programmes of bilingual/Plurilingual education.

## **Conclusion**

There is no doubt we live in a connected and globalized world were the use of different languages in a proficient way is not only necessary but compulsory. This is the main reason why Plurilingual programs are being developed and introduced at different instructional levels all over the world and, specifically, in Spain. Our future is imminently Plurilingual. Therefore, action-research on this newly introduced educational branch, thorough and quality training for preservice and in-service teachers focus on content-language learning methodologies and supportive curricula are needed to overcome some of the challenges that Plurilingual education may lay out.

Obviously, the achievement of the target described before is impossible to get if teachers and educators are not committed to it and do not get involved. Methodological changes must be implemented with the aim to stimulate the design of new approaches that match the needs and interests of the students. In this sense we must assume that nowadays another challenge lies not only in improving the communicative approach but also in knowing how to develop an interesting, amusing and effective method: gamification, multiliteracy, experienced learning, and other activity clusters like those proposed by Paniagua & Istance (2018) have the complicated mission of making our lessons become eye-catching yet efficient.

In midst of this educational landscape where our students are riddled with informal and non-formal learning approaches, where anybody can teach or learn anything online, are we really prepared to face a future in which our lessons —as a formal educational offer— have to be attractive, instructionally profitable and universally feasible for any average school? If the answer is "not yet", the route to overcome these and other difficulties is sufficiently clear to take on the challenge.

### References

- Bloom, B. (1956). Taxonomy of Educational Objectives, Handbook: Cognitive Domain1. Longman.
- Cenoz, J. (2015). Content-based instruction and content and language integrated learning: the same or different? *Language*, *Culture and Curriculum*, 28(1), 8-24.
- Chomsky, N. (1965). Aspects of the theory of syntax. Cambridge, Massachusetts. MIT Press.
- Contero, C., Zayas, F. & Arco. J.L. (2018). Addressing CLIL Lecturers' Needs: Reflections on Specific Methodological Training. *Porta Linguarum, Monográfico III*, 121-135.
- Coyle, D. Hood, P. & Marsch, D. (2010). *CLIL: Content and Language Integrated Learning*. Cambridge: Cambridge University Press.
- Dalton-Puffer, C. (2011). Content and Language Integrated Learning: From Practice to Principles? *Annual Review of Applied Linguistics*, 31, 182-204.
- Delicado, G. & Pavón, V. (2016). Training Primary Students for CLIL: Innovation through Collaboration. *Pulso. Revista de educación*, *39*, 35-38.
- Durán Martínez, R. (2017). Análisis comparativo de la percepción de los docentes sobre los programas bilingües en la Educación Primaria y Secundaria. *Revista Complutense De Educación*, 29(3), 865-880. <a href="https://doi.org/10.5209/RCED.54066">https://doi.org/10.5209/RCED.54066</a>
- Durán Martínez, R. & Beltrán Llavador, F. (2016). A Regional Assessment of Bilingual Programmes in Primary and Secondary Schools: the Teachers' View. *Porta Linguarum*, 25, 79-92.
- Ellis-Weismer, S., Venker, C., Evans, J., & Moyle, M. (2013). Fast mapping in late-talking toddlers. *Applied Psycholinguistics*, 34(1), 69-89
- Enríquez, S. (2012) *Luego de las TIC, las TAC*. Ponencia presentada en las II Jornadas Nacionales de TIC e Innovación en el Aula. Retrieved from

- http://sedici.unlp.edu.ar/bitstream/handle/10915/26514/ponencia\_ead\_enriquez\_\_silvia\_cecilia\_luego+de+las+TIC,+las+TAC+(1).pdf?sequence=1
- García, O. (2009). Bilingual Education in the 21st Century: A Global Perspective. Chichester.
- Järvinen, H.M. (Ed.) (2009). *Handbook: Language in Content Instruction*. Turku, University of Turku: Socrates Education and Culture.
- Gardner, H. (1983). Frames of Mind: The Theory of Multiple Intelligences. New York, Basic Books.
- González, J.P. & Reyes, R. (2010). Desarrollo de la Educación en Cuba después del año 1959. *Revista Complutense de Educación*, 21(1), 13-35.
- Halbach, A. (2008). Una metodología para la enseñanza bilingüe en la etapa de Primaria. *Revista de Educación*, 346, 455-66. Recuperado de: http://www.revistaeducacion.mec.es/re346/re346 17.pdf
- Herranz, R. (2017). What Makes an Effective Bilingual Programme? Talking from Experience. En Nuria García y Virginia Vinuesa (Coord.) *IV Congreso Internacional de Enseñanza Bilingüe en Centros Educativos: El bilingüismo a debate* (pp. 182-190). Servicio de publicaciones Universidad Rey Juan Carlos. España.
- Levy, M. (2015). Formación inicial para profesores de programas bilingües en inglés: políticas, prácticas y recomendaciones. Universidad de Alcalá: Servicio de Publicaciones.
- López, A. (2019). La competencia colaborativa en la formación de maestros AICLE. Universidad Pontificia Comillas. *Padres y Maestros*, 378, 32-38.
- Lova Mellado, M., Bolarín Martínez, M.J. & Porto Currás, M. (2013). Programas bilingües en Educación Primaria: Valoraciones de Docentes. *Porta Linguarum*, 20, 253-268.
- Madrid, D. & Pérez Cañado, M.L. (2012). CLIL Teacher Training. In J. de D. Martínez Agudo (Ed.). *Teaching and Learning English through Bilingual Education*. Newcastle upon Tyne: Cambridge Scholars.
- Marín, D. & Vidal, M.I. (2019). Tecnologías para el aprendizaje y el conocimiento: un estudio bibliométrico. *REIDOCREA*, 8(2), 37-50.
- Marsh, D., Mehisto, P., Wolff, D. & Frigols, M.J. (2011). *European Framework for CLIL Teacher Education*, European Centre of Modern Languages, Council of Europe.
- Mohan, B.A. (1985). Language and Content. Reading-Mas. Addison-Wesley.
- Navés, T. (2009). Effective Content and Language Integrated Learning Programmes. In Y. Ruiz de Zarobe, & R. Jiménez Catalán (Eds), *Content and Language Integrated Learning: Evidence from Research in Europe*. Bristol: Multilingual Matters.
- Otto, A. & Estrada, J.L. (2019). Towards an Understanding of CLIL in a European Context: Main Assessment Tools and the Role of Language in Content Subjects. *CLIL Journal of Innovation and Research in Plurilingual and Pluricultural Education*, 2(1), 31-42. DOI: https://doi.org/10.5565/rev/clil.11
- Paniagua, A. & D. Istance (2018): Teachers as Designers of Learning Environments: The Importance of Innovative Pedagogies, Educational Research and Innovation, OECD Publishing, Paris http://dx.doi.org/10.1787/9789264085374-en

- Pavón, V. & Ellison, M. (2013). Examining teacher roles and competences in Content and Language Integrated Learning (CLIL). *Linguarum Arena*, 4, 65-78.
- Sánchez-Antolín, P., Andrés, C. & Paredes, J. (2018). El papel de la familia en el desarrollo de la competencia digital. Análisis de cuatro casos. *Digital Education Review*, 34, 44-58.
- Study in Germany for free: What you need to know. Retrieved 26 February 2020, from <a href="https://www.study.eu/article/study-in-germany-for-free-what-you-need-to-know">https://www.study.eu/article/study-in-germany-for-free-what-you-need-to-know</a>
- Escobar Urmeneta, C. (2019). An Introduction to Content and Language Integrated Learning (CLIL) for Teachers and Teacher Educators. *CLIL Journal of Innovation and Research in Plurilingual and Pluricultural Education*, 2(1), 7-19. DOI: https://doi.org/10.5565/rev/clil.21
- Venegas, E. (2018). Las distintas aristas de la innovación. *Transatlántica de Educación*. *Educación para innovar; innovación para educar*, 20 y 21, Ministerio de Educación, Cultura y Deporte.