



THE IMPORTANCE OF DIGITAL COMPETENCE: SPANISH LANGUAGE TEACHING IN THE PANDEMIC CONTEXT

A IMPORTÂNCIA DA COMPETÊNCIA DIGITAL: O ENSINO DE LÍNGUA ESPANHOLA NO CONTEXTO PANDÊMICO

LA IMPORTANCIA DE LA COMPETENCIA DIGITAL: LA ENSEÑANZA DE LA LENGUA ESPAÑOLA EN EL CONTEXTO PANDÉMICO

> Melanie Zambon BUENO¹ e-mail: melzinhazb@gmail.com

Isadora Valencise GREGOLIN² e-mail: isadora@ufscar.br

How to reference this article:

BUENO, M. Z.; GREGOLIN, I. V. The importance of digital competence: Spanish language teaching in the pandemic context. **Rev. EntreLinguas**, Araraquara, v. 10, n. 00, e024031, 2024. e-ISSN: 2447-3529. DOI: https://doi.org/10.29051/el.v10i00.18518



Submitted: 26/09/2023 Revisions required: 18/08/2024 Approved: 20/11/2024 Published: 24/12/2024

Editors:Prof. Dr. Rosangela Sanches da Silveira GilenoDeputy Executive Editor:Prof. Dr. José Anderson Santos Cruz

¹ Federal University of São Carlos (UFSCar), São Carlos – SP – Brazil. Master's student in the Linguistics Graduate Program at UFSCar and Spanish language teacher at the Language Institute (IL) at the same university.
² Federal University of São Carlos (UFSCar), São Carlos – SP – Brazil. Professor with a Doctoral degree in

Linguistics and Portuguese Language and lecturer in the Department of Teaching Methodology at UFSCar.

Rev. EntreLinguas, Araraquara, v. 10, n. 00, e024031, 2024. DOI: https://doi.org/10.29051/el.v10i00.18518



ARITY SYSTEN

RTICLE SU

7 turnitin

ABSTRACT: The article aims to present the results of a qualitative-exploratory research with a group of Brazilian Spanish language teachers who seek to understand which digital technologies were used during the COVID-19 pandemic and for what purposes to develop digital education. The data supporting the text were collected between 2020 and 2021 through questionnaires and interviews with a specific group of basic education teachers and highlighted how digital technologies are used to teach Spanish. Reflections are presented on the importance of developing Teaching Digital Competence and critical techno pedagogy in the training of Spanish teachers so that they can integrate, in a coherent and well-founded way, digital technologies and cultures into Spanish teaching approaches. A transformation of classrooms into experimental environments was observed, as teachers used new technologies without the support of educational institutions.

KEYWORDS: Spanish. Digital Competence. Technologies.

RESUMO: O objetivo do artigo é apresentar resultados de uma pesquisa de caráter qualitativo-exploratório junto a um grupo de professores brasileiros de língua espanhola, buscando compreender quais tecnologias digitais foram utilizadas durante a pandemia da COVID-19 e com quais finalidades didáticas para a educação digital. Os dados que subsidiam o texto foram coletados entre 2020 e 2021, por meio de questionários e entrevistas com um grupo específico de professores da educação básica, e evidenciam as formas de utilização de tecnologias digitais para o ensino do espanhol. São apresentadas reflexões sobre a importância do desenvolvimento da Competência Digital Docente e da Tecnopedagogia Crítica na formação de professores, de modo que possam integrar, de forma coerente e fundamentada, tecnologias e culturas digitais às abordagens de ensino de espanhol. Observou-se a transformação das salas de aula em ambientes de experimentação, pois novas tecnologias foram utilizadas por docentes sem o respaldo das Instituições de Ensino.

PALAVRAS-CHAVE: Espanhol. Competência Digital. Tecnologías.

RESUMEN: El objetivo del artículo es presentar resultados de una investigación cualitativaexploratoria con un grupo de profesores brasileños de lengua española que busca comprender qué tecnologías digitales fueron utilizadas durante la pandemia de COVID-19 y con qué fines didácticos para la educación digital. Los datos que sustentan el texto fueron recolectados entre 2020 y 2021 a través de cuestionarios y entrevistas a un grupo específico de docentes de educación básica y resaltan las formas en que se utilizan las tecnologías digitales para enseñar español. Se presentan reflexiones sobre la importancia de desarrollar la Competencia Digital Docente y la Tecnopedagogía Crítica en la formación del profesorado, para que puedan integrar, de forma coherente y fundamentada, las tecnologías y culturas digitales en los enfoques de enseñanza del español. Se observó la transformación de las aulas en ambientes de experimentación, pues nuevas tecnologías fueron utilizadas por docentes sin el respaldo de Instituciones Educativas.

PALABRAS CLAVE: Español. Competencia Digital. Tecnologías.

Rev. EntreLinguas, Araraquara, v. 10, n. 00, e024031, 2024. DOI: https://doi.org/10.29051/el.v10i00.18518



Introduction

One of the consequences of the social isolation caused by the COVID-19 pandemic for education was the need to redesign teaching activities, which until then had predominantly taken place in person. To prevent the virus from spreading, there has been a significant increase in the search for digital technologies that can support and maintain teaching and learning activities, such as *Zoom*®, *Meet*®, *Google Classroom*®, and *WhatsApp*®, among others. García Aretio (2021), in his problematization of this period, states that

[...] faced with the obligatory sudden change in ways of learning and assessing, which could not continue to be face-to-face, a distance education that had been called into question in pre-Covid times had to be implemented urgently, massively and with significant pedagogical limitations in Covid times and is intended to be used in hybrid, combined or blended formats in later, post-Covid times (García Aretio, 2021, p.13-14, our translation).³

Although the influence and importance of digital technologies in contemporary life is undeniable, before the pandemic, there was a certain mistrust and resistance to the use of these technologies in educational processes in Brazil, mainly in language teaching and learning contexts. Some very common myths related to the impossibility of working on specific language skills through screens, especially those linked to oral and written production. There was also a prevailing mistrust that digital mediation would create a sense of distance between students and teachers.

However, the social isolation caused by the pandemic has required the intensive and extensive use of different digital technologies, allowing more teachers and students to experience screen-mediated teaching and learning situations. In this context, we carried out qualitative-exploratory research (Oliveira, 2008) with a group of Spanish language teachers, with the aim of understanding which digital technologies were being used before and during the pandemic and for what purposes, in order to problematize the possibilities and limits identified by the group, as well as aspects of the teaching approaches emerging during the pandemic.



³ Free translation of: "[...] ante el obligado cambio brusco en las formas de enseñar, de aprender y de evaluar, que no podían seguir siendo presenciales, una educación a distancia puesta muy en cuestión en tiempos preCOVID, tuvo que implementarse de urgencia, de forma masiva y con grandes limitaciones pedagógicas en tiempos de COVID, y se pretende aprovechar en formatos híbridos, combinados o de blended en épocas posteriores, posCOVID" (García Aretio, 2021, p.13-14).

Rev. EntreLinguas, Araraquara, v. 10, n. 00, e024031, 2024. DOI: https://doi.org/10.29051/el.v10i00.18518

The data on which this article is based was collected between 2020 and 2021 through questionnaires and interviews with the group of teachers, highlighting the ways in which digital technologies are used in Spanish teaching. In this way, it was possible to follow the processes of developing Digital Competence (Lucas; Moreira, 2018) and *technopedagogical* appropriation (Román-Mendoza, 2018) in emergency remote teaching situations, as well as to understand the strategies used for teaching in a digital environment.

The use of digital technologies in Spanish teaching contexts

The pandemic has represented a major challenge for educational institutions and teachers. In our research, the data indicates that most teachers had to learn to use digital technologies "in practice" and "on the job", often with the help of colleagues or through tutorials on *YouTube*®. Few teachers reported that their educational institutions offered technical and pedagogical training, and none of them said they had previous training in teaching mediated by digital technologies (Bueno, 2021).

The term "*technopedagogical*" (Román-Mendoza, 2018) has been widely used in the field of Applied Linguistics to address the use of technologies for teaching purposes. This term presupposes that technologies are not neutral and that the way they are used can reveal specific pedagogical concepts. All the teachers who participated in our survey said they used the internet before the pandemic, mainly to research content for lesson preparation. However, they rarely used it to promote communication and interaction with students, something that became crucial during the pandemic, as social distancing prevented direct contact between students, colleagues, and teachers.

It is worth noting that most of the participating Spanish teachers had technological resources in their classrooms before the pandemic, such as projectors and Wi-Fi connections. However, for various reasons, these resources were rarely used, either because they were unaware of their use's advantages or discouraged. For example, cell phones have permanently been banned in primary school classrooms (Sbeghen; Bergmann; Cesco, 2018). With the pandemic, screens have merged with the classroom and man with machine, in contrast to the separation that prevailed before.

As a result, the majority of teachers found it difficult to adaptation from face-to-face to remote teaching, having to adapt their teaching approaches in an often improvised and intuitive way. In addition, the teachers reported that the students also had to adapt to the new forms of

Rev. EntreLinguas, Araraquara, v. 10, n. 00, e024031, 2024. DOI: https://doi.org/10.29051/el.v10i00.18518

communication mediated by digital technologies, facing difficulties with the instability of the connection and the new relationships between spaces and times that are characteristic of digital culture.

Despite the beliefs and difficulties faced, the use of technology in education is not new. Paiva (2008) points out that this practice began in the 1960s in the United States and the 1990s in Brazil, being predominantly used for communication activities and automated responses. Although the use of technology in education is constant, discussions about the technology itself and its implementation in educational contexts are still recent. Two decades ago, Kenski (2003) pointed out that society plays a significant role in the use of technology in schools, perceiving it in different ways: as something negative, positive, or an opportunity for profit.

> Digital communication and information technologies, especially computers and Internet access, are beginning to play a part in teaching activities in Brazilian schools at all levels. In some cases, they come from an awareness of the educational importance of this new medium. In others, they are adopted due to external pressure from society, parents, and the community. In most institutions, however, they are imposed as a commercial and political strategy without adequate administrative restructuring, reflection, and proper preparation of the professional staff (Kenski, 2003, p.58, our translation).

Therefore, it is not enough just to consider the insertion of technologies and tools in education; it is also essential to raise awareness in society about their benefits and harms, as well as look for collaborative ways of integrating them into classrooms. Everyday applications, such as *Facebook*®, *Instagram*®, and *WhatsApp*®, can become powerful tools for language teaching, provided that teachers are properly prepared to use them and that society begins to see the internet as a means of learning, not just leisure.

One aspect highlighted by teacher inexperience during the pandemic was the need for teacher training aimed at developing digital competence to enable new approaches to language teaching using digital technologies. The next section will cover this topic.



The importance of Digital Competence for teaching Spanish

Moreira and Trindade (2022) point out that the term *Digital Competence* emerged in 2006 in Europe as part of an initiative aimed at developing citizens, with a focus on active citizenship, social inclusion, and integration into the job market. The authors define that:

Digital competence involves the confident, critical, and responsible use of and engagement with digital technologies for learning, work, and participation in society. This includes information and data literacy, communication and collaboration, media literacy, digital content creation (including programming), security (including digital wellbeing and cybersecurity-related skills), intellectual property issues, problem-solving, and critical thinking (Moreira; Trindade, 2022, p. 3, our translation).

In 2018, the Portuguese version of the *European Digital Competence Framework for Teachers* (Lucas; Moreira, 2018) was launched, which presents six distinct areas in which digital competence is expressed, totaling 22 competences. The document proposes six levels of proficiency, represented by letters: A1 and A2, considered basic levels; B1 and B2, intermediate levels; and C1 and C2, advanced levels.

In general, teacher digital competence has a common goal: "to harness the potential of digital technologies to improve and innovate education" (Lucas; Moreira, 2018, p.8, our translation). The perspective underpinning this proposal is based on the assumption that thinking about digital competence means reflecting not only on the use of digital technologies and tools for teaching, but also on ways of developing digital competencies professionally, learning about digital resources, rethinking assessment, teaching, and learning strategies, as well as understanding the need to promote the development of students' digital competence.

Figure 1 illustrates and presents the areas and competencies of this proposal:

Figure 1 - Areas and Competencies of the European Digital Competence Framework for Teachers



Source: Lucas and Moreira (2018, p. 8).

Didactic practices such as teaching students to use online dictionaries, search systems, and, more recently, Artificial Intelligence mechanisms in the form of chats can help raise awareness and develop autonomy and engagement in the process of learning a foreign language. More than a decade ago, Soto, Mayrink, and Gregolin (2009) argued that the choice and use of digital technologies in language teaching requires teachers to be guided by didactic objectives based on linguistic and educational theories:

[...] it is necessary to emphasize that the most decisive aspect is our awareness and discernment of the theoretical options that underpin the way we conceive of language and learning. The choice of one tool or another should be made according to how these instruments can enhance our objectives, in other words, bring us closer to where we want to go with language teaching (Soto; Mayrink; Gregolin, 2009, p. 130, our translation).

The authors point out that the same technological resource can be a source of pleasure and communication for some students and, for others, a territory where they feel lost. Some hypotheses for this difference may be related to the teacher's focus on a single teaching approach and factors inherent to the student, such as shyness, for example. So, as well as reflecting on ways to use digital tools to create an environment that favors student development and communication, it's equally important to think about how to apply them in a foreign language class.

In the context of our research, the three digital technologies most used by teachers to teach Spanish during the pandemic were: *Whatsapp*® (92%), *Google Meet*® (80%), and *Youtube*® (64%). Coincidentally, these tools are free in our country and have very intuitive

interfaces, which may have contributed to their rapid adoption in various contexts during remote teaching.

The main advantages of *Whatsapp*® were that it was widely known and used by students and that it didn't consume users' mobile data, since many telephone operators in Brazil offered unlimited use of the app *Google Meet*®, in turn, was the platform for synchronous communication offered free of charge by the educational networks due to an agreement with *Google Education*®. *Youtube*®, being the most popular video streaming and sharing platform in the country, was widely used even before the pandemic.

Figure 2 shows all the technologies mentioned by the group of teachers:

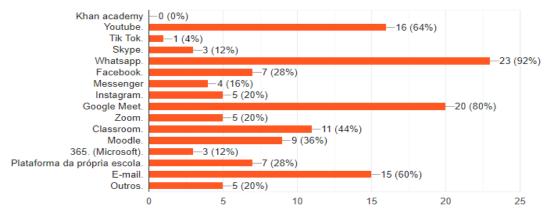


Figure 2- Digital technologies used during the pandemic

Source: Prepared by the authors.

As can be seen, the technologies used can be grouped according to their educational purpose into: technological resources with a communication and interaction function (*Skype*®, *Whatsapp*®, *Messenger*®, *Zoom*®, and *E-mail*®) and technological resources with a virtual environment function (*Youtube*®, *TikTok*®, *Facebook*®, *Instagram*®, *Classroom*®, *Moodle*®, *365*® and the school's platform).

Despite various features designed to help and enable interaction and active participation by students, the group of teachers taking part in the research reported that the synchronous meetings mediated by *Google Meet*® did not work satisfactorily during the pandemic, due to the lack of internet access for many students. In addition to the poor connection, there was also resistance to opening video cameras during classes.

Faced with this *technopedagogical* unfeasibility *Google Meet*®, the majority of teachers opted to migrate to using *Whatsapp*® as a synchronous interaction tool, reporting that students did not face any significant difficulties when using it. In addition to using *Whatsapp*® for synchronous interactions via video calls, audio, and written text, the teachers developed engagement strategies by sharing video lessons and links from *YouTube*® in the groups. In this way, it was possible to carry out comprehension activities with audio and video, since the platform makes it easy to upload files.

Despite these platforms' efforts and multiple potential, many teachers reported difficulties in developing students' oral and written productions.

Below is Chart 1, which summarizes the digital technologies used by the group of teachers during the pandemic, proposing an analysis based on the areas of the *European Digital Teaching Competence Framework* (Lucas; Moreira, 2018), their respective objectives *technopedagogical* and the difficulties encountered during their use:

Areas of the European Digital Competence Framework for Teachers (Lucas; Moreira, 2018)	Technologies used during the pandemic	Objectives of using digital technologies, according to Román- Mendoza (2018)	Difficulties encountered
Professional involvement. All aspects have been worked on in these tools.	Whatsapp®, Facebook®, Messenger®, Google Meet®, Zoom®, Classroom®, Microsoft®.	They can promote more critical and interactive learning, as they generate collaboration and mutual participation, favoring student involvement.	On <i>Microsoft</i> ®: There was a lot of dispersion and the students wouldn't turn on the camera;
Digital resources. Protection has not been worked on.	All applications are shown in Figure 2, with the exception of Khan Academy.	These tools allow students to create videos, which can encourage active participation, as well as the student's handling of the tool, culminating in the development of their autonomy.	On Zoom®: there were difficulties using the tool as it presented errors; On Google Meet®: students were unable to attend classes due to insufficient internet package;
Teaching and learning. All aspects of the framework have been worked on in these tools.	All the applications in Figure 2, with the exception of the Khan Academy.	All the apps encourage learning, whether collaborative or guided. These applications encourage the sending of materials, synchronous meetings, and student participation, which	On <i>Whatsapp</i> ®: Some students didn't interact with the app; Groups on <i>Facebook</i> ®: lack of response from students to posts;
		helps students achieve autonomy and more critical learning through	On <i>Instagram</i> ®: the concepts had to be

Chart 1 - Overview of the use of digital technologies

Rev. EntreLinguas, Araraquara, v. 10, n. 00, e024031, 2024. DOI: https://doi.org/10.29051/el.v10i00.18518

e-ISSN: 2447-3529



		contact with peers and/or	summarized on the
		the materials presented.	platform, as well as only
Evaluation.	All the apps in Figure 2,	All the applications	having spaces for links in
	with the exception of	allow teachers and	specific places;
All aspects of the	Khan Academy, Tik Tok,	students to send	
framework have been	Instagram, and Inshot.	assessments, whether	On Youtube®: students
worked on in these tools.		they are audio, video, or	couldn't watch the videos
		written activities. With	if they didn't have a good
		this, students have access	data package available;
		to different applications,	
		giving them autonomy in	<i>Tik Tok</i> ®: not used
		the digital world.	much;
Training learners.	All the applications in	All the tools mainly	
	Figure 2, with the	favor the active	Google Classroom®:
All aspects of the	exception of Khan	involvement of students,	there was little
framework have been	Academy.	encouraging their	participation in the
worked on in these tools.		participation and	forums;
worked on in these tools.		autonomy.	
			<i>E-mail</i> : The interaction
Promoting the learner's	All the applications in	All the tools on the side	took place with a small
digital competence.	Figure 2, with the	encourage content	group of students, as
	exception of Khan	creation and student	they were not in the habit
Responsible use has not	Academy.	communication and	of looking at e-mails;
been addressed.		participation.	
			Inshot®: No difficulties
			were reported;
			<i>Moodle</i> ®: the
			configuration offered
			few options for
			asynchronous activities
			to generate engagement,
			and only allowed short
			videos to be posted. The
			students had difficulty
			accessing the internet
			and were unable to take
			part in the activities.

Source: Prepared by the authors.

As can be seen in Chart 1, technologies offer many possibilities for ubiquity and critical and participatory teaching (Román-Mendoza, 2018). However, in the context researched, several difficulties were encountered regarding student participation, whether due to connection issues, inappropriate use of the tools, or shyness. Another factor identified was the absence of work on all the aspects envisaged for the development of digital competence (Lucas; Moreira, 2018), such as those related to "protection" and "responsible use". One hypothesis raised for this gap in classes is the lack of knowledge on the part of teachers, combined with the lack of adequate training offered by educational institutions.

Although other aspects of digital competence have been addressed, the proposals for synchronous and interactive activities planned for tools such as *Teams*® or *Meet*® had to be

adapted to an asynchronous format, to be carried out *offline* by the students. This was because, at times, the students didn't participate, and at others, they didn't have access to the internet. This scenario reflects teachers' significant social role in using digital technologies, considering that the internet infrastructure in our country is still quite precarious.

The use of *TikTok*® was minimal, as was that of Instagram, which shows that these technologies were seen more as "leisure" tools than "educational" ones. Another relevant aspect was the students' lack of engagement and participation in Spanish language activities involving these technologies. Factors such as shyness, chaotic home environments, or even technical difficulties contributed to this lack of interaction in synchronous and asynchronous activities, such as in *Classroom*® or *Whatsapp*®.

Therefore, although the teachers had *technopedagogical* knowledge about the use of these technologies, the lack of response from the students turned out to be a demotivating factor, resulting in a more transmissive approach during the pandemic. In this way, developing students' digital competence becomes crucial, as it can sensitize them to other uses of the technologies already part of their daily lives, promoting greater awareness of their use and their responsibilities towards others.

Final considerations: Brazil and digital competence: still a distant reality?

Unfortunately, there is still no reference proposal for the development of digital competence that takes into account the specific characteristics of Brazil and Latin America, as well as our educational systems. The pandemic, coupled with the absence of broad discussions on the use of digital technologies in Brazilian basic education, has resulted in an emergency and intuitive implementation of these media in classrooms. This brought up a number of difficulties, but also provided valuable individual experiences. Basic education classrooms have thus become environments for experimenting with new digital possibilities.

The pandemic context has highlighted the importance of including digital technologies in the classroom, considering that they are already integrated into other areas of social life. Despite the teachers' efforts to make up for the lack of specific training in digital technologies, the student's lack of engagement and participation showed that the school community was not prepared for activities in this format. Factors such as poor access to the internet and electronic devices have exacerbated this scenario. Many students found it difficult to access the lessons, as operators did not offer discounts on mobile data for educational applications, forcing them



Rev. EntreLinguas, Araraquara, v. 10, n. 00, e024031, 2024. DOI: https://doi.org/10.29051/el.v10i00.18518

to use their own data packages. It was also common for them not to turn on their microphones or cameras during lessons.

As a result, many teachers have had to look for other asynchronous strategies, such as making video lessons available instead of an interactive meeting. Thinking about digital competence in a society that still has limited access to digital media is a complex task, but not an impossible one. This implies reflecting on various aspects, both how to work with digital tools and deal with the digital network itself. In this sense, the results of our research reiterate the post-pandemic problematization of Gregolin (2021), who defends the importance of teacher reflection on the ways of teaching and learning, thus allowing the creation of new strategies for the insertion of digital technologies in classrooms, favoring hybrid teaching in the future.

Therefore, the experiences of Spanish teachers during the pandemic highlight the importance of developing *Digital Teaching Competence* (Lucas; Moreira, 2018) and *Tecnopedagogía Crítica* (Román-Mendoza, 2018) in teacher training, so that they can integrate digital technologies and cultures into Spanish teaching approaches in a coherent and well-founded way.

ACKNOWLEDGMENTS: The research was funded by CAPES (*Coordenação de Aperfeiçoamento de Pessoal de Nível Superior*) - Funding Code 001.

REFERENCES

AMENDOLARA, M. A interação online no ensino da língua espanhola. **Revista Educação**, São Paulo, v. 11, n. 11, 2008. Available at: https://revista.pgsskroton.com/educ/article/view/1943. Accessed in: 15 June 2023.

BUENO, M. Z. **Possibilidades e limites do uso de tecnologias digitais para o ensino e aprendizagem de espanhol:** experiências e reflexões de um grupo de professores durante a pandemia COVID-19. Orientador: Dra Isadora Valencise Gregolin. 2021. 79 f. Trabalho de Conclusão de Curso (Graduação em Letras) –Universidade Federal de São Carlos, São Carlos, SP, 2021.

GARCÍA ARETIO, L. COVID-19 y educación a distancia digital: preconfinamiento, confinamiento y posconfinamiento. **RIED-Revista Iberoamericana de Educación a Distancia**, [*S. l.*], v. 24, n. 1, p. 9-25, 2021. DOI: 10.5944/ried.24.1.28080. Available at: https://www.redalyc.org/jatsRepo/3314/331464460001/331464460001.pdf. Accessed in: 10 July 2023.



GREGOLIN, I. V. Uso emergencial de tecnologias digitais e perspectivas pós-pandemia para o ensino e aprendizagem de línguas. *In*: SILVA JUNIOR, A. F. **Conversas sobre ensino de línguas durante a pandemia**. São Paulo: Pimenta Cultural, 2021. p. 233-243. Available at: https://www.pimentacultural.com/_files/ugd/18b7cd_bb0d43b971f04f94b26c92ae8b58a7a9.p df Accessed in: 20 Sept. 2023.

KENSKI, V. M. **Tecnologias e ensino presencial e a distância.** Campinas, SP: Editora Papirus, 2003.

LUCAS, M.; MOREIRA, A. **DigCompEdu**: quadro europeu de competência digital para educadores. Aveiro: Universidade de Aveiro, 2018. Available at: https://ria.ua.pt/bitstream/10773/24983/1/Lucas_Moreira_2018_DigCompEdu.pdf. Accessed in: 24 Sept. 2023.

MOREIRA, L; TRINDADE, A. R. **DigComp 2.2**: Quadro europeu de competência digital para cidadãos com exemplos de conhecimentos, capacidades e atitudes. Universidade de Aveiro Editora, 2022. DOI: 10.48528/4w7y-j586.

OLIVEIRA, C. L. Um apanhado teórico-conceitual sobre a pesquisa qualitativa: tipos, técnicas e características. **Revista Travessias**, [*S. l.*], v. 2, n. 03, 2008. Available at: https://e-revista.unioeste.br/index.php/travessias/article/view/3122 Accessed in: 15 June 2023.

PAIVA, V. L. M. **O uso da tecnologia no ensino de línguas estrangeiras**: breve retrospectiva histórica. Belo Horizonte, 2008. Available at: http://www.veramenezes.com/techist.pdf. Accessed in 1 June 2023.

ROMÁN-MENDOZA, E. **Aprender a aprender en la era digital:** tecnopedagogía crítica para la enseñanza del español LE/L2. Nova York: Editora Routledge, 2018.

SOTO, U; MAYRINK M; GREGOLIN I. V. **Linguagem, educação e virtualidade.** São Paulo: Editora UNESP, 2009. Available at: https://static.scielo.org/scielobooks/px29p/pdf/soto-9788579830174.pdf. Accessed in: 10 Aug 2023.

SBEGHEN, L. B.; BERGMANN, J. C. F; CESCO, A. Duolingo no PIBID: aplicativo como complemento à prendizagem de Língua Espanhola. **Revista Educação e Linguagens,** Campo Mourão, v. 07, n. 13, p. 228-244, 2020, DOI: 10.33871/22386084.2018.7.13.228-244. Available at:https://periodicos.unespar.edu.br/index.php/revistaeduclings/article/view/6506 Accessed in: 13 Sept. 2023.

