

MULTILITERACIES AND THE NEW MEDIATION NEEDS OF LANGUAGE  
TEACHERS AFTER THE CORONAVIRUS PANDEMIC

*MULTILETRAMENTOS E AS NOVAS NECESSIDADES DE MEDIAÇÃO DE  
PROFESSORES DE LÍNGUAS APÓS A PANDEMIA DO CORONAVÍRUS*

*MULTIALFABETIZACIONES Y LAS NUEVAS NECESIDADES DE MEDIACIÓN DE  
LOS PROFESORES DE IDIOMAS TRAS LA PANDEMIA DE CORONAVIRUS*



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**ABSTRACT:** This study, grounded in the understanding of the teacher as a digital immigrant, aims to delineate a diagnostic profile of digital technology use, preferred activities, and skills of teachers and undergraduate students of foreign languages in the state of Amapá during the pandemic period. The research draws on the assumptions of Digital Literacy and Multiliteracies, articulated with the conception of the teacher as a mediator of multimodal practices. The methodological design is mixed and exploratory and was conducted in the context of a workshop focused on the development of digital materials for foreign language teaching and learning. Data were generated through a questionnaire administered at the end of the training activity and answered by twenty-two participants. The results indicate that, although there is recognition of the relevance of Digital Information and Communication Technologies and the need for innovative pedagogical practices, the use of technological resources in language classes remains limited.

**KEYWORDS:** Digital literacy. Multiliteracies. Digital technologies. Teacher training. Pandemic.

**RESUMO:** Este estudo, fundamentado na compreensão do professor como imigrante digital, tem como objetivo delinear um perfil diagnóstico do uso de tecnologias digitais, das atividades preferenciais e das habilidades de docentes e acadêmicos de línguas estrangeiras no estado do Amapá durante o período pandêmico. A pesquisa apoia-se nos pressupostos do Letramento Digital e dos Multiletramentos, articulados à concepção do professor como mediador de práticas multimodais. O delineamento metodológico é de natureza mista e exploratória e teve como contexto uma oficina de elaboração de materiais digitais voltados ao ensino-aprendizagem de línguas estrangeiras. Os dados foram gerados por meio de um questionário aplicado ao final da atividade formativa, respondido por 22 participantes. Os resultados indicam que, embora haja reconhecimento unânime da relevância das Tecnologias Digitais de Informação e Comunicação (TDIC) e da necessidade de práticas pedagógicas inovadoras, o uso de recursos tecnológicos nas aulas de línguas ainda se mostra limitado.

**PALAVRAS-CHAVE:** Letramento digital. Multiletramentos. Tecnologias Digitais. Formação docente. Pandemia.

**RESUMEN:** Este estudio, fundamentado en la comprensión del docente como inmigrante digital, tiene como objetivo delinear un perfil diagnóstico del uso de tecnologías digitales, de las actividades preferentes y de las habilidades de docentes y estudiantes universitarios de lenguas extranjeras en el estado de Amapá durante el período de la pandemia. La investigación se sustenta en los presupuestos del Alfabetismo Digital y de los Multialfabetismos, articulados con la concepción del docente como mediador de prácticas multimodales. El diseño metodológico es de carácter mixto y exploratorio y se desarrolló en el contexto de un taller de elaboración de materiales digitales orientados al proceso de enseñanza-aprendizaje de lenguas extranjeras. Los datos se obtuvieron mediante un cuestionario aplicado al finalizar la actividad formativa, respondido por 22 participantes. Los resultados indican que existe reconocimiento de la relevancia de las Tecnologías Digitales, aunque el uso de recursos tecnológicos en las clases de lenguas sigue siendo limitado.

**PALABRAS CLAVE:** Alfabetización digital. Multialfabetizaciones. Tecnologías digitales. Formación del profesorado. Pandemia.

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## Introduction

The COVID-19 crisis instituted new ways of living, working, teaching, and learning. Education was undoubtedly one of the most affected social sectors, as the transition to distance learning highlighted the relevance and urgency of multiliteracies in the teaching–learning process. In this context, the role of teachers—both in general and foreign language teachers in particular—as mediators of this transition gained prominence.

During the pandemic crisis, schools and teachers were required to adapt rapidly to a new reality of uncertain duration. As the coronavirus is a potentially fatal virus, face-to-face classes were suspended, and the virtual environment became the new classroom space. For many educators, this was a challenging task, as they had to adapt not only to virtual teaching but also to deal with the lack of equipment and internet access in their schools, homes, and students' households. This situation led numerous public education professionals to invest their own financial resources in more advanced technology, without receiving any form of financial support or incentives from their maintaining institutions.

At the same time, there was an intense search for intensive training courses and free or paid online workshops, enabling educators to meet the demands imposed by the pandemic and the urgent need for instruction. Based on this scenario, this article aims to present and discuss the importance of multiliteracies and, in particular, the use of digital technologies by foreign language teachers in Amapá, as well as the emerging demands for socio-technological mediation faced by these professionals.

Through a brief literature review and an examination of contemporary teaching practices, this article seeks to offer perspectives on how foreign language professionals can act effectively in a post-pandemic context. The discussion is grounded in research on digital literacy and multiliteracies, drawing on the work of authors such as Cope and Kalantzis (2010a, 2010b), Buzato (2015), Lemke (2010), and Lankshear and Knobel (2012), who conceptualize reading and writing practices as multimodal and articulated through emerging digital technologies. This text also aims to contribute to the ongoing discussion on the role of multiliteracies in education and to provide useful insights for foreign language teachers.

To this end, the article is organized into five sections following the introduction: the theoretical framework addressing multiliteracy practices and the role of the teacher as an agent of multimodal practices corresponds to Sections 1 and 2, respectively; the third section presents

the methodological procedures of the study; this is followed by the analysis of the results; and the fifth section presents the final considerations.

## Digital literacy and multiliteracies in language teaching

According to Soares (2004), the term *literacy* is relatively recent and was introduced into the field of education and linguistic sciences just over two decades ago. Its emergence can be understood as a response to the need to describe and name social behaviors and practices related to reading and writing that go beyond mastery of the alphabetic and orthographic system, which is the traditional goal of the literacy process. The so-called Communication Era has placed social practices of reading and writing at the center of educational and professional debates, shedding light on their role in a world increasingly centered not only on written culture but also on multimodal writing.

From this perspective, Dudeney, Hockly, and Pegrum (2016, p. 17, our translation) define digital literacies as involving “the individual and social skills needed to interpret, manage, share and create meaning effectively in the growing range of digital communication channels.” In the twenty-first century, the ability to interact with digital technologies requires mastery of basic skills for their effective use, enabling individuals to locate resources, communicate ideas, and build collaborations that transcend personal, social, economic, political, and cultural barriers.

According to Selfe (1999, p. 11, our translation),

digital literacy refers to the social and cultural contexts for discourse and communication, as well as the linguistic and social products and practices of communication, and the ways in which communication environments have become essential parts of our cultural understanding of what it means to be literate.

In line with this perspective, Soares (2002) discusses literacy within the scope of cyberculture and argues that the screen constitutes an artifact that both enables a new mode of access to information and requires adherence to new or additional cognitive processes. In the terms proposed by Knobel and Lankshear (2007, 2017) and Lankshear and Knobel (2011, 2013), this refers to what the authors call *new literacies*.

The term *multiliteracies*, introduced by the New London Group, refers to the “multiplicity of communication channels and media, as well as the increasing importance of cultural and linguistic diversity” (New London Group, 2021, p. 106, our translation).

Consequently, language teaching comes to require not only instructional methods but also a pedagogy of multiliteracies, which encompasses modes of representation that transcend language itself and its traditional teaching practices.

In this context, Digital Information and Communication Technologies (DICT) play a significant role in the development of sociolinguistic competencies and skills across the various spheres of social language use. Through a wide range of tools and platforms, DICT enable users to access and share information more efficiently (Yamada; Manfredi, 2014). Moreover, given the reduced barriers to information access, these technologies allow users to develop multiliteracies while simultaneously acquiring new linguistic skills.

### **The language teacher as a mediator of multimodal practices**

It is widely recognized that digital technologies are increasingly present in people's lives and in educational environments, and their conscious use cannot be overlooked. The introduction of new technologies into the teaching–learning process opens up a range of possibilities, innovative perspectives, and significant challenges. Among these challenges are the integration of new media into education and the need for teacher education that can guide the teaching–learning process in a constructive manner. Gal *et al.* (2021) argue that initial and continuing teacher education should promote teachers' digital literacy and support them in the challenge of educating citizens who use knowledge in an ethical and emancipatory way.

The global dissemination of digital technologies across multiple environments—such as banks, hospitals, and schools—has been remarkable. In the context of the COVID-19 pandemic, there was a need to redefine and reconstruct paradigms, resulting in significant consequences and lessons learned. Educational institutions were compelled to foster discussions on students' new linguistic, discursive, and multimodal demands. In this sense, it is essential to explore the positive contributions of these technologies to the enhancement of educational environments.

These demands are closely linked to the context of remote teaching, intensified during the pandemic, and to the use of digital technologies. Examples include the ability to communicate effectively on digital platforms and in virtual environments; the development of reading and writing skills in digital formats; the use of multimodal practices to express ideas; and the capacity to understand and produce different types of digital media. In addition, students

also require self-management and organizational skills to cope with the autonomy demanded by remote learning, as well as flexibility to adapt to different learning formats.

However, for the development of these skills to occur, Kersch *et al.* (2016) argue that

the school needs to take part in this change by providing students not only with conscious and reflective multiliteracy experiences, but also with the development of the potentialities that emerge from new technologies, building knowledge collaboratively (Kersch *et al.* 2016, p. 22, our translation).

Thus, it is essential to discuss the new linguistic, discursive, and multimodal demands placed on teachers, as they are also in a process of (re)constructing their practices alongside students, given that this scenario is relatively new for many of them. In this sense, Prensky (2001) characterizes teachers as true digital immigrants faced with an immediate need for adaptation. Teachers who assume the role of mediators—facilitating the learning of digital natives—must also be active participants in the interactions generated by multimodal genres and new technologies.

The linguistic, discursive, and multimodal demands of students are intrinsically linked to the transformations brought about by the digital era. The contemporary expansion of digital genres, entailing new linguistic and language-use spheres, has made it essential for both students and teachers to enhance their communication skills in virtual environments and to be able to express themselves through a variety of multimodal and hypermedia formats.

As highlighted by Kersch *et al.* (2016), in contemporary contexts, students are expected to develop autonomy and self-management skills in order to continue learning beyond the classroom. This implies that formal education must contribute to the development of citizens who are capable of learning continuously and adapting to different situations and contexts. To achieve this, teaching and learning processes must be rethought in light of the needs of new learners, who require new pedagogical approaches and new competencies from teachers.

In this regard, one viable alternative is to take advantage of the opportunities provided by digital technologies to foster autonomous and creative learning. For instance, the use of online teaching platforms can enable students to access diversified and personalized educational resources, while also creating opportunities for autonomous practice and peer collaboration. Teachers, in turn, can assume the role of facilitators and mentors, guiding students in the selection and use of resources, as well as providing feedback and support as needed.

According to Antônio (2010), many problems arise from teachers' inability to manage technological uses in educational settings. Many complain that mobile phones distract students.

This is true; however, before mobile phones, students were also distracted. The only difference is that they were distracted by other things—indeed, this continues to occur in schools where mobile phones have been banned. What causes student distraction is a lack of interest in the lesson, not the mere presence of a mobile phone.

In this sense, Gal *et al.* (2021) argue that it is essential to pay close attention to the role of teachers in this new era, since without proper preparation there is a risk of perpetuating the dissemination of traditionalist discourses and the rejection of these resources, even though such media—such as mobile phones—offer countless new possibilities and advances in the ways of teaching and learning.

It is also important to emphasize that, although new technologies have been steadily entering our daily public and private routines for more than three decades, it was the pandemic that brought to the forefront a reality that was already known but little addressed or discussed within Brazilian public education. This applies both to teacher education for multiliteracies and to the effective use of these technologies in the classroom, as outlined in the following sections.

## Methodological Procedures

The methodological approach adopted in this study is exploratory and mixed (qualitative–quantitative), with a questionnaire used as the data collection instrument. Data analysis was conducted from an interpretative perspective.

The data used in this study were collected during the pandemic period, at the end of a workshop entitled “Learn How to Design Interactive Activities with Canva.” The workshop, proposed by the Research Group Núcleo Amapaense de Pesquisa em Línguas e Literaturas Estrangeiras (NAPLLE) of the Federal University of Amapá (UNIFAP), in partnership with the Danielle Mitterrand State Center for French Language and Culture, aimed to contribute to the continuing education of foreign language teachers from public and private school systems in the state of Amapá. Its purpose was to support teachers in the development of teaching activities through virtual platforms. At the end of the workshop, participants received a certificate and completed a research questionnaire. The responses collected through this questionnaire were used for the development and reflection presented in this article, with due authorization from the participants.

To enable the workshop to take place, a registration period was opened from June 1 to June 15 through a link generated on Google Forms, which was disseminated via WhatsApp,

social media, and other online channels. One hundred slots were made available; however, only 74 individuals registered. The workshop was held on June 16, on a Saturday, in order to accommodate the availability of most teachers, from 9:00 a.m. to 12:00 p.m.

In total, forty-five French language teachers, one Physical Education teacher, one Early Childhood Education teacher, and twenty-seven undergraduate students enrolled in the Portuguese–French Language and Literature program participated in the workshop. Thus, the audience consisted of 63% teachers and 37% university students. Due to the broad online dissemination of the registration form, some participants were from cities other than Macapá (AP), such as Recife (PB), Fortaleza (CE), among others.

It is worth noting that, despite the large number of registered participants, only twenty-two (22) individuals completed the final questionnaire that generated the data for this investigation. All participants chose pseudonyms to ensure the preservation of their identities, and the use of the data for academic purposes was duly authorized by the participants.

The questionnaire administered at the end of the workshop consisted of eight (8) questions related to the use of Canva and Information and Communication Technologies (ICT) in teaching activities. Of these, only six (6) were selected for analysis, as outlined below:

- a) Were you already familiar with the Canva platform?
- b) Before the pandemic, did you already use technological resources (ICT) in your classes? Which ones?
- c) Which activity or activities proposed in the Canva Workshop did you like the most?
- d) Do you usually produce your own teaching materials? If so, what types of tools do you use?
- e) Do you think it is important for teachers to prepare their own teaching materials? Please justify your answer.
- f) Do you believe that social media (Instagram, Facebook, Twitter, etc.) contribute positively to the foreign language teaching–learning process? Please justify your answer.

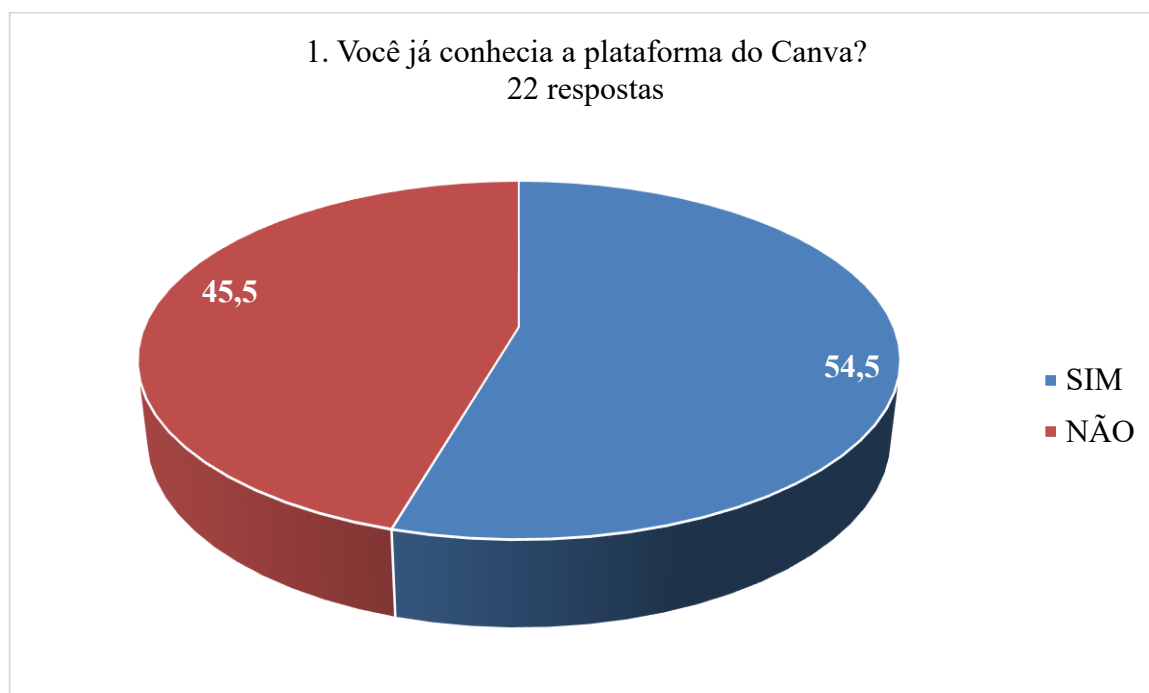
The responses to these questions made it possible, on the one hand, to outline a profile of teachers' and undergraduate students' levels of adoption, frequency of use, and skills regarding ICT before and during the pandemic; and, on the other hand, to relate these aspects to issues of teacher education for the use of ICT in the region.

## Presentation and discussion of the data

Taking the term “new” technologies as a primary reference, it can be stated that emerging technologies have long been gradually introduced into language teaching—for example, through the adoption of microsystems and cassette tapes, projectors, computers, and digital books. However, at no other moment in history has their introduction and dissemination taken on the characteristics observed in contemporary times, particularly with regard to social insertion, reach, speed, mobility, and the tools made visible by the Internet. Nevertheless—and not surprisingly—the data collected in this study point to a significant lack of knowledge of tools that have long been available and are still scarcely used in teaching activities in the state of Amapá.

The COVID-19 pandemic made it possible to open windows and look at the dust hidden under the rug of teacher education institutions, prompting questions about the role that ICT have been given in teacher training. The lack of familiarity with the Canva platform—which served as a mobilizing element in this study—illustrates this issue. Although the platform has been available for approximately ten years, about 55% (fifty-five percent) of the participants were partially or entirely unfamiliar with its applicability (Figure 1). It is important to emphasize that the central issue is not the lack of knowledge of the platform itself, but rather teachers’—both in-service and pre-service—lack of skills and familiarity with this and other platforms and virtual resources that exist and are available for educational purposes.

**Figure 1** – Knowledge of the Canva platform before the pandemic<sup>3</sup>

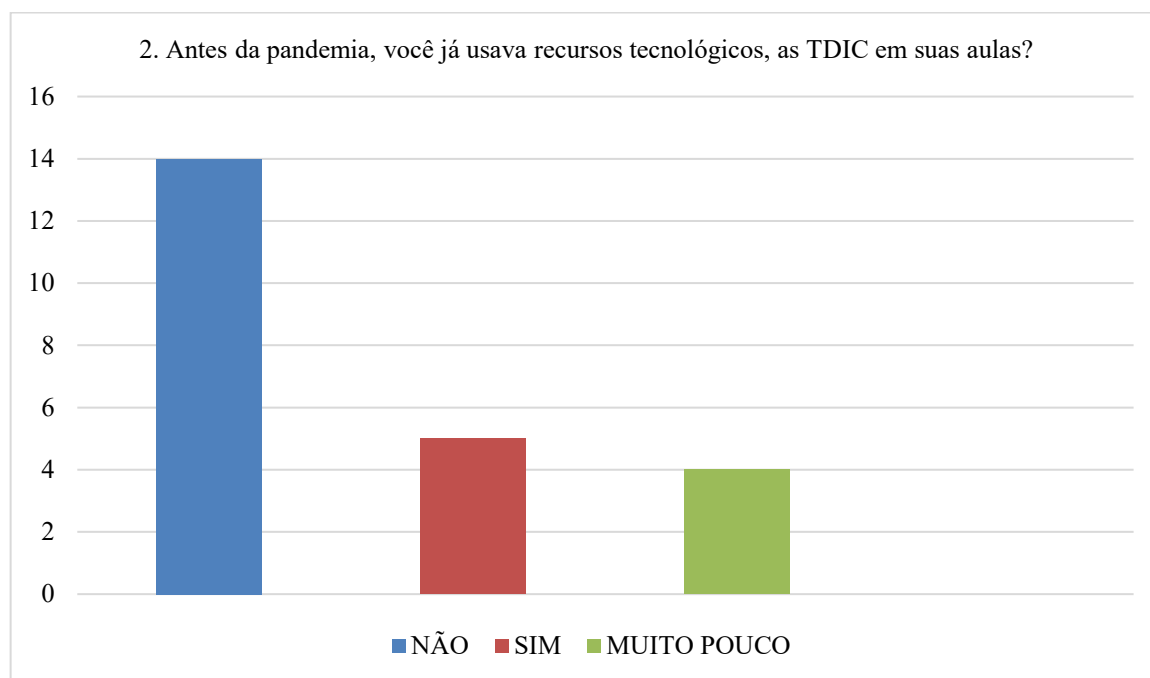


Source: Prepared by the authors.

Another relevant finding concerns the fact that, among those 45% who reported being familiar with the platform, only 20% stated that they used it to design activities for their language classes. This implies that knowing a given platform is not equivalent to its effective use as an educational tool. Accordingly, when asked about their prior use of contemporary technological resources in their classes before the pandemic, approximately 70% reported not using them, while the remaining 30% were divided between those who already used them frequently (20%) and those who used some technological resources sporadically (10%), as illustrated in Figure 2.

<sup>3</sup> Translation: 1. Were you already familiar with the Canva platform? 22 Responses; Blue: Yes; Red: No.

**Figure 2** – Use of ICT before the pandemic<sup>4</sup>



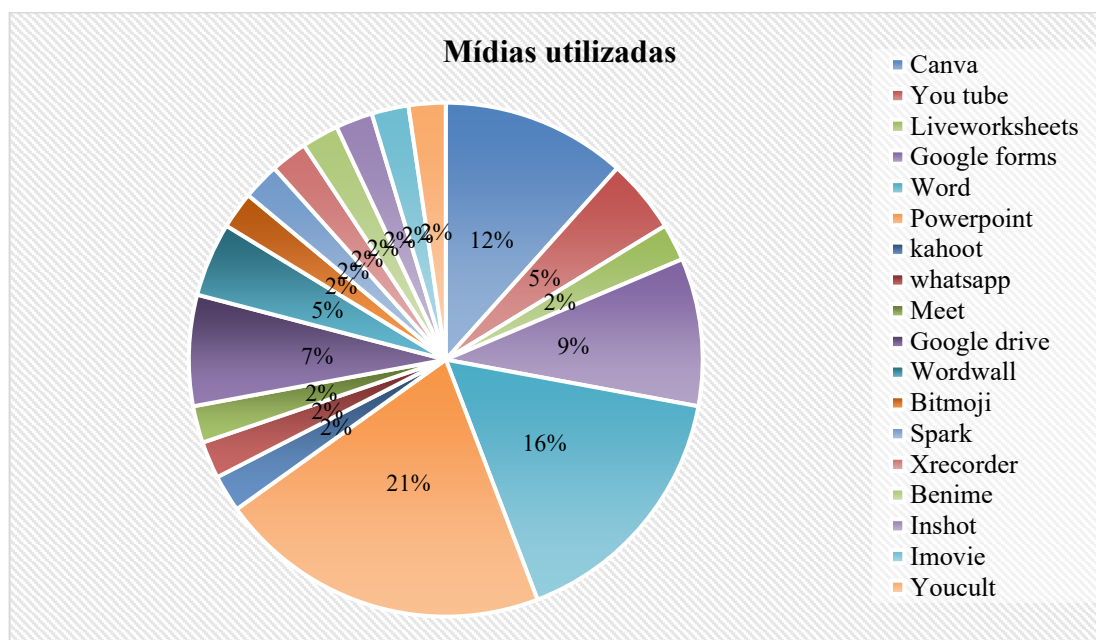
Source: Prepared by the authors.

Regarding the resources and platforms known and already used by the participants, all those mentioned in Question 2 and Question 4 were compiled and classified in order to provide a broader overview of the technological artifacts in use. This classification was based on four categories: multimodal platforms, repository websites, sources of didacticizable materials, and instrumental resources. As multimodal platforms—within which different text modalities and functionalities operate, with or without interactive use—the following were mentioned: Canva, Padlet, WhatsApp, Kahoot, Wordwall, and Spark.

As repository websites—through which professionals access previously prepared activities—the platforms cited were Bonjour de France, Bonjour du monde, Le point du FLE, and TV5Monde. Classified as sources of didacticizable materials were YouTube and Liveworksheets, while instrumental resources included Photoshop, Bitmoji, Google Meet, Google Drive, and XRecorder.

<sup>4</sup> Translation: 2. Before the pandemic, did you already use technological resources, TDICs, in your classes? No; Yes; Very little.

**Figure 3** – Platforms and websites known and/or used by participants in FLE classes

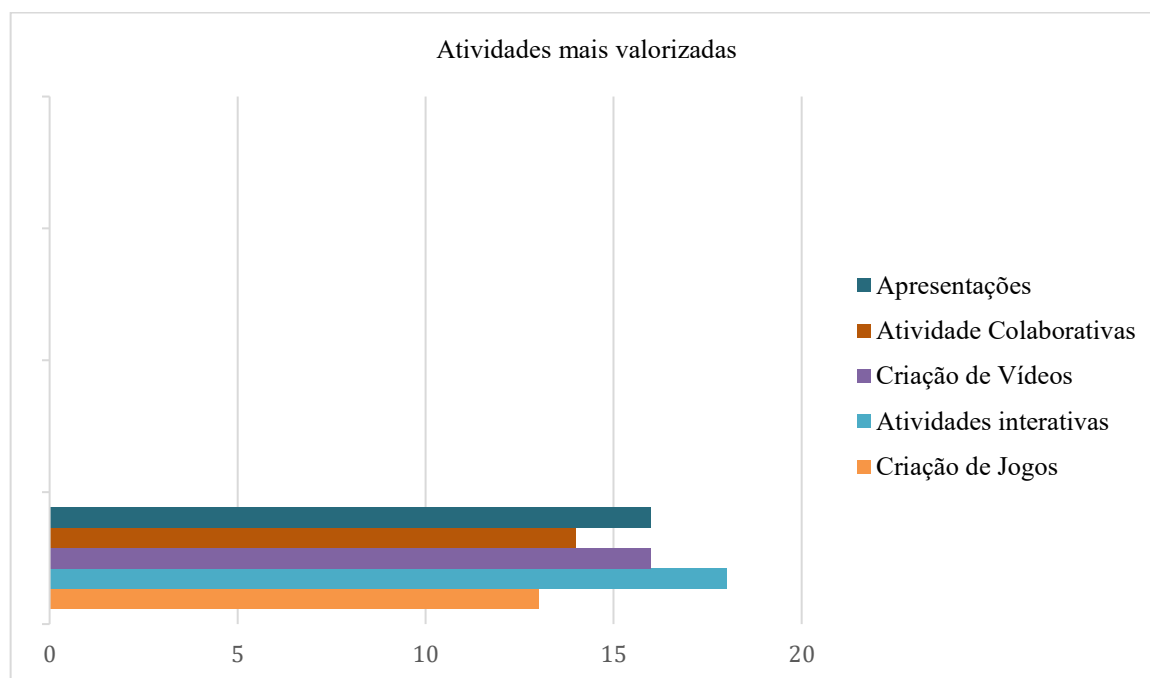


Source: Prepared by the authors.

Although the resources identified do not represent an insignificant number of online tools, they are certainly far fewer than what is currently available online, whether free or paid. Beyond this quantitative aspect, it is important to note that the main resources used are not interactive, but rather instrumental in nature—those that facilitate the design of activities, presentation, storage, and distribution of content. This group includes PowerPoint, Word, Google Forms, and Google Drive, which were used by 53% of the participants. It is worth emphasizing that, although these systems offer multimodal resources, in most cases the activities are limited to the use of written texts.

These findings, however, contrast with the activities that were most highly rated and appreciated by the workshop participants, as shown in Figure 4 below:

**Figure 4 – Most highly valued activities<sup>5</sup>**



Source: Prepared by the authors.

The design of interactive activities—those that allow teachers to diversify methods of knowledge transmission and encourage students to become active participants in the teaching–learning process—and collaborative activities—which aim to enhance students’ cognitive and socio-emotional development by encouraging group study and work, fostering values such as respect, empathy, and responsibility—along with activities involving the creation of videos, games, and presentations that incorporate multimodal resources, were the most appreciated by participants. This establishes a direct relationship between reality and expectations, between the actual and the ideal in teachers’ instructional planning.

Aligned with the aspiration to become technologically self-sufficient, there was unanimous recognition of the high importance attributed to teachers’ production of their own teaching materials. This was justified by arguments emphasizing teacher autonomy and creativity, the possibility of adapting materials to a specific audience, selecting appropriate tools, and revising activities based on feedback received, as well as by the lack of specific teaching materials within the state school system and the inadequacy of some pre-designed activities that may not align with the desired proficiency levels and skills. Contradictorily, however, the rate of adoption of platforms appears to decrease in proportion to their complexity

<sup>5</sup> Top-down translation: Presentations; Collaborative activities; Video creation; Interactive activities; Game creation.

and the range of multimodal resources they offer. Thus, only 12% reported using Canva, 5% used Wordwall and YouTube, and 2% employed tools such as InShot, iMovie, Spark, Benime, Padlet, among others.

Likewise, social media are viewed predominantly positively (82%) as teaching resources by the participants. Their statements emphasize attributes such as widespread use, accessibility, and linguistic diversity—lexical, phonetic, morphosyntactic, sociolinguistic, among others—as well as the use of language in everyday situations and the strong identification between younger generations and social networks. These aspects are perceived as beneficial to teaching quality and the learning process. Clearly, these positions reveal a reflective stance adopted by teachers regarding the new linguistic, discursive, and multimodal demands that have emerged alongside the expansion of ICT and, consequently, the necessary redefinition of teaching practices in order to integrate new media into education, as advocated by Gal *et al.* (2021).

The question that arises in this context is the following: if teachers are aware of the importance of producing their own teaching materials and of the existence of available resources for this purpose—such as websites, tools, platforms, and social media—why do most of them restrict themselves to the use of more limited platforms in terms of instrumental resources—oral, written, and visual—available online? The data analyzed—although not intended for generalization—suggest factors such as lack of knowledge, insufficient skills, insecurity, and limited access to ICT.

Numerous multimodal platforms remain unknown to the general public and even to teachers—especially those who have not received specific training in their use. Moreover, multimodal didactic-pedagogical professional development programs offered to teachers are still scarce, a situation often compounded by the limited time available for continuing education in public school systems.

The inability to use diverse technological resources, which require consistent digital literacies involving individual and social skills, as conceptualized by Selfe (1999), constitutes a significant professional barrier. After all, creating, editing, and incorporating audio, video, and images into digital documents are not inherent skills of teachers who were trained in the final decades of the twentieth century, as one might assume.

Furthermore, this lack of proficiency leads both to insecurity in the development of digital teaching materials and to teachers remaining within their comfort zone, represented by textbooks and pre-prepared materials offered by repository websites or platforms. For language

teachers to “update” their practices, it is necessary to develop skills to construct meaning from multimodal texts, locate, filter, and evaluate available materials, and understand their logic of application within teaching contexts.

Thus, in line with Buzato (2003, 2007), it is understood that the multiplicity of communication channels, tools, and resources available online also requires pedagogical skills for multiliteracies, which go far beyond searching for videos on YouTube, creating tests and exercises in Google Forms, or preparing presentations in PowerPoint. In this context, teachers’ choices of digital tools are closely related to their limited ability to manage multimodal activities through existing platforms, as they often do not feel adequately prepared to work with them.

Finally, these factors are compounded by the lack of high-quality internet access for both students and teachers. In Amapá, there remains a significant disparity in the quality of internet services compared to other regions of the country, which imposes additional instrumental constraints and encourages the design or proposal of activities that do not require large data consumption or high connection speeds.

## **Final Considerations**

This article proposed an analysis of the profile of ICT use, preferred multimodal activities, and the skills required of foreign language teachers in the post-pandemic educational context of Amapá, relating these aspects to the multiliteracies currently demanded in the teaching–learning process. The profile was developed based on a formative activity aimed both at contributing to teachers’ digital literacy during the most critical phase of the pandemic and at gaining deeper insight into their practices, skills, and needs.

The results indicate that although ICT are not new to the everyday practices of contemporary society or to educational environments, they remain novel for a large portion of the teaching workforce. The 2019 pandemic served as a revealing factor of a reality that was already known but had been naturalized, concealed, or ignored. COVID-19 exposed the vulnerabilities of teaching practice, but it also stimulated awareness and a search for improvement and adaptation to the new demands of education.

Among the main aspects identified from the analysis of usage, skills, and online activities, the following stand out: (a) there is still considerable lack of awareness within the

teaching community regarding the existence and availability of multimodal educational platforms; (b) the most frequent uses are limited to basic tools that require minimal skills, low data generation or management capacity, and do not depend on high-quality internet connectivity; (c) dealing with interfaces—even those considered easy and intuitive—continues to pose barriers in the mediation between teacher, knowledge, and student; and (d) insecurity in designing multimodal activities stems both from limited proficiency with tools and from the need to pedagogically integrate different communication channels and modes, as well as to master their metacognitive functioning.

Considering that the primary objective of language teaching is the effective use of languages in diverse social and cultural contexts, it becomes evident that the incorporation of multiliteracies into educational (schools) and formative (universities) environments is essential for the integration of teachers and students into the contemporary world, where languages, communication channels, and digital tools intersect. Within these new communicative environments, new multimodal and multimedia practices of behavior and interaction are constantly activated, which, in turn, require new ways of thinking about schooling, teaching, and education in the modern world.

## REFERENCES

- ANTÔNIO, J. C. Uso pedagógico do telefone móvel (celular), **Professor Digital**, 2010. Available at: <https://professordigital.wordpress.com/2010/01/13/uso-pedagogico-do-telefone-movel-celular/>. Accessed in: 02 Oct. 2023.
- BUZATO, M. K. Entrevista concedida a Olivia Rangel Joffily. Letramento digital abre portas para o conhecimento. **EducaRede**, v. 23, 2003. Available at: [www.educarede.org.br](http://www.educarede.org.br). Accessed in: 1 Oct. 2023.
- BUZATO, M. K. Desafios empíricos-metodológicos para a pesquisa em letramentos digitais. **Trabalhos em Lingüística Aplicada**, Campinas, SP, n. 1, p. 45-62, 2007.
- BUZATO, M. K. Novos letramentos e inclusão digital: em direção a um enfoque pós-social. In: BRAGA, D. B. (org). **Tecnologias da informação e comunicação e participação social: possibilidades e contradições**. São Paulo: Cortez, p. 125-146, 2015.
- COPE, B.; KALANTZIS, M. Multialfabetizaciones: nuevas alfabetizaciones, nuevas formas de aprendizaje. **Boletín de la Asociación Andaluza de Bibliotecários**, n. 98-99, p. 53-92, 2010a.
- COPE, B.; KALANTZIS, M. Gramática de la multimodalidad. **Boletín de la Asociación Andaluza de Bibliotecarios**, n. 98-99, p. 93-152, 2010b.
- DUDENEY, G.; HOCKLY, N.; PEGRUM, M. **Letramentos digitais**. São Paulo: Parábola Editorial, 2016.
- GAL, M. B. S. S.; OLIVEIRA, D. L.; MORAES, R. M. A.; PEREIRA, R. C. O papel do professor na era digital: desafios e transformações. **Revista CBTECLE**, v. 4, n. 1, p. 268-283, 2021. Available at: <https://revista.cbtecle.com.br/index.php/CBTecLE/article/view/229>. Accessed in: 2 Oct. 2023.
- GRUPO NOVA LONDRES. Uma pedagogia dos multiletramentos: projetando futuros sociais. **Revista Linguagem em Foco**, v. 13, n. 2, 2021, p. 101-145. Available at: <https://revistas.uece.br/index.php/linguagememfoco/article/view/5578>. Accessed in: 25 Sep. 2022.
- KERSCH, D. F.; COSCARELLI, C. V.; CANI, J. B. (org). **Multiletramentos e Multimodalidade: ações pedagógicas aplicadas à linguagem**. Campinas, SP: Pontes, 2016.
- KNOBEL, M.; LANKSHEAR, C. **A new literacies sampler**. New York: Peter Lang, 2007.
- KNOBEL, M.; LANKSHEAR, C. (org.). **Pesquisando novas alfabetizações: Design, teoria e dados na investigação sociocultural**. Nova York, NY: Peter Lang, 2017.

LANKSHEAR, C.; KNOBEL, M. **Novas alfabetizações: práticas cotidianas e aprendizagem social**. Reino Unido: McGraw-Hill Education, 2011.

LANKSHEAR, C.; KNOBEL, M.; CURRAN, C. Conceitualizando e pesquisando “novas alfabetizações”. **A enciclopédia de linguística aplicada**, v. 2, 2013.

PRENSKY, M. Digital natives, digital immigrants. **Horizon**, v. 9, n. 5, 2001.

SELFE, C. L. **Technology and literacy in the twenty-first century: the importance of paying attention**. Chicago: Southern Illinois University Press, 1999.

SOARES, M. Novas práticas de leitura e escrita: Letramento na cibercultura. **Educ. Soc.**, Campinas, SP, v. 23, n. 81, p. 143-160, 2002.

SOARES, M. Alfabetização e letramento: caminhos e descaminhos. **Porto Alegre**, 2004.

YAMADA, B. A. G. P.; MANFREDINI, F. Tecnologias de informação aplicadas na escola. *In*: ALMEIDA, N. A. **Tecnologias na Escola**. São Paulo: Cengage Learning, 2014.

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