EIGHTH YEAR MAJOR REVIEW

SAMPLES OF

INSTRUCTIONAL DEVELOPMENT

PROFESSIONAL SERVICE TO THE DEPARTMENT

AND

GROWTH/SCHOLARSHIP

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INTRODUCTION

In this document I briefly present all the achievements that have led me to grow professionally while teaching at Columbia University. The content is presented considering the *Lecturer Review Guidelines* (2025, p. 4). The previous documents support the teaching requirements and include a documented record of excellence in classroom teaching (successful classroom observations and students' evaluations), the teaching philosophy and teaching materials (document 9).

As specified in the *Lecturer Review Guidelines* (2025, pp. 4–5), the Major Review requires evidence of professional growth across the three criteria outlined below (2, 3, and 4). Because I am also seeking promotion to Senior Lecturer, this section of my dossier details my work in each of these areas and presents clear evidence that I have consistently surpassed the expectations established in the guidelines.

<u>2. Instructional development</u>: Contributions to the design, pedagogy, syllabi, and organization of courses, such as:

- creating teaching materials or teaching methodologies
- developing new courses
- leading or coordinating sections or courses

<u>3. Service to the department, Arts and Sciences or the University, such as:</u>

- one-on-one academic advising
- directing programs
- contributing to the training and supervision of colleagues…
- serving on departmental/Arts & Sciences committees
- collaboration with program colleagues and the department administration to ensure the effectiveness of the program.

4<u>. Professional growth and/or scholarship:</u> General contributions to scholarship, pedagogy, or creative activity in the subject area, such as:

- demonstrating leadership in the subject area within and outside the University.
- presenting or publishing pedagogical, scholarly, artistic or professional works in the subject area.

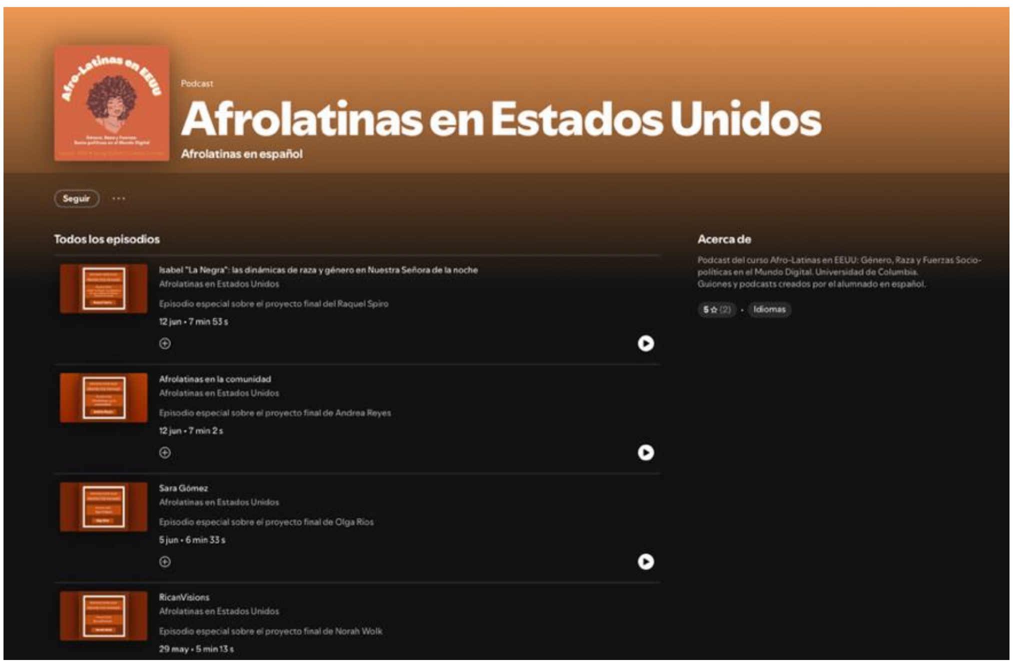
As I have extensively contributed to the three criteria, this document is organized considering the above-mentioned structure.

INSTRUCTIONAL DEVELOPMENT

Since my Fifth-Year Critical Review, I have worked continuously on the creation of innovative teaching materials, pedagogical methodologies, and digital tools designed to enhance the teaching and learning of Spanish courses in the LAIC program. In the document titled *Sample of Course Materials* in this dossier, you have seen multiple and varied examples of the materials I have created and implemented in my classes to promote meaningful, student-centered learning. Below, I present two instructional materials of which I am particularly proud, as they exemplify my ongoing commitment to innovation, reflective teaching, and the integration of digital literacy into language pedagogy.

CREATING TEACHING MATERIALS AND METHODOLOGIES

For the advanced course *SPAN 3300: Afrolatinas in the U.S.*, I have developed a unique teaching methodology centered on podcasting. In this course, students engage deeply with the curriculum content, transforming their learning into scripts for episodes of the podcast *Afrolatinas en Estados Unidos*. Through this process, they apply linguistic, cultural, and critical thinking skills to communicate meaningfully with authentic audiences. The podcasting format extends learning beyond the classroom walls, allowing students' voices and perspectives to reach a broader community of Spanish speakers. The image below takes you to the podcast's page on Spotify.



Podcasting offers multiple pedagogical advantages in the foreign language classroom: it promotes authentic communication, enhances oral proficiency and pronunciation through repeated drafting and recording, and fosters collaboration, creativity, and digital literacy. Moreover, it empowers students to develop a public voice in Spanish and to participate in real-world discourse about identity, race, and representation.

This course has been offered every Spring since 2023, during which time students have produced three full seasons, each comprising ten episodes, that highlight the achievements of Afro-Latinas in the United States and beyond. This podcast spotlights the stories, experiences, and contributions of Afro-Latina women living in the U.S., created by students of the advanced course *Afrolatinas en Estados Unidos.* Across multiple seasons, each episode features student-led research turned into audio narratives that explore identity, culture, migration, professional achievement, raciolinguistics, and social justice within the Afro-Latina community. The project not only serves as a learning tool for the students but also makes their work publicly accessible on platforms like Spotify, expanding the educational reach beyond the classroom.

Here there is a list of some of the episodes published:

#	Date	Episode Title and Digital Access	Topic
1	Mar 03 2023	Identidad Afrolatina: datos necesarios para comprender la afrolatinidad	Exploring the concept of Afrolatinidad and identity.
2	Apr 17 2023	*¿Quién es Gloriann Sacha Antonetty Lebrón?*	Spotlight on Afro-Latina academic Gloriann S. Antonetty Lebrón.
3	Apr 19 2023	*¿Quién es Tanya K. Hernández?*	Focus on Tanya K. Hernández and her contributions.
4	Apr 21 2023	*¿Quién es Omaris Z. Zamora?*	Focus on Omaris Z. Zamora in academia.
5	Apr 24 2023	*¿Quién es Bárbara Abadía-Rexach?*	Profiling Bárbara Abadía-Rexach and her impact.
6	Mar 12 2025	*Elizabeth Acevedo*	Discussion of Elizabeth Acevedo's career and poetry.
7	Mar 14 2025	*Buena Vista Social Club*	History of Buena Vista Social Club and Afrolatina connections.
8	Apr 09 2025	*La salsa*	Conversation about salsa music and Afro-Latina culture.
9	Apr 10 2025	*Melissa Lozada-Oliva*	Episode on Melissa Lozada-Oliva, poetry, and Spanish usage.
10	Apr 11 2025	*Identidad Lingüística - Experiencias personales*	Personal experience reflections on Afro-Latina linguistic identity.

INSTRUCTIONAL ACTIVITY WITH RBML: EXPLORING JOSEFINA BÁEZ'S ARCHIVE

As part of the Advanced Spanish course *Afro-Latinas in the United States*, I designed a pedagogical collaboration with Columbia University's Rare Book & Manuscript Library (RBML) to take advantage of its extensive archival resources. This visit focused on the Josefina Báez Papers, a rich collection that documents the creative and professional trajectory of the Dominican-American artist, performer, and educator. During the visit, students explored original materials—including scripts, notebooks, correspondence, photographs, and performance artifacts—to better understand Báez's work and her contributions to Dominican and diasporic performance traditions.

This hands-on experience allowed students to engage directly with primary sources, fostering archival literacy, cultural analysis, and interdisciplinary research skills. The visit also inspired multiple student-created podcast episodes for *Afrolatinas en Estados Unidos*, in which they reflected on Báez's legacy and its connection to Afro-Latina identity and artistic expression.

Collaborating with other units and departments at Columbia, such as RBML, is essential to broadening students' academic experiences and connecting classroom learning with the university's vast institutional resources. These collaborations strengthen interdisciplinary learning, promote community across departments, and expose students to diverse professional and research perspectives within the university.

Discovering Josefina Báez

In this first episode of the special series dedicated to the brilliant Josefina Báez, we learn a bit more about her artistic journey. Audio and script created by the students of the *Afro-Latinas in the United States* course at Columbia University. Original music by: Benjamin Parkhurst (CU 2027) Cover photo: taken during the visit to Josefina Báez's archive at Butler Library.

A Conversation About Two Works by Josefina Báez

In this second episode of the special series dedicated to the brilliant Josefina Báez, we explore and discuss two of her works. The audio and script were created by the students of the *Afro-Latinas in the United States* course at Columbia University.
Original music by: Benjamin Parkhurst (CU 2027) Cover photo: taken during the visit to Josefina Báez's archive at Butler Library.

Josefina Báez's Archives at Butler Library

In this third episode of the special series dedicated to the brilliant Josefina Báez, we step into her world through a visit to her archives at Butler Library at Columbia University. The audio and script were created by the students of the *Afro-Latinas in the United States* course at Columbia University. Original music by: Benjamin Parkhurst (CU 2027) Cover photo: taken during the visit to Josefina Báez's archive at Butler Library.

SERVICE TO THE DEPARTMENT, ARTS AND SCIENCES OR THE UNIVERSITY

My service to the Department, the School of Arts and Sciences, and the University reflects my strong commitment to collaborative academic citizenship, shared governance, and the collective advancement of teaching and learning at Columbia. Over the past several years, I have contributed through committee work, pedagogical workshops, mentorship of graduate students, cross-departmental collaborations, and active participation in university-wide initiatives. These efforts demonstrate not only my dedication to supporting colleagues and students, but also my belief that academic excellence is strengthened through teamwork, open dialogue, and the exchange of innovative pedagogical practices. Below you may see examples of these activities.

SERVING ON DEPARTMENTAL COMMITTEE (First-Year Review Committee)

During the 2023–2024 academic year, I served on the First-Year Review Committee for a Lecturer in my department. The first year of service for all full-time lecturers, regardless of rank, serves as a probationary period. The committee's work focused on writing a report based on the classroom observations and the candidate's dossier, which would help in determining whether to extend the lecturer's initial statutory appointment. Serving on this committee provided me with a deeper understanding of the review process and the criteria used to assess lecturers' professional growth and teaching effectiveness.

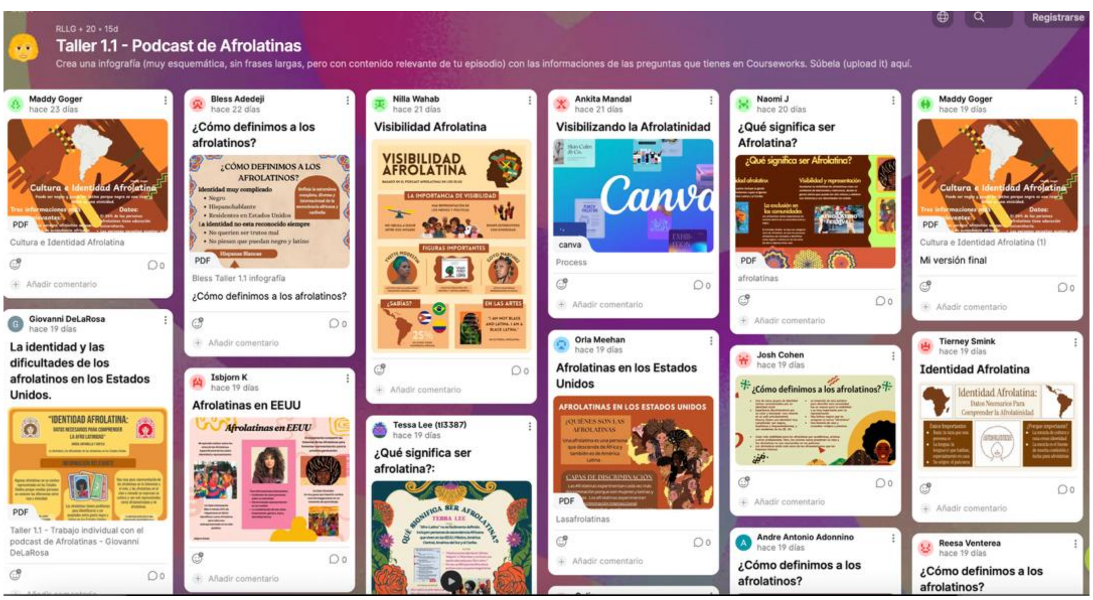
As part of my service, I observed two classes (October 23 and 25, 2023) and met multiple times with the other committee members to share and discuss our observations. I also reviewed the lecturer's dossier and prepared a report for the Chair of the committee. Finally, we met with the lecturer under review to provide collective feedback and discuss our insights regarding their dossier and teaching practices.

This experience was particularly meaningful, as it enhanced my understanding of departmental evaluation procedures, strengthened my appreciation of reflective and evidence-based teaching, and deepened my professional relationships with colleagues through the exchange of pedagogical perspectives.

COLLABORATION WITH PROGRAM COLLEAGUES AND CONTRIBUTING TO THE TRAINING OF COLLEAGUES

The key to a successful teaching and research environment is collaboration. I strongly believe that teamwork and the exchange of ideas among colleagues foster the creation of meaningful learning experiences and the development of high-quality research projects. Within the Department of Latin American and Iberian Cultures (LAIC), Dr. Reyes Llopis-García organizes each academic year a series of six professional development sessions designed to provide a space for sharing research outcomes, instructional methodologies, and innovative teaching materials among faculty and graduate students. Last February, I presented the workshop entitled *Multimodal Learning: Instagram and Podcasts as Pedagogical Tools for Curricular Decolonization in Language Teaching.*

In this workshop, I presented the theoretical framework that supports the podcasting project developed for the course *Afro-Latinas in the United States*. Colleagues who attended expressed great interest in the podcast and have since incorporated it into their own syllabi. Below, you can see a digital panel created by Dr. Llopis-García's students, inspired by different episodes from the podcast. This initiative highlights the value of peer collaboration and the impact of sharing pedagogical practices within our department.



I also believe that mentoring our graduate students and participating in their academic activities are essential for their growth as future scholars and educators. On October 30, 2023, I participated in the forum *“Balancing the Scales: Exploring the Pros and Cons of AI in Language Learning,”* organized by Mónica Ramírez Bernal, CLT Lead Teaching Fellow. The event was conceived as a safe and collaborative space where attendees could share their perspectives and questions regarding the advantages and challenges of integrating AI into second language instruction. Its main goal was to help instructors make informed and reflective decisions about the use of emerging technologies in their classrooms.

Collaboration with colleagues is a constant and essential aspect of my academic practice. The example below reflects my belief that academic work thrives through shared knowledge, dialogue, and collective innovation. On April 25, 2025, my colleague Dr. Irene Alonso-Aparicio invited me as a guest speaker to her graduate seminar to share my expertise in digital literacy and the use of AI in education. These forms of collaboration not only enrich my own pedagogical perspective but also contribute to strengthening the department’s culture of innovation and mutual learning. You may access the presentation by clicking the image below.

CANDIDATE FOR THE LECTURERS ADVISORY COMMITTEE

In Spring 2022 and Spring 2024, I presented my candidacy to serve on the Lecturers Advisory Committee. Although I was not elected, I remain deeply interested in contributing to the Columbia community and will continue to apply for committee positions where I believe my experience and perspective can be of value.

CANDIDATE FOR THE SENATE

In Spring 2025, I presented my candidacy for the University Senate. Below is the bio that accompanied my name on the ballot. Although I was not elected, I plan to continue putting forward my candidacy, as I strongly believe I can both learn from and contribute to Columbia's shared governance through my expertise and commitment to strengthening its academic community.

> Candidate Bio: Leyre Alejaldre Biel
>
> I am a Lecturer in the Department of Latin American and Iberian Cultures. Since joining Columbia in 2018, I have contributed a strong global perspective shaped by teaching and leadership experience in Gambia, Thailand, Barbados, Spain, and the UK. My research connects language education, technology, and social justice, with a focus on equitable access to generative AI, curriculum decolonization, and Afrolatinx identity in the U.S. classroom. I bring this vision to my teaching by designing courses that integrate digital tools to foster critical thinking and student agency. My close engagement with students and deep understanding of their academic realities equip me to contribute meaningfully to a range of Senate committees. I have served on the First-Year Review Committee for a Lecturer and on the Curriculum Committee in my department, where I worked to align pedagogical goals with content. These experiences have strengthened my understanding of faculty evaluation, curriculum development, and the importance of inclusive academic structures. As a lecturer, I know firsthand the challenges of heavy teaching loads, limited research time, and restricted access to professional development. I've transformed those challenges into opportunities for connection, insight, and innovation. My primary motivation for seeking a Senate seat is to address the persistent underrepresentation of Lecturers in university governance. Although we play a vital role in Columbia's academic life, our voices are often missing from key institutional conversations. As your Senate representative, I will advocate for equity, visibility, and support for the untenured community—fostering stronger collaboration across the University and ensuring that all members of our community are heard, valued, and included

WORKSHOP CO-ORGANIZER FOR ARTS AND SCIENCES LECTURERS UNDERGOING THEIR 5TH YEAR REVIEW

Together with my colleague Dr. Dolores Barbazán Capeáns, I co-organized and led a workshop designed to guide Arts and Sciences Lecturers through the 5th-Year Critical Review process. This event, open to all lecturers undergoing their review, aimed to provide practical guidance, share best practices, and foster a supportive environment for professional growth. The workshop emphasized transparency in the review process, effective dossier organization, and reflective teaching documentation. Collaborating with Dr. Barbazán Capeáns made this initiative particularly meaningful, as it combined our complementary perspectives and experience to promote peer mentoring, community building, and cross-departmental collaboration among lecturers across Columbia.

LRC COLLABORATION: POCAST SPOTLIGHT OF THE COURSE AFROLATINAS IN THE UNITED STATES

The Language Resource Center (LRC) invited me as a guest speaker and faculty spotlight for one of the episodes of its podcast *Said & Done*. In this episode, I discussed the design and pedagogical goals of my advanced course *Afro-Latinas in the United States*, which highlights the voices and experiences of Afro-Latina women through student-created podcasts and transmedia projects. This invitation represents an important opportunity for visibility, as it showcases an innovative course model that integrates digital storytelling, cultural research, and social engagement. Moreover, it promotes dialogue among faculty members about inclusive pedagogy, digital humanities, and the evolving role of technology in language education. By clicking on the image you may listen to the episode.

In this episode of Said & Done, Leyre Alejaldre Biel, Lecturer in Spanish at Columbia, speaks about her Advanced Spanish course, Afrolatinas en Estados Unidos. The class centers the voices and experiences of Afrolatina women, as students research and learn about members of this community.The episode also points to how this project extends beyond the classroom, with student-created podcasts available on Spotify and student-generated content relating to the class on Instagram.

***If you'd like to see and hear more of the student work, visit Afrolatinas en Estados Unidos on Spotify: https://open.spotify.com/show/5tneZgWTsNUQO7Xw7xAv67 And Afrolatinas in Spanish on Instagram https://www.instagram.com/afrolatinasinspanish/

PROFESSIONAL GROWTH/SCHOLARSHIP

Below, I briefly explain the professional and scholarly activities that have contributed to my growth as a lecturer and researcher. As you will observe, many of them are international collaborations with academic institutions abroad. Some of these activities have been generously funded by the universities I collaborate with, others with the support of FRAP funding, and the majority through my own resources.

MOST RELEVANT PUBLICATIONS SINCE 5th YEAR CRITICAL REVIEW

Since my 5th-Year Critical Review was conducted three years ago, I have published extensively in peer-reviewed journals and collective volumes. Below is a list of my most relevant and recent publications, and I have also included one of my most cited papers since last review (Appendix 1). As you may observe, in 2025 I currently have only one publication, whereas in a typical year I would have completed three. This reduced output is a direct consequence of the devastating loss of a student in November 2024. This tragedy had a profound emotional impact on me, and as a result, I was unable to meet several early-2025 deadlines required to bring my ongoing work to publication.

Alejaldre Biel, L. (2025). Microtexto hipermedial en el contexto digital: instrumento pedagógico para la conciencia intercultural y lingüística. *Didáctica del microrrelato y otras formas breves hipermediales. Calvo Revilla, A. & Álvarez Ramos, E. (eds).* Dykinson

Alejaldre Biel, L. (2024). El impacto de la brecha digital en el uso de la inteligencia artificial: una reflexión desde la antropología social educativa. In *Humanities and Knowledge*, 41-41

Alejaldre Biel, L., González García, P., Ortiz Jiménez, M. Villarrubia Zúñiga, M.S., (2024). An exploratory study about the role of university tutoring in three English-speaking contexts: Australia, Barbados, and the United States. In *Building Knowledge: Visions from Education and the Humanities*. López Vega, A., & del Olmo Ibañez, M.T., (Eds). Berlin, Germany: Peter Lang Verlag.

Alejaldre Biel, L., Álvarez Ramos, E., Mateos Blanco, B., & Parrado Collantes, M. (2024). Vademecum of artificial intelligence tools applied to the teaching of languages. *Journal of Technology and Science Education, 14*(1), 77-94. doi:https://doi.org/10.3926/jotse.2522

Alejaldre Biel, L. (2023). Función tutorial universitaria para la mejora del aprendizaje y la calidad en Estados Unidos. Agenda 2030. In *Humanities and Knowledge*, 29. Octaedro

Alejaldre Biel, L. (2023). Regular el uso de la IA Generativa en el contexto universitario: autoría, construcción de conocimiento y apropiación intelectual. In *Humanities and Knowledge*, 13. Octaedro

Alejaldre Biel, L. (2023). Exploring the use of virtual reality to teach Spanish prepositions "por" and "para": a work in progress. In *Propuestas Didácticas en la Nueva Sociedad del Conocimiento*, 145-152. Dykinson

Alejaldre Biel, L., & Barbazán Capeáns, L. (2023). A digital tool to promote independent study and fluency using the Science of Learning. In *Investigación e innovación educativa en contextos diferenciados*, 815-824, Dykinson.

Alejaldre Biel, L., Romero Oliva, M. F., & Romero Claudio, C. (2023). Entre biografías ilustradas no ficcionales y lecturas ficcionales para una educación literaria: espacios de promoción del legado cultural. *Siglo XXI. Literatura Y Cultura Españolas*, (21), 401–434. https://doi.org/10.24197/sxxi.21.2023.401-434

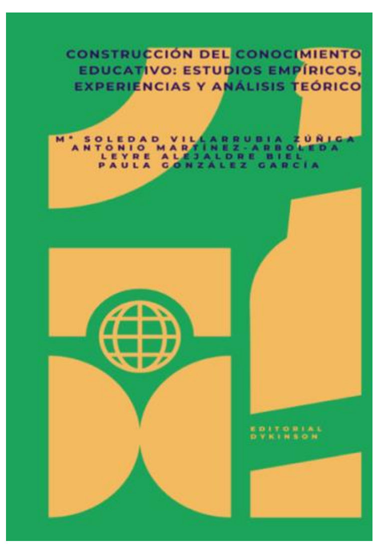
Parrado Collantes, M., Álvarez Ramos, E., Mateos Blanco, B., & Alejaldre Biel, L., (2023) #emboscarse. Taller para una educación literaria desde la geografía literaria. II Congreso Internacional sobre Investigación y Praxis docente en los objetivos de Desarrollo Sostenible (CIIP-ODS), 99-100

Alejaldre Biel, L., Álvarez Ramos, E. Mateos Blanco, B. (2023). Literate practices of the technological society: reading consumption in higher education. Prácticas letradas de la sociedad tecnológica: consumos lectores en educación superior. *Texto Livre.*

E. Mateos Blanco, B & Alejaldre Biel, L. (2023). Instaficción y autoconocimiento: aplicación del modelo didáctico. TICTACTEP. Tirant Lo Blanch.

BOOK (COLLECTIVE VOLUME EDITOR)

I am especially proud of the book I co-edited with colleagues from two international universities, the University of the West Indies in Barbados and the University of Alicante in Spain. The volume, titled *Constructing Educational Knowledge: Empirical Studies, Experiences, and Theoretical Analysis*, will be published in the coming months by Dykinson Editorial. The cover of the book appears in the image below.



GRANTS AND AWARDS

I would have not been able to grow professionally within my subject of study without the crucial support of the academic community in Columbia University and other International Universities. I am going to present the most important grants and awards achieved since the last review:

2025-2026	I am currently working on two research-grant proposals to continue developing instructional materials based on the podcast *Afrolatinas in the United States*. The submission deadline are November 20th, and mid-March 2026.
2024-2025	Awarded a Research and Travel Grant by the University of Valladolid for (March, 16th-23, 2025)
2022-2023	Awarded a Research & Travel Grant for the proposal, "The Unheard Voices of Afro-Latinas in Puerto Rico." ILAS. Columbia University.

CURRENT RESEARCH PROJECTS

Currently I am working on the following research projects:

2025-2027	**The Role of Digital Technologies in the Teaching and Learning of Spanish as a Second Language in Higher Education.** This project examines how emerging digital tools, including generative AI such as ChatGPT and Cogniti, impact the teaching and learning of Spanish in higher education. Using an applied linguistics framework, it investigates student engagement, perceptions, and language acquisition to inform innovative, equitable, and technology-integrated pedagogical practices.
2024-2026	***Decolonizing the language curriculum***. Undergoing research aiming to decolonize the process of teaching and learning Spanish.
	Podcasting for the Course *Afro-Latinas in the US: gender, race and socio-political forces in the digital world*. On March 8th, 2024 the third season of the podcast was released. Currently working on creating instructional materials based on the podcasts.
	The Role of Digital Technologies in the Teaching and Learning of Spanish as a Second Language in Higher Education. This project examines how emerging digital tools, including generative AI such as ChatGPT and Cogniti, impact the teaching and learning of Spanish in higher education. Using an applied linguistics framework, it investigates student engagement, perceptions, and language acquisition to inform innovative, equitable, and technology-integrated pedagogical practices.
	Word and Image: School Libraries and Reader Education (III). *Teaching Innovation Projects — Teaching Innovation Project (Ref. PID_007/2024) — in collaboration with the Segovia Public Library and the PALIM Research Group, University of Valladolid.*

Research Project Phase III: ***Parallel Corpus of English and Spanish, European Research Project***. *Parallel Corpus of English and Spanish online is a multifunctional tool for translation, language learning and linguistic-contrastive research. Funded by el Ministerio de Ciencia e Innovación*. Universidad de Valladolid and la Universidad de Santiago de Compostela. Spain

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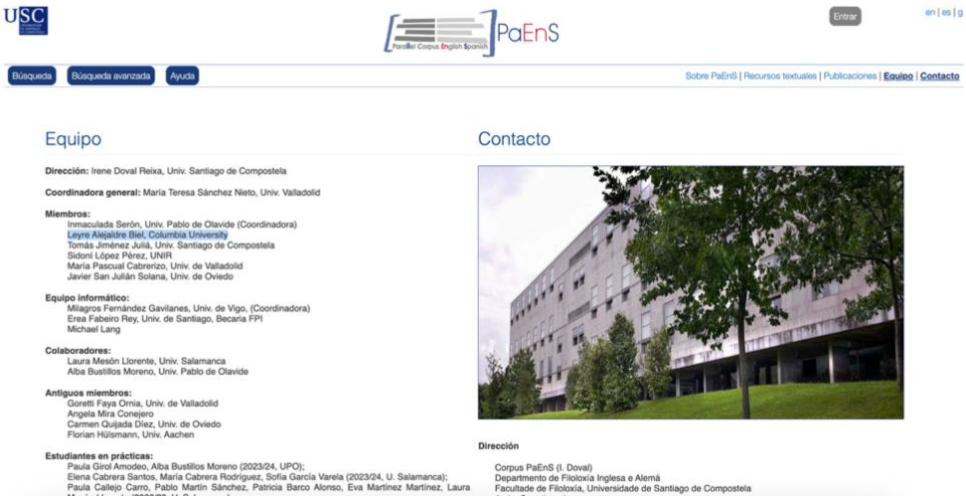
WORK RELATED TO THE RESEARCH PROJECT PaEnS ENGLISH/SPANISH PARALLEL CORPUS

PaEnS is a bilingual English–Spanish parallel corpus developed within the larger international project *PaCorES* (*Parallel Corpora Spanish*, www.pacores.eu), which aims to compile multilingual corpora with Spanish as the central language. The project currently includes additional corpora pairing Spanish with German, Chinese, and French.

PaEnS contains over 53 million tokens and 1.5 million aligned text segments, combining fiction and non-fiction texts verified through a mix of automated and manual alignment processes using advanced tools such as Bertalign, Stanza, and Freeling. The resource also includes several large-scale supplements (e.g., TED Talks, Europarl, Global Voices, and OpenSubtitles) totaling over 110 million words.

The corpus provides a multifunctional tool for linguistic and translation research, supporting work in contrastive linguistics, typology, translation studies, lexicography, and machine translation training. It is also widely used by translators and language learners at intermediate and advanced levels to access authentic, human-produced translation examples in real contexts. This corpus was extensively used in *the Rapid Reading and Translation* course I taught in Spring 2025. By clicking the image below, you may access this digital tool.



As part of the *PaEnS* project, my work involves reviewing the translation alignment of 23 published works and correcting misalignments to ensure linguistic accuracy and consistency across the corpus. This meticulous process contributed to the overall quality and reliability of the dataset. The texts I worked with are listed below and found in [this website](#):

1. Allende, Isabel (1987): Eva Luna. Buenos Aires: Editorial Sudamericana
2. Allende, Isabel (1994/2014): Paula. Barcelona: Penguin Random House.
3. Carrión, Jorge (2019): Contra Amazon. Barcelona: Galaxia Gutenberg.
4. Collins, Suzanne (2008): The Hunger Games. New York: Scholastic.
5. Dahl, Roald (1964/2010): Charlie and the Chocolate Factory. London: Penguin Books.
6. García Sáenz de Urturi, Eva (2017): Los ritos del agua. Barcelona: Planeta.
7. Gladwell, Malcolm (2019): Talking to Strangers: What We Should Know about the
8. People We Don't Know. New York: Hachette.
9. Haidt, Jonathan / Lukianoff, Greg (2018): The Coddling of the American Mind. New York: Penguin Random House.
10. Jewell, Lisa (2017/2020): Then She Was Gone. Melbourne: Penguin Random House.
11. Loureiro, Manel (2010): Apocalipsis Z: Los días oscuros. Barcelona: Plaza & Janés.
12. Magano, Jorge (2014): La mirada de piedra. Madrid: La esfera de los libros.
13. Marsé, Juan (2011): Caligrafía de los sueños. Barcelona: Lumen.
14. McManus, Karen M. (2021): You'll Be the Death of Me. New York: Delacorte Press.
15. Melchor, Fernanda (2013/2019): Aquí no es Miami. Barcelona: Penguin Random.
16. Melchor, Fernanda (2021): Páradais. México: Penguin Random House.
17. Millás García, Juan José (2018): Que nadie duerma. Madrid: Alfaguara.
18. Ngan, Natasha (2018): Girls of Paper and Fire. New York: Jimmy Patterson Books.
19. Riordan, Rick (2012): The Mark of Athena. New York: Hyperion Books.

20. Rivera Garza, Cristina (2002/2018): La cresta de Ilión. Ciudad de México: Penguin Random House.
21. Santiago, Esmeralda (2011): Conquistadora. New York: Vintage Books.
22. Schweblin, Samantha (2014/2025): Distancia de rescate. Barcelona: Planeta.
23. Vargas Llosa, Mario (1993): El pez en el agua. Madrid: Alfaguara

ACTIVE MEMBER OR COLLABORATOR IN INTERNATIONAL RESEARCH GROUPS

2025-2026	Reading, Communication, and Educational Ecosystems (LECOEDU). Research Group. University of Cádiz. HUM-1128.
2024-2025	Word and Image. Teaching Innovation Research Group for Linguistic and Literary Education at the University of Valladolid. Spain.
2023-2025	International Research Group: Online Spanish Parallel Corpora as a Multifunctional Tool for Translation, Language Learning, and Contrastive Linguistic Research. Directed by Prof. Maite Sánchez Nieto (Universidad de Valladolid) and Prof. Doval Reixa (Universidad Santiago de Compostela). Spain.
2023-2024	International Research Group ECOLIJ**:** Educación Comunicativa y Literaria en la Sociedad de la Información. Literatura Infantil y Juvenil en la construcción de identidades. S61_20R. Universidad de Zaragoza, Spain.
2021-2024	International Research Group: Research and Educational Innovation Group in Language and Literature Didactics. Directed by Prof. Romero Oliva. Universidad de Cádiz, Spain.

GUEST SPEAKER

Since the last review I have been invited to international Universities to present my research and to teach seminars to PhD students.

June 2025	Integrating Digital Competence in the Curriculum design. Universidad de Cádiz. Invited by Professor Romero Oliva.
April 2025	Guest speaker for Didactics Course for PhD students taught by Prof. Alonso Aparicio, presenting: Digital Literacy in the Language Classroom. Columbia University.
March 2025	Fundamentals of Designing a CLIL Course. Universidad de Valladolid.
October 2024	IA in education: challenges for the future educators. Invited by Assistant Professor Álvarez. University of Valladolid.
July 2023	*Digital Literacy for Teachers (2nd ed)*. Invited by the Unidad de Atención al Desarrollo (UAD). Zaragoza, Spain.

PROFESSIONAL DEVELOPMENT

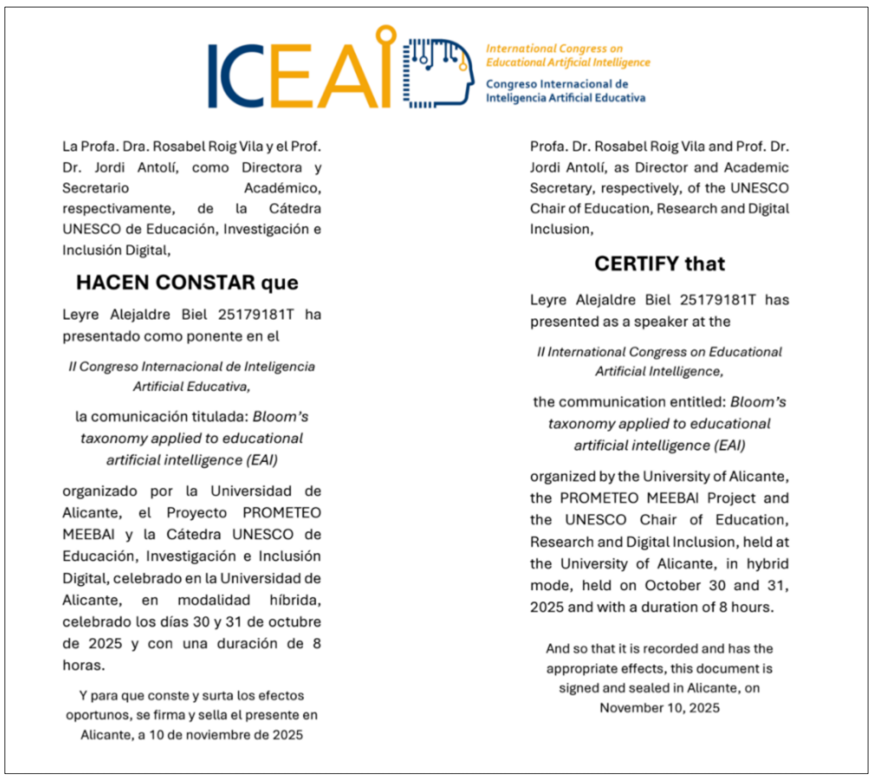
A key part to continue growing professionally is to attend and present the research conducted in conferences. In the next lines I detail my participation as presenter and attendee in national and international academic conferences.

CONFERENCES, WORKSHOPS AND SEMINARS AS PRESENTER

CONFERENCE PRESENTATIONS

October 2025 **ICEAI 2025: 2nd International Congress on Educational Artificial Intelligence**

Presentation titled: Bloom's Taxonomy Applied To Educational Artificial Intelligence (Eai) (Certificate below)



ICEAI

International Congress on Educational Artificial Intelligence

Congreso Internacional de Inteligencia Artificial Educativa

La Profa. Dra. Rosabel Roig Vila y el Prof. Dr. Jordi Antolí, como Directora y Secretario Académico, respectivamente, de la Cátedra UNESCO de Educación, Investigación e Inclusión Digital,

HACEN CONSTAR que

Leyre Alejaldre Biel 25179181T ha presentado como ponente en el

II Congreso Internacional de Inteligencia Artificial Educativa,

la comunicación titulada: *Bloom's taxonomy applied to educational artificial intelligence (EAI)*

organizado por la Universidad de Alicante, el Proyecto PROMETEO MEEBAI y la Cátedra UNESCO de Educación, Investigación e Inclusión Digital, celebrado en la Universidad de Alicante, en modalidad híbrida, celebrado los días 30 y 31 de octubre de 2025 y con una duración de 8 horas.

Y para que conste y surta los efectos oportunos, se firma y sella el presente en Alicante, a 10 de noviembre de 2025

Profa. Dr. Rosabel Roig Vila and Prof. Dr. Jordi Antolí, as Director and Academic Secretary, respectively, of the UNESCO Chair of Education, Research and Digital Inclusion,

CERTIFY that

Leyre Alejaldre Biel 25179181T has presented as a speaker at the

II International Congress on Educational Artificial Intelligence,

the communication entitled: *Bloom's taxonomy applied to educational artificial intelligence (EAI)*

organized by the University of Alicante, the PROMETEO MEEBAI Project and the UNESCO Chair of Education, Research and Digital Inclusion, held at the University of Alicante, in hybrid mode, held on October 30 and 31, 2025 and with a duration of 8 hours.

And so that it is recorded and has the appropriate effects, this document is signed and sealed in Alicante, on November 10, 2025

July 2025 **I Coloquio de innovación e investigación en educación lingüística y lliteraria.** Universidad de Valladolid. Facultad de Educación de Segovia. Spain.

Presentation Titled: Desafíos y futuribles en el área de DLL.

June 2025 **4th International Congress: Education and Knowledge.** Universidad de Alicante. Spain

Symposium Coordinator: Teaching Innovation in Additional Language Education: Artificial Intelligence at the Service of Multilevel Education.

Paper presented: Communicative Competence: GenAI as a Tool to Develop Oral and Written Interaction

Mayo 2025 **International Meeting-Roundtable Discussions on Educational Artificial Intelligence transdisciplinarity, sostenibility and Interinstitutionality**. University of West Indies. Barbados. Roundtable coordinator.

December 2024 **II Coloquio Internacional de Hispanistas. Research in Contexts of Academic Mobility**

Presentation titled: Between Illustrated Non-Fiction Biographies and Fictional Readings for Literary Education: Spaces for Promoting Cultural Legacy.

November 2024 **International Congress: Humanities and Knowledge (ICON-huma 2024).**

Symposium Coordinator Artificial Intelligence and Social Anthropology for Education

November 2024 **I Congreso Internacional de Inteligencia Artificial Educativa (ICEAI 2024).** Presentation Titled: Artificial Intelligence in Language Teaching at the University Level: Barbados, the United States, and Australia – Impacts and Opportunities.

March 2024 **NEALLT Annual Conference.**

Presentation titled: Multimodal Learning: Instagram and Podcasts Shaping Linguistic Competence in CLIL

February 2024 **American Language Program (ALP) 2024 Winter Conference**. Columbia University. Presentation titled: "A Digital Tool to Promote Studying using the Science of Learning."

September 2024 **XII Congreso Internacional de Minificción.** Universidad de Puerto Rico Recinto de Carolina.

Presentation Titled: Hypermedia Microtext on Instagram: A Pedagogical Tool for Curricular Decolonization

November 2023 **II International Congress: Humanities and Knowledge (ICON-huma 2023).** Spain.

Presentation Titled: Regular el uso de la IA Generativa en el contexto universitario: autoría, construcción de conocimiento y apropiación intelectual

November 2023 **II International Congress: Humanities and Knowledge (ICON-huma 2023).** Spain.

Presentation Titled: Función Tutorial Universitaria Para La Mejora Del Aprendizaje y La Calidad En Estados Unidos. Agenda 2030

June 2023 **XVI Congreso Internacional de Educación e Innovación**. Universidad Autónoma de Yucatán. México.

Presented with Dr. Barbazán: "A Digital Tool To Promote Independent Study And Fluency Using The Science Of Learning"

Presentation titled: "Exploring The Use Of Virtual Reality To Teach Spanish Prepositions Por And Para: A Work In Progress"

CONFERENCES, WORKSHOPS AND SEMINARS AS ATTENDEE

Oct. 2025 ICEAI 2025: 2nd International Congress on Educational Artificial Intelligence. Universidad de Alicante, Spain.

Naming and Implementing Critical Practices for AI in Language Instruction. LRC. Columbia University.

July 2025 I Coloquio de innovación e investigación en educación lingüística y lliteraria. Universidad de Valladolid.

June 2025 4th International Congress: Education and Knowledge. Universidad de Alicante. Spain

Dec. 2024 II Coloquio internacional de hispanistas. Research in Contexts of Academic Mobility

Nov. 2024 International Congress: Humanities and Knowledge (ICON-huma 2024).

Mar. 2024 NEALLT Annual Conference.

Feb. 2024 American Language Program (ALP) 2024 Winter Conference.

Sept. 2024 XII Congreso Internacional de Minificción. Universidad de Puerto Rico Recinto de Carolina.

Nov 2023 II International Congress: Humanities and Knowledge (ICON-huma 2023). Spain.

June 2023 XVI Congreso Internacional de Educación e Innovación. Universidad Autónoma de Yucatán. México

PhD DISSERTATION COMMITTEE / INTERNATIONAL ADVISOR

2025-	PhD Co-Director of the dissertation titled: From Policy To Practice: A Critical Analysis of the Spanish Language Teaching Manuals for Ghanaian Senior High Schools. University of Malaga
2021-2024	International Advisor for two PhD candidates from Universidad of Valladolid:
	Flipped learning in the teaching and learning of Spanish in Japan: Case Study. Candidate Mayumi Tsukada. PhD Program in Spanish Literature, Linguistics and Communication. University of Valladolid.
	El Cuento Español Femenino Contemporáneo. Propuesta Metodológica y Taxonómica para el Aula de ELE. Candidate Yugiu Gin. PhD Program in Spanish Literature, Linguistics and Communication. University of Valladolid.

CONCLUSION

The materials presented in this part of my 8TH year dossier demonstrate a sustained and deeply integrated commitment to instructional innovation, departmental service, and scholarly growth. My work in instructional development—ranging from the design of multimodal pedagogical materials to the substantial redesign of the GR6001 syllabus—reflects my ongoing dedication to creating inclusive, research-informed learning environments for undergraduate and graduate students alike. At the same time, my service contributions across LAIC and the broader Columbia community illustrate my investment in strengthening our shared academic mission. Whether through committee work, peer-mentoring initiatives, support for colleagues undergoing the 5th-year review, or my candidacies for the Lecturers Advisory Committee and the Senate, these efforts underscore my commitment to collaborative leadership and our collective well-being as a department.

Parallel to this, my scholarly trajectory continues to grow in scope and interdisciplinarity. My publications, conference presentations, grant proposals, and participation in international research groups demonstrate an active engagement with emerging conversations in digital humanities, decolonial pedagogy, and language-learning technologies. Current projects—including those centered on the *Afrolatinas in the U.S.*, corpus-based instructional innovation, and the ethical integration of generative AI—show both continuity and expansion in my research agenda.

Overall, the work presented here reflects a professional profile that is cohesive yet dynamic: one that evolves in response to student needs, departmental priorities, and global intellectual trends. I remain firmly committed to advancing pedagogical excellence, contributing meaningfully to the life of the department and the university, and strengthening my scholarly contributions within national and international academic communities.

APPENDIX 1 PUBLICATION IN PEER REVIEWED JOURNAL

OmniaScience

Journal of Technology and Science Education
JOTSE, 2024 – 14(1): 77-94 – Online ISSN: 2013-6374 – Print ISSN: 2014-5349
https://doi.org/10.3926/jotse.2522

VADEMECUM OF ARTIFICIAL INTELLIGENCE TOOLS APPLIED TO THE TEACHING OF LANGUAGES

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Abstract

A qualitative documentary research of software and multimedia artificial intelligences was chosen to enable the ontological understanding of the object of study that aims to explore the potential for learning through Artificial Intelligence (AI). Besides, it is shown how AI, as a novel component within the digital education landscape, contributes to educational technological capital. In light of our research area, the focus is on determining how AI can be harnessed to enhance the development of communicative competence. This entails identifying and categorizing AI tools relevant to language didactics. The sample size for this study is 120 AI applications, sourcing and compiling data on AI tools from specialized websites. This sample serves as a paradigm justifying a mixed-method study capable of combining quantitative and qualitative data.

The variables supporting this study consider four characteristics related to the specific typify of the digital tool in the pedagogical context. The first aspect pertains to the classification of generative AI tools with potential educational use. AI tools enriches and enhances the dimensions of learning underscoring the urgent need for literacy in this technology. The second variable was linked to the Pedagogical Competences of Teachers and the areas. The category in language education pertains to educators' ability to create, adapt, and employ digital resources that enhance language teaching and learning. The third and fourth identify the skills related to language learning. In the context of learning environments with AI tools, it is essential to contemplate the role of linguistic competence as subordinate to communicative competence.

Keywords – Artificial intelligence, Education, Language, Communicative competence.

To cite this article:

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1. Introduction

The appearance of ChatGPT in November 2022 marked a turning point in what was previously understood as artificial intelligence (AI). A concept known to society, but one that felt distant in some areas, such as education. The Generative AI tool ChatGPT has reached the educational community, causing the foundations of the educational system to shake and finally question the need to implement a deep structural and transversal change in what is currently understood as teaching and learning. The inclusion of AI in Education would mean facing two challenges eminently: on the one hand, the use of AI would generate new teaching methods, which is already being implemented in classrooms at all levels; and, on the other hand, Zapata-Ros indicates that we are facing a much more radical challenge: the creation of a completely new educational system, as a consequence of the implementation of AI (Zapata-Ros, 2023). This restructuring and rethinking of both the theoretical and practical bases of education bring to the forefront the need to digitally literate society in formal educational contexts and abandon the idea of citizens' self-literacy (Alejaldre & Álvarez, 2019; Esteve, 2015).

Despite the fact that students are considered digital natives (Prensky, 2001; Oblinger & Oblinger, 2005; Pedró, 2006, 2011; Gisbert & Esteve, 2011; Esteve, 2015) it is a reality that they have not received a formal education in digital literacy; in fact, they have learned to use certain digital devices and their functionalities without specific training, sometimes through trial-and-error and sometimes with the help of peers or video tutorials. As Alejaldre and Álvarez (2019) point out, the paradox arises when we place ourselves in another context, frequent in many classrooms, such as the presence of students who have learned to read on their own before starting formal education. However, in these cases, the idea of not continuing with the literacy plan in reading and writing that school curricula mark in their programs is not conceivable, so we should ask ourselves why digital literacy has not found its place in contemporary curricular plans. In addition, this perception of teachers' digital competence is not aligned with reality, since several authors agree that students do not necessarily arrive at university with an optimal (or at least minimally necessary) level of digital competence and, therefore, it will be essential to design and develop training and accreditation processes that allow us to demonstrate the level of this competence (Gisbert, Espuny & González, 2011; Gisbert & Esteve, 2011; González, Espuny & Gisbert, 2010).

With the irruption of Generative AI, it is even more urgent to provide the educational community with digital literacy training that, among other skills, equips the user with a series of tools that allow them to use Generative AI tools in the teaching and learning process in a way that promotes real learning experiences and that is not used for the opposite: to make an algorithm complete the student's work. Here arises the great dilemma that occupies many of the current discussions about the use or not of Gen AI in education, Jimenez, López, Martín, Romero & Serrano (2023) highlight that "the debate about the possible less appropriate uses of ChatGPT in university teaching has not been long in coming, especially with regard to the writing of academic papers. Can ChatGPT be included as a reference for writing an academic paper? Is it permissible to use ChatGPT to write an essay for a university paper? Can ChatGPT be included as a co-author of an academic or research paper?" (Jimenez et al. 2023: page 114). The aim of this research is to provide a set of AI Gen tools and associate them with the different competency areas detailed in the teacher and citizen digital competency frameworks. It is not intended to provide an exhaustive list of these tools, for which there are already interesting resources that are frequently updated (Agarwal, Gans & Goldfarb, 2022; Ebrahimi, 2023) or directories of AI tools, such as Futurepedia (https://www.futurepedia.io/) or All Things AI (https://allthingsai.com/), that attempt to reflect this overflowing evolution.

1.1. AI and Education

Many institutions and researchers are trying to envision a guide to integrate AI into education in a coherent way and without it being considered a threat, but just another tool. The Beijing Consensus document on Artificial Intelligence (UNESCO, 2019) aims to respond to the opportunities and challenges presented by AI in relation to education, putting forward 44 recommendations, grouped into different aspects that can help to understand the magnitude of the task: AI planning in education policy; AI for education management and delivery; AI to support teaching and teachers; AI for learning and learning assessment; developing values and competences for life and work in the AI era; AI to provide lifelong learning opportunities for all; promoting equitable and inclusive use of AI in education; gender-equitable

AI and AI for gender equality; and ensuring ethical, transparent and verifiable use of educational data and algorithms. These aspects are covered in more detail in Artificial Intelligence and Education: A guide for policy makers (UNESCO, 2021). As can be seen, the relationship between AI and education is complex and multifaceted.

The literature review reveals several recurring concerns regarding the inclusion of Generative AI in the formal educational framework, and, specifically in the language classroom. On one hand, studies that argue that an excessive use would imply the decrease of human traits in the teaching-learning process, such as “self-regulation, metacognition, goal orientation, planning, creative brainstorming and a variety of skills that could be negatively affected by automation or machine takeover” (Zapata-Ros, 2023: page 4) and lose control over the authorship of academic texts. On the other hand, the observation made by Jiménez et al. (2023) is quite intriguing as it points out that “if we do not integrate these tools in the classroom, we will be implicitly recognizing only their illicit uses and subtly favoring that students access them to misuse them” (Jiménez et al., 2023: page 120).

1.2. Communicative Competence and Digital Competence

The processes of teaching and learning aim to achieve communicative competence, which, as asserted by Hymes, teaches us “when to speak, when not to, and as to what to talk about with whom, when, where, in what manner” (Hymes, 1972: page 277). Communicative competence encompasses various interrelated competences, of which we have selected three for this study: linguistic, sociolinguistic, and pragmatic. In language teaching, the goal is not only to attain the target language; the process also aims to communicate effectively, reflect on language use and communication mechanisms, and ultimately understand the impact of culture and its references on language and communication (Dolz, Gagnon & Mosquera, 2009).

On the other hand, digital competence should be understood as “the critical and secure use of Information Society Technologies for work, leisure, and communication. Relying on basic ICT skills: the use of computers to retrieve, assess, store, produce, present, and exchange information, and to communicate and participate in collaboration networks via the Internet” (Rec. 2006/962 of the Parliament and the Commission, December 18) (Diario Oficial de la Unión Europea, 2006: page 16). The role of educators leads them to develop their digital competence beyond what is necessary for life. As facilitators of learning, they must acquire “specific digital competences of educators that allow them to use digital technologies effectively for teaching” (Redecker & Punie, 2017: page 15).

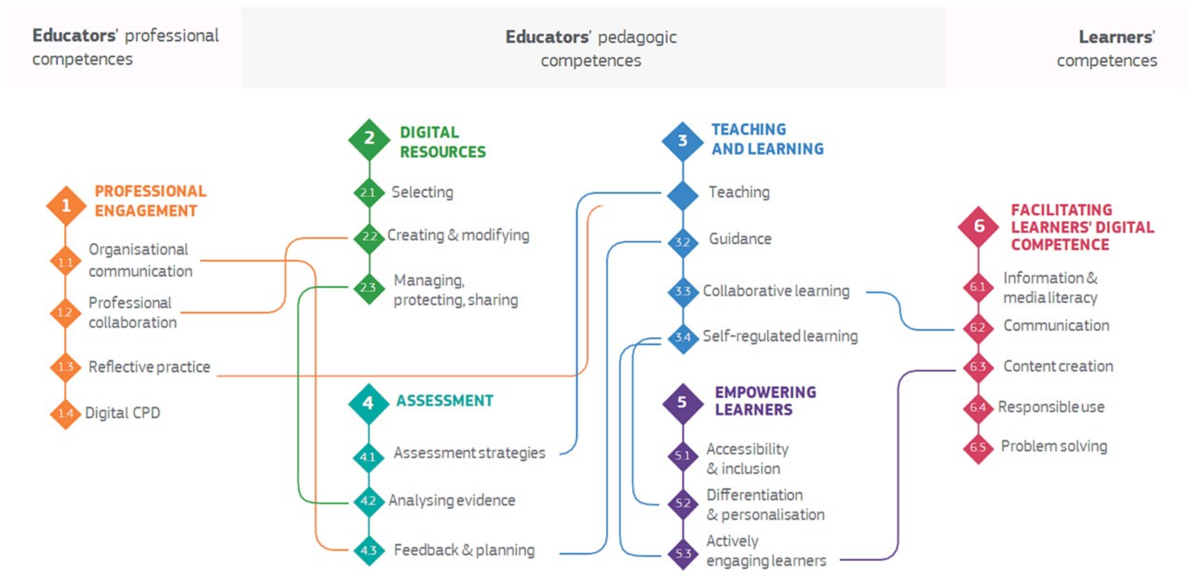

Figure 1. The DigCompEdu Competencies and Their Connections (Redecker & Punie, 2017: page 16)

DigCompEdu describes 22 competences organized into six areas, four focused on the development of educators' pedagogical competences: Digital Resources, Teaching and Learning, Assessment, and Empowering Learners. Thus, educators must be equipped to search for information and exchange digital content, as well as create them. It is also essential to have the ability to manage and organize the use of technology in teaching and learning processes. Similarly, technology provides digital strategies that can help improve assessment, not forgetting its use as a tool to facilitate the inclusion and engagement of students in their own learning (Redecker & Punie, 2017).

2. Methodology

2.1. Objectives

The objectives of this study align with the research framework established by Wang and Cheng (2021) and seek to further develop and specify them within the domain of specific didactics, in accordance with the recommendations outlined by UNESCO in its document 'Artificial Intelligence and Education: A Guide for Policymakers' (UNESCO, 2021). Consequently, this paper explores the potential for learning through Artificial Intelligence (AI) and how AI, as a novel component within the digital education landscape, contributes to educational technological capital (Casillas, Ramírez & Ortiz, 2014). In light of our research area, our focus is on determining how AI can be harnessed to enhance the development of communicative competence. This entails identifying and categorizing AI tools relevant to language didactics.

2.2. Theoretical Framework

A qualitative documentary research of software and multimedia artificial intelligences has been chosen to enable the ontological understanding of the object of study. Although all documentary research is a complicated process, at present, due to the vertiginous ebullition of technology and its constant updating, as well as the plurality of studies on the subject (García-Peñalbo, Llorens-Largo & Vidal, 2024), which requires sufficient knowledge to be able to discriminate the valuable information from the residual (Martínez-Corona & Palacios-Almón, 2019), the chosen typology of analysis is the most relevant to the proposed objectives.

Its approach is understood through the double aspect indicated by Barraza (2018) for any documentary study: an initial one that collects, selects, taxonomizes and relates the data extracted from different sources and a later one that aims to give a systematic and evaluative vision of the results obtained. The identification of AI applications that are or may be susceptible to use in education contains information relevant to the topic of study and, although it is understood as an investigation in itself when approaching the object studied (Manheim & Rich, 1998; Cardona, 2002; Boote & Beile, 2005), we go one step further by qualitatively analyzing the results obtained. We are facing a functional review (Colás & Buendía, 1998) that brings us closer to the state of the problem and its object of study in an evaluative way.

2.3. Procedure

For the documentary analysis process, the phases dictated by various researchers have been taken into account (Tobón, Guzmán, Silvano-Hernández & Cardona, 2015; Martínez-Corona & Palacios-Almón, 2019; Román-Acosta, Aniceto-Vargas, & Román-Julián, 2021): 1. Identification of articles and books in scientific databases. 2. Selection of essential and complementary words. 3. Establishment of selection criteria based on chronology and relevance and 4. Classification of information into analysis categories.

First, we conducted a comprehensive review of the current state of the art by examining scientific literature and publications within the institutional framework. Subsequently, we sourced and compiled data on AI tools from specialized websites, such as https://www.futurepedia.io/ and https://allthingsai.com/. Additionally, we consulted reports from the Stanford Institute for Human-Centered Artificial Intelligence (HAI) to identify key players in AI development, extending beyond industry giants like Google, Amazon, and Microsoft.

After a meticulous and rigorous data cleaning and clarification process, we were able to incorporate a substantial number of tools into our corpus. In parallel, an examination of profiles and specialized social network pages yielded valuable insights into the practical applications of AI in educational contexts.

In any case, the selection criteria mentioned by Extremeño and Moscoso (1998) have been respected in favor of quality control in the indexing of documents in any database: consistency, relevance and exhaustiveness. To this initial triad we found it appropriate to add a fourth criterion due to the digital nature of the object of study: current events (Rodríguez, 2013).

2.4. Research Tools

Collected data has been organized into a file that, in addition to serving as a comprehensive library of AI applications, validates its utility as a resource for education. Furthermore, the file establishes competency categories that influence and hold both participants in the teaching and learning process accountable within the parameters defined by variables implicit in language didactics. The list of AI can be found in the table below.

Tools	Tool Category	Pedagogical competencies of educators	Competence	Associated AI Capabilities
ActiveCampaign	Text Generation	Digital Content	Linguistic	Read, understand and produce texts
Adobe Firefly	Image Generation	Digital Content	Linguistic	Read, understand and produce texts
Adrenaline	Source Code Generation	Evaluation and Feedback	Linguistic	Read, understand and produce texts
AICommand	Generation of 3D Objets	Digital Content	Pragmatic	Read, understand and produce texts
Al Text Classifier	AI Generated Text Detection	Evaluation and Feedback	Linguistic	Read, understand and produce texts
Amazon CodeWhisper	Source Code Generation	Evaluation and Feedback	Linguistic	Read, understand and produce texts
Answer the public	Text Generation	Teaching and Learning	Pragmatic	Rhetorical impact
Anthropic	Text Generation	Teaching and Learning	Linguistic	Initiating, maintaining, and concluding conversations
AudioLM	Audio Generation	Teaching and Learning	Sociolinguistic	Ability to understand spoken messages
Bard	Text Generation	Teaching and Learning	Linguistic	Initiating, maintaining, and concluding conversations
Bardeen	Text Generation	Digital Content	Linguistic	Read, understand and produce texts
Bing Image Creator	Image Generation	Digital Content	Linguistic	Read, understand and produce texts
Book creator	Text Generation	Digital Content	Linguistic	Read, understand and produce texts
Bradwatch	Text Generation	Digital Content	Sociolinguistic	Emotion analysis
Brainly	Text Generation	Teaching and Learning	Linguistic	Read, understand and produce texts
ChatBA	Image Generation	Teaching and Learning	Pragmatic	Read, understand and produce texts
ChatGPT	Text Generation	Teaching and Learning	Linguistic	Initiating, maintaining, and concluding conversations
ChatPDF	Text Generation	Digital Content	Pragmatic	Read, understand and produce texts

Tools	Tool Category	Pedagogical competencies of educators	Competence	Associated AI Capabilities
ChatPDF	Text Generation	Teaching and Learning	Sociolinguistic	Read, understand and produce texts
ChatSonic	Text Generation	Teaching and Learning	Linguistic	Initiating, maintaining, and concluding conversations
Claude	Text Generation	Teaching and Learning	Linguistic	Initiating, maintaining, and concluding conversations
ClosersCopy	Text Generation	Digital Content	Sociolinguistic	Initiating, maintaining, and concluding conversations
Code GPT	Source Code Generation	Evaluation and Feedback	Linguistic	Read, understand and produce texts
Codeium	Source Code Generation	Evaluation and Feedback	Linguistic	Read, understand and produce texts
Colossyan	Video Generation	Teaching and Learning	Sociolinguistic	Real-Time Translation
Conker	Text Generation	Evaluation and Feedback	Linguistic	Read, understand and produce texts
Consensus	Text Generation	Teaching and Learning	Sociolinguistic	Read, understand and produce texts
Copilot	Text Generation	Teaching and Learning	Sociolinguistic	Read, understand and produce texts
Copy.ai	Text Generation	Digital Content	Linguistic	Read, understand and produce texts
Copyleaks	AI Generated Text Detection	Evaluation and Feedback	Linguistic	Initiating, maintaining, and concluding conversations
CopySmith	Text Generation	Digital Content	Linguistic	Initiating, maintaining, and concluding conversations
Coqui	Audio Generation	Digital Content	Sociolinguistic	Emotion analysis
Cortex	Text Generation	Digital Content	Sociolinguistic	Emotion analysis
Craiyon	Image Generation	Digital Content	Linguistic	Read, understand and produce texts
DALL-E 2	Image Generation	Digital Content	Linguistic	Read, understand and produce texts
Decktopus	Image Generation	Teaching and Learning	Pragmatic	Read, understand and produce texts
Deep Dream generator	Image Generation	Digital Content	Sociolinguistic	Cultural Awareness Translation
Deepmind	Text Generation	Student Empowerment	Pragmatic	Initiating, maintaining, and concluding conversations
Dream by Wombo	Image Generation	Digital Content	Linguistic	Read, understand and produce texts
DreamFusion	Generation of 3D Objects	Digital Content	Linguistic	Speech-to-text
EdPuzzle	Text Generation	Digital Content	Pragmatic	Speech-to-text
Elicit	Text Generation	Teaching and Learning	Linguistic	Read, understand and produce texts
Fliki	Video Generation	Teaching and Learning	Sociolinguistic	Speech-to-text
Frase	Text Generation	Digital Content	Linguistic	Initiating, maintaining, and concluding conversations
Gencraft	Video Generation	Digital Content	Linguistic	Speech-to-text
GET3D	Generation of 3D Objects	Digital Content	Sociolinguistic	Speech-to-text
GetResponse	Text Generation	Digital Content	Linguistic	Read, understand and produce texts

Tools	Tool Category	Pedagogical competencies of educators	Competence	Associated AI Capabilities
Ghostwriter	Source Code Generation	Evaluation and Feedback	Linguistic	Read, understand and produce texts
Github copilot	Source Code Generation	Evaluation and Feedback	Linguistic	Read, understand and produce texts
Glasp	Source Code Generation	Evaluation and Feedback	Pragmatic	Read, understand and produce texts
Google Workspace	Text Generation	Teaching and Learning	Pragmatic	Read, understand and produce texts
GPT for Slides	Image Generation	Teaching and Learning	Pragmatic	Read, understand and produce texts
GPTZero	AI Generated Text Detection	Evaluation and Feedback	Linguistic	Initiating, maintaining, and concluding conversations
HeyGen	Video Generation	Teaching and Learning	Sociolinguistic	Read, understand and produce texts
Hour one	Video Generation	Digital Content	Linguistic	Speech-to-text
HubSpot	Text Generation	Digital Content	Linguistic	Read, understand and produce texts
Hugging face	Text Generation	Teaching and Learning	Linguistic	Initiating, maintaining, and concluding conversations
Humata	Text Generation	Teaching and Learning	Linguistic	Read, understand and produce texts
Imagen video	Video Generation	Digital Content	Linguistic	Speech-to-text
Imagine 3D	Generation of 3D Objets	Digital Content	Linguistic	Read, understand and produce texts
Jasper	Text Generation	Digital Content	Linguistic	Initiating, maintaining, and concluding conversations
Leap	Image Generation	Digital Content	Linguistic	Read, understand and produce texts
Lexalytics	Text Generation	Student Empowerment	Pragmatic	Emotion analysis
Listnr	Audio Generation	Teaching and Learning	Sociolinguistic	Speech-to-text
Lovo	Audio Generation	Digital Content	Sociolinguistic	Speech-to-text
MailChimp	Text Generation	Digital Content	Linguistic	Rhetorical impact
Make a video	Video Generation	Digital Content	Linguistic	Speech-to-text
Microsoft 365 Copilot	Text Generation	Digital Content	Pragmatic	Read, understand and produce texts
Microsoft Bing	Text Generation	Teaching and Learning	Pragmatic	Read, understand and produce texts
Midjourney	Image Generation	Digital Content	Linguistic	Read, understand and produce texts
Monic	Text Generation	Teaching and Learning	Linguistic	Initiating, maintaining, and concluding conversations
MonkeyLearn	Text Generation	Digital Content	Pragmatic	Personalized Messages
Murf.ai	Audio Generation	Teaching and Learning	Sociolinguistic	Speech-to-text
Netbase Quid	Text Generation	Digital Content	Sociolinguistic	Emotion analysis
NightCafe	Image Generation	Digital Content	Sociolinguistic	Read, understand and produce texts
Notion	Text Generation	Teaching and Learning	Linguistic	Read, understand and produce texts
Openai	Text Generation	Teaching and Learning	Linguistic	Initiating, maintaining, and concluding conversations
Otter	Audio Generation	Teaching and Learning	Sociolinguistic	Speech-to-text

Tools	Tool Category	Pedagogical competencies of educators	Competence	Associated AI Capabilities
Peppertype.ai	Text Generation	Digital Content	Pragmatic	Personalized Messages
Perplexity	Text Generation	Teaching and Learning	Pragmatic	Read, understand and produce texts
Play.ht	Audio Generation	Digital Content	Sociolinguistic	Speech-to-text
Podcastle	Audio Generation	Digital Content	Linguistic	Ability to understand spoken messages
Quillbot	Text Generation	Teaching and Learning	Linguistic	Grammar and spelling
Replika	Audio Generation	Teaching and Learning	Sociolinguistic	Rhetorical impact
Resume Builder	Text Generation	Teaching and Learning	Linguistic	Read, understand and produce texts
Rytr	Text Generation	Digital Content	Linguistic	Read, understand and produce texts
SciSpace	Text Generation	Teaching and Learning	Linguistic	Read, understand and produce texts
Scite Assistant	Text Generation	Teaching and Learning	Sociolinguistic	Read, understand and produce texts
Simplified	Text Generation	Digital Content	Linguistic	Read, understand and produce texts
SlidesAI	Image Generation	Teaching and Learning	Pragmatic	Read, understand and produce texts
Smart Compose	Text Generation	Teaching and Learning	Pragmatic	Rhetorical impact
Socialbakers	Text Generation	Digital Content	Pragmatic	Read, understand and produce texts
Sprinklr	Text Generation	Teaching and Learning	Pragmatic	Ability to understand spoken messages
Stability.ai	Text Generation	Student Empowerment	Sociolinguistic	Ability to understand spoken messages
Stable Diffusion Online	Image Generation	Digital Content	Linguistic	Read, understand and produce texts
Starryai	Image Generation	Digital Content	Linguistic	Read, understand and produce texts
Stockimg	Image Generation	Digital Content	Linguistic	Read, understand and produce texts
Surfer SEO	Text Generation	Digital Content	Linguistic	Read, understand and produce texts
Synthesia	Video Generation	Digital Content	Sociolinguistic	Personalized Messages
Tactiq	Text Generation	Teaching and Learning	Linguistic	Speech-to-text
Talkwalker	Text Generation	Teaching and Learning	Sociolinguistic	Rhetorical impact
Tavus	Video Generation	Digital Content	Sociolinguistic	Personalized Messages
Text2SQL	Source Code Generation	Evaluation and Feedback	Linguistic	Read, understand and produce texts
TextCortex	Text Generation	Teaching and Learning	Sociolinguistic	Initiating, maintaining, and concluding conversations
TinyWow	Text Generation	Digital Content	Linguistic	Read, understand and produce texts
Tome.ai	Image Generation	Digital Content	Linguistic	Read, understand and produce texts
Transkriptor	Audio Generation	Teaching and Learning	Sociolinguistic	Speech-to-text
Trinka	Text Generation	Teaching and Learning	Linguistic	Grammar and spelling
Turnitin	AI Generated Text Detection	Evaluation and Feedback	Linguistic	Read, understand and produce texts

Tools	Tool Category	Pedagogical competencies of educators	Competence	Associated AI Capabilities
Twee	Text Generation	Teaching and Learning	Sociolinguistic	Read, understand and produce texts
Visual ChatGPT	Image Generation	Digital Content	Linguistic	Initiating, maintaining, and concluding conversations
Voicemaker	Audio Generation	Digital Content	Sociolinguistic	Speech-to-text
Voicemod	Audio Generation	Digital Content	Sociolinguistic	Real-Time Translation
Voicera	Audio Generation	Teaching and Learning	Sociolinguistic	Online Dictionary
Wellsaid	Audio Generation	Teaching and Learning	Sociolinguistic	Speech-to-text
Wordtune	Text Generation	Teaching and Learning	Linguistic	Grammar and spelling
Writesonic	Text Generation	Digital Content	Linguistic	Read, understand and produce texts
Writesonic	Text Generation	Digital Content	Sociolinguistic	Speech-to-text
You	Text Generation	Teaching and Learning	Pragmatic	Initiating, maintaining, and concluding conversations
YouTubeDigest	Video Generation	Teaching and Learning	Linguistic	Speech-to-text

Table 1. Research Data

2.5. Variables

The variables underpinning this study consider four aspects related to the specific characterization of the digital tool in the pedagogical context. The first aspect pertains to the classification of generative AI tools with potential educational use as proposed by Morales-Chan (2023), which distinguishes between text generation, image, video, 3D object generation, audio, source code generation, and tools designed for the detection of AI-generated text. Furthermore, the assessed resources have been linked and categorized within the Digital Teaching Framework (Redecker & Punie, 2017), specifically with the Pedagogical Competences of Teachers and the areas defining digital content (2), teaching and learning (3), assessment and feedback (4), and student empowerment (5). The last two categories identify the skills related to language learning. On one hand, those specified in the Common European Framework of Reference for Languages (Consejo de Europa, 2002), such as linguistic, sociolinguistic, and pragmatic competences – i.e., communicative competence. On the other hand, they encompass the skills associated with key language competences and AI capabilities as defined by Tuomi (2018): reading, understanding, and producing texts; speech-to-text; initiating, maintaining, and concluding conversations; emotion analysis; rhetorical impact; personalized messaging; oral message comprehension; grammar and spelling; real-time translation; automatic translation with cultural awareness; and online dictionaries.

3. Results

Initially, the analysis aimed to categorize the 120 AI tools within the corpus based on the framework proposed by García-Peñalvo et al. (2024), serving as a paradigm justifying a mixed-method study capable of combining quantitative and qualitative data. Before proceeding with the examination of the references, it is pertinent to clarify that, in all variables open to analysis, the value and prevalence of certain items have been scrutinized against others to achieve precise conclusions. The educational ecosystem, recognizing the functional and reciprocal nature of AI-based tools, enriches and enhances the dimensions of learning (Gubareva & Lopes, 2020; Gašević, Dawson & Siemens, 2015; Gašević, Siemens & Sadiq 2023), underscoring the urgent need for literacy in this technology.

3.1. AI Tools

The most common tools are those related to text generation (62 cases), followed by those used to create images (18), audio (14) and video (10). Artificial intelligence tools that promote Source Code Generation or Generated Text Detection are in the minority (8 and 4 cases, respectively).

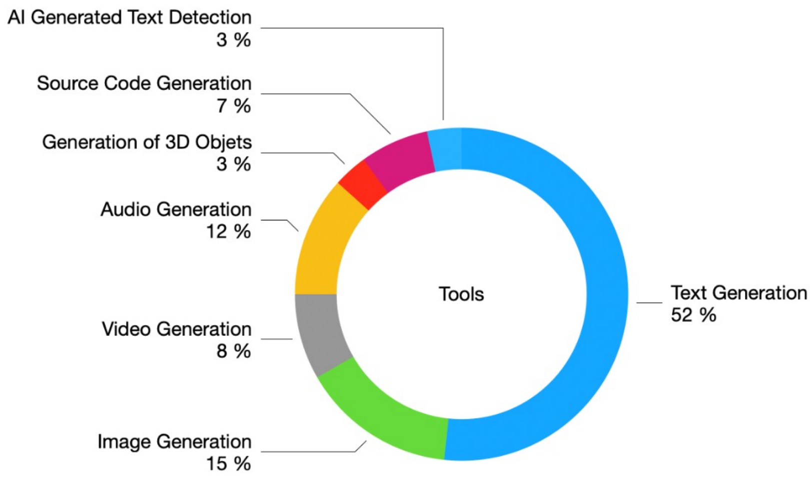

Figure 2. AI tools

Special mention deserves the supremacy of textual generation over the rest of the tools. Its quasi-tyrannical positioning surpasses the midpoint. Timidly follows image generation with 15% of tools focused on its production. In any case, word and image tools are the most offered by AI, although with a considerable difference in weight.

3.2. Communicative Competences

When looking at the communicative competences of the language described in the Common European Framework of Reference for Languages: linguistics, pragmatics and sociolinguistics, the development of linguistics prevails with 54.2% of the cases obtained. Sociolinguistic competence is at a lower level, with almost 29%. Examples of AI focused on the development of pragmatic competence represent only 17.5% of the total. Below, it's presented the specific number of cases that fall within each of the communicative competences outlined by the Common European Framework. As depicted in the graph, instances of tools related to grammatical or linguistic competence double those of sociolinguistic competence and triple those of pragmatic competence.

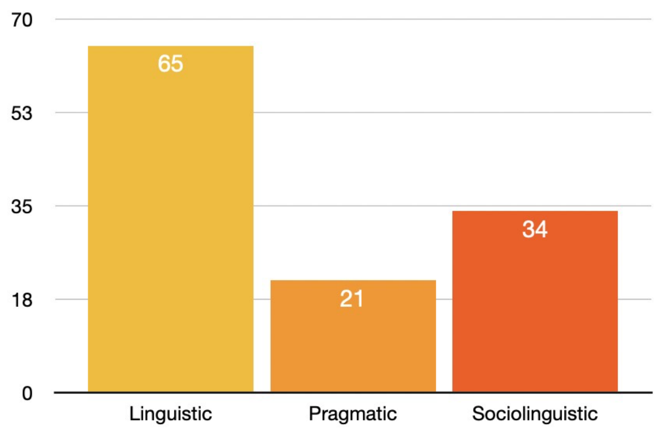

Figure 3. Linguistic, sociolinguistic and pragmatic competences

3.3. Associated AI Capabilities

The results regarding the skills associated with IAs show an extreme supremacy of reading, comprehension and text production (57%). Close to 20% is the ability to Initiate, Hold, and Conclude Conversations. The presence of the rest is merely testimonial.

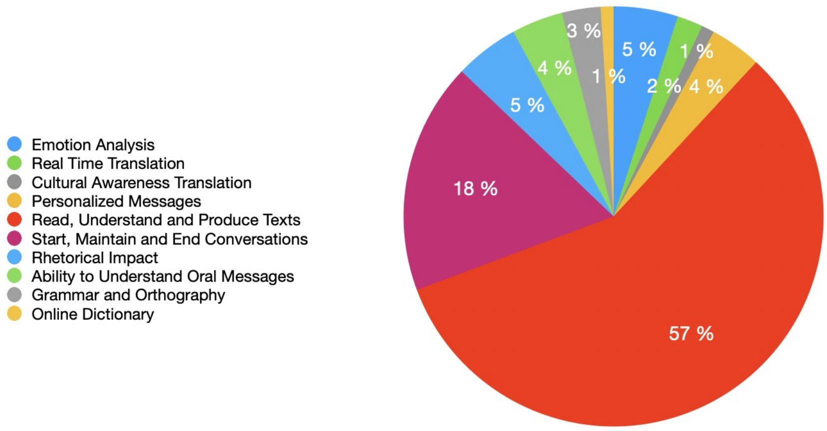

Figure 4. Associated AI Capabilities

In the extracted data, written skills prevail over oral skills, perhaps stemming from the historical belief derived from a grammatical approach that written language truly manifests linguistic knowledge. The characteristics of written expression, in contrast to orality, require a higher level of language proficiency and a more precise use of language. Unlike the fluidity of oral language, which allows for immediate correction and informal speech realizations, a preference for simplicity emerges, acknowledging spontaneity that permits errors or hesitations as communication unfolds in real-time. In contrast, written language demands greater correctness, enabling a more sophisticated register due to its non-immediate nature. It employs a more refined syntax, specialized vocabulary, and logically structured and organized language. These intrinsic characteristics of oral and written registers have led to a greater emphasis on written skills over spoken ones.

3.4. Educators' Pedagogical Competences

On the other hand, this study aims to diagnose and establish the connection between the use of AI and the development of Educators' Pedagogical Competences (Redecker & Punie, 2017). These competences include proficiency in digital content (2), teaching and learning (3), assessment and feedback (4), and, lastly, empowerment of students (5). With 56 cases, the first contextualized category in language education pertains to educators' ability to create, adapt, and employ digital resources that enhance language teaching and learning (Alejaldre & Álvarez, 2019; Juan-Lázaro & Alejaldre, 2020).

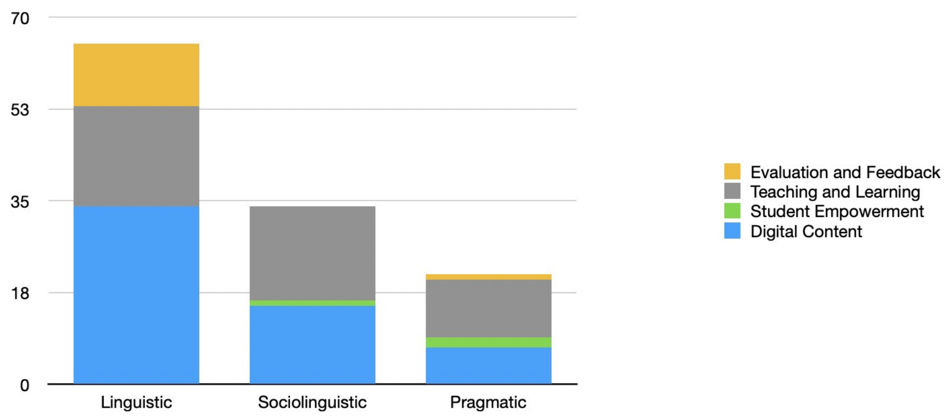

Figure 5. Educators Pedagogical Competences (DigCompEdu) and Student Competences (CEFRL)

The pedagogical competencies required of educators (Redecker & Punie, 2017) are proportionally distributed among the communicative competencies outlined by the Common European Framework (Consejo de Europa, 2002) in the context of digital content and of teaching and learning. However, this distribution is not mirrored in the domains of assessment, feedback, and student empowerment.

3.5. IA Tools and Key Language Competences

The item 'reading, understanding, and producing texts (images)' is the most numerous, accumulating 58 cases. It represents a significant set of skills related to reading, comprehending, and producing texts and images. These skills encompass the ability to analyze, interpret, and create written and visual content effectively, utilizing text generation tools (29), image tools (16), video (1), 3D objects (2), source code (8), and AI-generated text detection (2). The second category, 'voice to text (images),' totals 19 cases and underscores the importance of transcribing spoken content into a text-visual format, potentially associated with information accessibility through AI applied to text and image generation (3), video (6), 3D objects (2), and audio (8). The next skill pertains to personal interaction, involving the ability to initiate, maintain, and conclude conversations. In the 18 listed cases, oral or written communicative exchanges occur where both the sender and receiver–student-to-student, student-to-AI–practice dialogical skills through text generation (15), image tools (1), and AI-generated text detection (2).

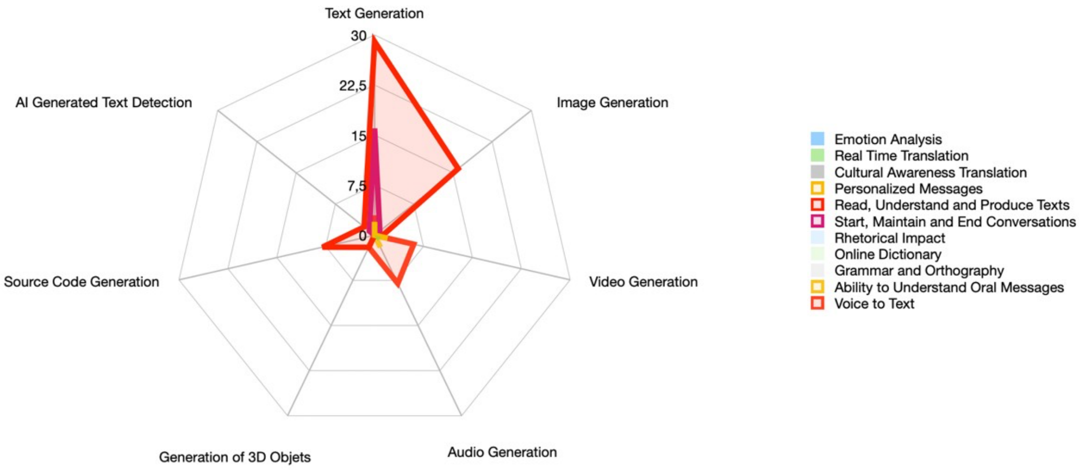

Figure 6. Pedagogical Competences of educators (DigCompEdu) and Student Competences (CEFRL)

4. Discussion and Conclusions

Subsequently, these tools are presented along with the number of cases or examples corresponding to each category, including text generation, images, video, 3D objects, audio, source code, and those designed for AI-generated text detection. In the realm related to text generation, specifically 62 cases, we have observed that tasks integrated into the teaching and learning process materialize as grammar exercises, oral practice dialogues, vocabulary lessons, and authentic texts in the target language. This empowers educators to personalize and sequence content, providing students with a wide array of learning resources, thus optimizing the teaching process. Focusing on the 18 cases involving image production and how to transfer their utility to language didactics, the response is a profusion and diversity of resource offerings. These resources encompass the creation of visual cards, illustrations of communicative situations – such as Dream by Wombo, Leap, or Midjourney – and graphic material for teaching words and phrases, all of which involve a creative process and constitute a new shared space for both educators and learners, including tools like Decktopus, GPT for Slides, or SlidesAI.

Audio content generation encompasses 14 diverse examples across various functions. The most significant options within this category facilitate the creation of pronunciation standards recordings, practice dialogues, narrations, and listening exercises. Such tools educate and stimulate listening skills, thereby contributing to the production of the target language's oral proficiency. The next tier combines the advantages of imagery with the extensive possibilities of sound, focusing on audiovisual material (10 cases). Explanatory videos demonstrating authentic dialogues and communicative exchanges serve as a catalyst for acquiring sociocultural and pragmatic competences. Expanding the scope of AI, we encounter four applications capable of recreating 3D objects–AICommand, DreamFusion, GET3D, and Imagine 3D Que. In the context of our study, these applications primarily serve the simulation of language immersion situations that expose learners to realistic scenarios. The last two categories, source code generation and AI-generated text detection, encompass 8 and 4 cases, respectively. AI-driven source code generation involves intricate systems and processes capable of shaping learning platforms in any discipline. Advanced digital literacy would enable students to practice coding and learn the language in a contextual manner. Lastly, the tools designed to evaluate the originality of language learning-related written texts – such as Turnitin, Al Text Classifier, Copyleaks, and GPTZero – also serve other functions, including verifying the authenticity of online learning resources and preventing plagiarism.

Variables that allow the use of artificial intelligence related to the development of Educators' Pedagogical Competences (Redecker & Punie, 2017) have also been assessed. Educators are responsible for critically selecting and evaluating digital resources to determine their alignment with learning objectives and the needs of their students (Álvarez, Alejaldre & Mateos, 2021). This necessarily involves the creation of digital materials, such as interactive exercises, instructional videos, and online learning platforms, all aimed at promoting the acquisition of the various components that constitute communicative competence.

Area 3, responsible for teaching and learning, encompasses 48 cases. In the context of our study, this competency centers on educators' capacity to design and facilitate effective and motivating learning experiences in digital environments. Language instructors must proficiently integrate digital tools to develop communication skills in the target language, encourage autonomous practice, and create opportunities for authentic online interaction (Méndez & Pano, 2019), all while incorporating pedagogical strategies that promote active learning and the development of communicative competence (Marta-Lazo & Gabelas, 2016).

The focus on assessment and feedback includes 13 cases distributed between only two categories of AI tools: source code generators and those designed for AI-generated text detection. This particularity is not trivial, as even though the variables are not limited to the same catalog, both descriptors serve an identical purpose. This competency involves educators' ability to assess students' progress in their language skills and provide effective feedback in digital environments (Román-Mendoza, 2018). Additionally, the creation of authentic assessments measuring communicative competence and the use of technological tools for managing and analyzing assessment data have become a top priority in learning environments. Similarly, providing personalized feedback that contributes to cultural competence is an essential aspect.

The competency related to student empowerment (3 cases) focuses on educating and raising awareness of responsible and autonomous digital users (Sánchez & Mestre, 2016). In this regard, tools such as Lexalytics, Deepmind, and Stability incorporate digital skills such as media and digital literacy within the context of a foreign language, as well as online safety and critical thinking regarding language sources and content. Additionally, these tools promote active student engagement and encourage a sense of belonging and connection to a virtual community, fostering autonomy in their learning and the development of a responsible digital identity (Castells, 2015).

As for competences that, integrated into the communicative sphere, compartmentalize the skills inherent to the knowledge and practice of a language (Consejo de Europa, 2002), linguistic competence stands out with 65 cases. It focuses on the normative understanding of grammar, phonology, morphology, and syntax of a language. Secondly, with 34 cases, the category refers to sociolinguistic competences, such as an understanding of the social and contextual uses of language and linguistic variations as reflections and indicators of cultural and social aspects, as well as other factors like age and gender. Thirdly, with 21 cases, pragmatic competence addresses the interpretation of meaning in communicative situations and the social implications of language, particularly those related to effective communication and intentional discourse responses.

The prevalence of linguistic competence, as outlined by the Common European Framework of Reference for Languages, deserves attention within the communicative competencies emphasized by AI tools. Pragmatic and sociolinguistic competencies take secondary roles compared to the development and exploitation of grammatical competence. The latter, as defined by the Diccionario de Términos Clave de ELE (Dictionary of Key Terms in Spanish as a Foreign Language), is "the ability of a person to produce grammatical statements in a language, that is, statements that respect the grammar rules of that language at all levels (vocabulary, word and sentence formation, pronunciation, and semantics)" (Martín-Peris, Atienza-Cerezo, Cortés-Moreno, González-Arguello, López-Ferrero & Torner-Castells, 2008).

In the context of learning environments with artificial intelligence (AI) tools, it is crucial to contemplate the role of linguistic competence as subordinate to communicative competence. While linguistic competence remains a fundamental component to ensure grammatical correctness in communication, AI tools refresh the paradigm by offering new opportunities to dynamically and effectively develop and enhance communicative competence. Within these environments, linguistic competence can be fortified through the utilization of natural language processing (NLP) algorithms, which provide instant feedback on grammatical and vocabulary aspects. Communicative competence and AI-enhanced learning environments form a mutually beneficial partnership in the development of listening comprehension skills, intention interpretation, adaptation to various contexts, and effective language use in real-life situations. The success of this symbiosis lies in the creative capacity of generative AI tools to offer interactive exercises simulating authentic conversations. In these exercises, students must consider not only the social and cultural norms but also attend to conversational pragmatics to facilitate effective communication.

Furthermore, AI tools broaden the scope of communicative competence by assessing students' ability to comprehend emotional nuances, interpret context, and adapt their discourse to the audience. This provides educators with insights to customize instruction and offer specific, functional guidance to each student based on their individual needs. Ultimately, the implementation and utilization of AI tools in language didactics contexts equip learners with the ability to understand and use language effectively in a digitally connected and global communication-driven world (García-Peñalvo, 2023).

The supremacy of AIs focused on the development of micro skills in written proficiency far exceeds that of other applications. This data only highlights the traditional grammatical instruction that has long governed language teaching and learning processes. However, oral skills continue to be considered less important or given less value in learning, perhaps due to the spontaneity and immediacy of spoken discourse.

Finally, it is necessary to perform a quantitative cross-analysis of the variables that characterize this study with the aim of resolving the procedure and concluding the systematization of results. To achieve this, two types of data are described and linked: those pertaining to the functional characterization of the tool (Morales-Chan, 2023), and those providing a detailed perspective on the skills required in this specific context, with a focus on reading, understanding, and text production, as well as voice-to-text conversion and interpersonal communication skills (Tuomi, 2018). However, it is essential to emphasize that the design of this research requires expanding, adapting, and updating the traditional conception of a reader to that of a text-visual reader (Mora, 2012). This new identity underscores students' inclination to blend 'linguistic and digital competence to successfully address the challenges of the evolving narrative technology landscape' (Mateos & Alejaldre, 2023).

Three skills account for 95 out of the 120 tools that enrich the target corpus of this research. Consequently, the remaining data represents a minority of results. In a less significant proportion, there are AI tools centered on the analysis of emotions expressed through language (5 cases). However, dealing with emotional connections remains a major challenge for this technology, as it possesses the ability to recognize, identify, and mimic emotions but lacks the capacity for empathy. The skill of using persuasive and rhetorical strategies to influence communication effectively, defined as 'rhetorical impact,' is distributed among 5 cases, with 4 related to text generation and 1 to audio. Under the category of 'personalized messages' (4 cases), the importance of tailoring communication to meet individual recipient needs is emphasized, mediated through generative text AI (2) and video (2). The catalog includes only 4 cases for the descriptor 'understand oral messages,' with 2 related to text generation and 2 to audio. This denotes that the practice of active listening and auditory comprehension is not prominent in communicative interactions. There are three AI tools developed for text generation under the category of 'grammar and spelling,' while those focused on translation, either in real-time (2) or with cultural awareness (1), are reduced to one video application, one audio, and one image, similar to the dedicated online dictionaries with a single audio entry.

The prolixity of the applications generated under the development of AI demonstrates the wide panorama that opens for both students and teachers. This entails specific training that enables the healthy use of AIs, which should not be demonized. In the same way, the educational precepts must be modified in favor of a teaching more adapted to the times that contributes to an optimal use of the tools shown. It has been demonstrated that they allow the development of the basic skills and competences of teachers and students.

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