

**DIGITAL INFORMATION AND COMMUNICATION TECHNOLOGIES IN
LANGUAGE(S) TEACHING AND TEACHING PRACTICE**

**TECNOLOGIAS DIGITAIS DE INFORMAÇÃO E COMUNICAÇÃO NO ENSINO
DE LÍNGUAS(GENS) E NA PRÁTICA DOCENTE**

**TECNOLOGÍAS DIGITALES DE INFORMACIÓN Y COMUNICACIÓN EN LA
ENSEÑANZA DE LENGUAS(JES) Y EN LA PRÁCTICA DOCENTE**

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ABSTRACT

This article is an excerpt from a doctoral thesis that aims to investigate how the implementation of active, collaborative, and hybrid methodologies, mediated by Digital Information and Communication Technologies (DICTs), in the conduct of pedagogical activities contributed to the teaching and learning processes of Language(s) during the period of social distancing at the Federal Institute of Pará (IFPA), Santarém Campus, PA. The investigation stems from a central question, unfolded into three guiding questions concerning the limits and possibilities of applying DICTs as didactic-pedagogical resources in both face-to-face and emergency remote teaching (ERT) in the area of Language(s). From the field of Applied Linguistics, the research is qualitative and interpretivist, with an ethnographic approach supported by Clifford (2002) and Flick (2009). The analysis of the synchronous online focus interview technique (Murray, 1997; Gondim, 2002) follows the methodology of Content Analysis, as proposed by Bardin (2016). Grounded in the studies of Lévy (2010), Alves (2020), Bortoni-Ricardo (2008), Moita Lopes (2006), Kenski (2013), Zulfa (2021), Hodgers et al. (2020), and Moran (2017; 2018; 2019), the corpus of analysis consists of experience reports from seven (7) Language(s) teachers at IFPA/Santarém. From the exploration and analysis of these experience reports, it is concluded that the greatest challenge in Language(s) teaching stemmed from ERT, intensified by the restriction of face-to-face contact and limited Internet access for the use of DICTs, given that teachers had already been applying such methodologies in their teaching. Thus, through the use of active, collaborative, and hybrid methodologies via DICTs, it is expected that teachers will analyze, rethink, and (re)construct their pedagogical practices in face-to-face education.

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Keywords: Hybrid Teaching. Language(s). Pedagogical Practice. Technologies.

RESUMO

Este artigo é um recorte da tese doutoral, que objetiva investigar como a implementação de metodologias ativas, colaborativas e híbridas, mediadas pelas Tecnologias Digitais de Informação e Comunicação (TDICs), na condução das atividades pedagógicas contribuíram para os processos de ensino e de aprendizagem de Línguas(gens), no período de distanciamento social, no Instituto Federal do Pará (IFPA), Campus Santarém, PA. A investigação parte de uma questão central, desmembrada em três questões norteadoras sobre limites e possibilidades de aplicação das TDICs como recurso didático-pedagógico no ensino presencial e ensino remoto emergencial (ERE) na área de Línguas(gens). Da área da Linguística Aplicada, a pesquisa é qualitativa e interpretativista com abordagem etnográfica, sustentada em Clifford (2002) e Flick (2009). Na análise da técnica de entrevista focal on-line síncrono (Murray, 1997; Gondim, 2002), segue a metodologia da Análise de Conteúdo, em Bardin (2016). Fundamentada nos estudos de Lévy (2010), Alves (2020), Bortoni-Ricardo (2008), Moita Lopes (2006), Kenski (2013), Zulfa (2021), Hodgers et al. (2020), Moran (2017; 2018; 2019), o corpus de análise é constituído pelos relatos de experiência sete (7) professore(as) de Línguas(gens) do IFPA/Santarém. A partir da exploração/análise dos relatos de experiência conclui que o maior desafio no ensino Línguas(gens) decorreu do ERE, potencializado pela restrição do contato presencial, dificuldade de acesso à Internet, para exploração das TDICs, posto que os(as) professores(as) já exploravam tais metodologias no ensino. Assim, pela exploração das metodologias ativas, colaborativas e híbridas através das TDICs, espera-se que os docentes analisem, repensem e (re)construam suas práticas pedagógicas no ensino presencial.

Palavras-chave: Ensino Híbrido. Línguas(gens). Prática Pedagógica. Tecnologias.

RESUMEN

Este artículo es un recorte de la tesis doctoral que tiene como objetivo investigar cómo la implementación de metodologías activas, colaborativas e híbridas, mediadas por las Tecnologías Digitales de Información y Comunicación (TDIC), en la conducción de las actividades pedagógicas, contribuyó a los procesos de enseñanza y aprendizaje de Lenguas(jes), durante el período de distanciamiento social, en el Instituto Federal de Pará (IFPA), Campus Santarém, Brasil. La investigación parte de una cuestión central, formulada a partir de tres preguntas orientadoras sobre los límites y posibilidades de aplicación de las TDIC como recurso didáctico-pedagógico en la enseñanza presencial y en la enseñanza remota de emergencia (ERE) en el área de Lenguas(jes). Desde el campo de la Lingüística Aplicada, la investigación es cualitativa e interpretativa con un enfoque etnográfico, basada en Clifford (2002) y Flick (2009). En el análisis de la técnica de entrevista focal en línea y sincrónica (Murray, 1997; Gondim, 2002), se sigue la metodología del Análisis de Contenido, según Bardin (2016). Fundamentado en los estudios de Lévy (2010), Alves (2020), Bortoni-Ricardo (2008), Moita Lopes (2006), Kenski (2013), Zulfa (2021), Hodgers et al. (2020) y Moran (2017, 2018, 2019), el corpus de análisis está constituido por los relatos de experiencia de siete (7) profesores(as) de Lenguas(jes) del IFPA/Santarém. A partir de la exploración y análisis de los relatos de experiencia, se concluye que el mayor desafío en la enseñanza de Lenguas(s) surgió durante el ERE, intensificado por la restricción del contacto presencial y la dificultad de acceso a Internet para la utilización de las TDICs, dado que los(as) docentes ya venían aplicando dichas metodologías en su práctica. De este modo, mediante la implementación de metodologías activas, colaborativas e híbridas a través de



las TDIC, se espera que los docentes analicen, repiensen y (re)construyan sus prácticas pedagógicas en la enseñanza presencial.

Palabras clave: Enseñanza Híbrida. Lenguas(jes). Práctica Pedagógica. Tecnologías.

1 INTRODUCTION

Pedagogical practice and teaching practice have been the target of many reflections and inflections throughout the History of Education. This article derives from the thesis entitled *Applicability of Digital Information and Communication Technologies for Language Teaching in Teaching Practice*, defended in the Graduate Program in Languages at the State University of Western Paraná (UNIOESTE), Cascavel Campus, in 2023.

In addition to the constant challenge of seeking quality and efficient teaching and learning, the experience, experience and construction of knowledge in the areas of Languages and their different expressions, contemplating teaching experiences in Portuguese, Spanish, English, Computational Language and Philosophy, in Basic and Higher Education, lead us to several questions, concerns and questions. However, with social distancing⁸ due to the covid-19 pandemic⁹ and the resulting teaching totally mediated by digital technologies, the research expanded to draw a parallel between the exploration of DICTs in face-to-face teaching¹⁰ and social distancing, in emergency remote teaching (ERE),¹¹ completely *online*.

It was in the incessant search for didactic strategies, pedagogical mechanisms and technological instruments that would contribute to teaching-learning and safeguarding lives, that, including the lack of preparation to handle the various technological applications, computers, in addition to the difficulty of accessing *the Internet*, teachers sought in countless ways to respect social distancing. They sought to make their pedagogical practices more agile and effective, in order to fill the gaps left by the impossibility of physical contact during the teaching-learning process entirely *online*.

⁸ Unlike social isolation, social distancing refers to "[...] measures that aim to reduce interactions in a community, which may include people who are infected, not yet identified and, therefore, not isolated" due to contamination by the *Sars-CoV-2 virus*, responsible for the coronavirus pandemic (Aquino *et al.*, 2020, p. 2425).

⁹ Covid-19, a disease that has affected humans, caused by the *Sars-CoV-2 virus*, whose acronym comes from **CORONA VIRUS DISEASE, which means Coronavirus disease. "At first, the spelling 'Covid' obeyed the rule of acronyms: '[...] With more than three letters and pronounceable, the acronyms must be written with a capital letter and the rest in lowercase'. From the moment the acronym started to name the disease, 'covid-19' became a common noun written with lowercase letters, like so many other diseases" (TRF. Federal Justice, 2020, s.p.; ABL, 2022, electronic resource).**

¹⁰ The expression *face-to-face teaching* is used to differentiate it from the meaning attributed to *emergency remote teaching* (ERE) that requires the simultaneous participation of students and teachers at a single moment in class, physical presence even remotely, during the time when the class is actually held.

¹¹ Emergency remote teaching (ERE) consists of a temporary solution that allows the continuity of face-to-face teaching activities during the period of the covid-19 pandemic. Therefore, ERE is not a new teaching modality. It is just a strategy that aims to continue school activities during the school year. To this end, it promotes a temporary curricular change, thus appearing as a viable alternative in the face of the circumstances generated by the pandemic crisis (Hodges *et al.*, 2020).

Thus, to enable the teaching of curricular content in a non-face-to-face manner, teachers implemented active¹², collaborative,¹³ and hybrid¹⁴ methodologies. Students started to attend classes in their home environments, pedagogical activities were carried out by digital means through synchronous and asynchronous interaction¹⁵, highlighting the new and temporary expression used in the area of Education during social distancing: Emergency Remote Teaching (ERE).

In this context, the present research investigates and discusses the potential of DICTs as a didactic-pedagogical resource explored during Language(gens) classes at the Federal Institute of Education, Science and Technology, IFPA, *Santarém Campus*, which offers Technical and Technological Professional Education¹⁶ in formal education¹⁷, in face-to-face and *online* teaching in the ERE. In this perspective, the approach to the theme contemplates the association of the potential of DICTs with didactic-pedagogical methodologies and strategies applied to pedagogical practice and language learning at IFPA/Santarém.

¹² Later defined, in this thesis, the generic term active learning has been used in the sense of student-centered learning, instead of teacher-centered and consists of the act of learning by doing (Moran, 2018).

¹³ Under a broader conception, collaborative learning is said to be "[...] any activity in which two or more people work together to create meaning, explore a topic or improve skills" (Harassim, 1995 *apud* Torres, Alcantara; Irala, 2004, p. 5).

¹⁴ Hybrid learning refers to 'blended education', and consists of the mixture of "[...] face-to-face education with distance education (*online*), promotes the combination of different learning spaces or between formal and informal learning [...]" (Mattar, 2017, p. 27).

¹⁵ Synchronous interaction is one that takes place in real time, that is, "[...] The parties involved in the exchange of messages have immediate access to the responses and reactions of the other, since, in some way, they are simultaneously sharing a communication channel that instantly carries out the exchanges of messages". In asynchronous interaction, "[...] the exchange of messages is interspersed for a period of time that disfigures the instantaneous character of the interaction/synchronous communication" (Jungblut, 2004, p. 105).

¹⁶ In this thesis, the expression Technical and Technological Education is used to encompass Technical Professional Education (EPTM) and Basic Education (EBIS) and Technological Professional Education in Higher Education (EPT/ES). Secondary Technical Professional Education (EPTM) is a type of vocational education found in Basic Education. Its offer is through technical courses of initial technical professional qualification in the integrated modalities, concomitant or subsequent to High School, and technical professional specialization courses, according to the National Catalog of Technical Courses (CNCT). Technological Professional Education, on the other hand, refers to undergraduate and graduate courses, including intermediate outputs of technological professional qualification, observing the National Catalog of Higher Technology Courses (CNCST), technological professional specialization courses and professional Master's and Doctorate programs (Brasil, 2021).

¹⁷ Formal education is that which is developed in institutions regulated by law, certifying, organized according to national guidelines such as schools and universities, with previously demarcated contents, thus constituting institutionalized education (Gohn, 2006, p. 26). Formal education can be offered in Secondary Level Technical Professional Education (EPTM), in Basic Education, integrated and subsequent modalities (EBIS) and in Technological Professional Education under one of three teaching modes: face-to-face, blended (or hybrid) or distance education (DE) (arts. 80 and 81, LDB/1996, Brazil, 1996).

2 THE RESEARCH: FOUNDATIONS AND CONTEXTS

This section presents the foundations and contexts that underpin the research. Initially, we approach a conceptualization of what is understood by research and research report, with the purpose of fostering reflections on the theoretical-methodological foundations that guided the investigative path.

Next, the context of the investigation, the participating subjects and the procedures adopted for the generation of the records are described, as well as the systematic analysis and interpretation of the data produced. Finally, the limitations and delimitations that configure the scope of the study are highlighted.

According to Moreira and Caleffe (2011, p. 248), research can be understood as a systematic search process, supported by data, which aims to answer a question, solve a problem or expand the understanding of a given phenomenon. Methodology, on the other hand, refers to the study of the paths and instruments used in the construction of scientific knowledge.

The research activity is configured as an academic practice supported by two complementary dimensions: the generation of data and the scientific description of the investigated phenomenon. For Amorim (2001), the generation of data is a process that involves the understanding of the subject in relation to his context and his actions. Scientific description, on the other hand, refers to the analysis of the phenomenon studied, whose interpretation is systematized and expressed in the research report.

According to Jobim and Souza (2003), the research report is the result of a process that takes place when the researcher, appropriating the other's gaze, turns this gaze to himself and starts to act from the perspective that the other's gaze allows him to have on the phenomenon studied. This reflective movement contributes to the resignification of his own worldview.

As for the methodological procedures, we present the approach adopted to search for answers to the guiding questions, supported by the theoretical-methodological framework that underlies the investigation on the meanings attributed by IFPA/Santarém teachers to the insertion of DICTs in their pedagogical practices in the teaching of Languages, in the context of Technical and Technological Education.

The research is anchored in the assumptions of Applied Linguistics (AL), of a qualitative and interpretative nature, with an ethnographic orientation and is theoretically based on the field of Applied Linguistics (AL), understood here in an expanded way,

distancing itself from traditional conceptions that treat it only as an application of theories. So, when thinking about AL, we seek to "[...] create intelligibility about social problems in which language occupies a central place" (Moita Lopes, 2006, p. 14), in order to provide "[...] gains to social practices and their participants, in the sense of a better quality of life" (Rojo, 2006, p. 258).

The comprehension and analysis bias adopted from the perspective of Applied Linguistics (AL) was concentrated on a previously delimited object of study, which includes the area of Natural Language Processing (NLP¹⁸), articulated with objectives and procedures supported by the use of multimedia in the teaching-learning process. Thus, we consider problem situations and objects of investigation and interpretation emerging from teaching practice, reported by teachers in the areas of Letters, Portuguese, Spanish and English, as well as Computational Language and Philosophy, working at IFPA/Santarém, both before and during the period of emergency remote teaching resulting from the covid-19 pandemic.

2.1 THEORETICAL-METHODOLOGICAL PERSPECTIVE OF THE RESEARCH

Technically, the analysis of the object of study and interpretation permeated other fields of Science, particularly Anthropology and Sociology, and brought together a set of methods and theoretical-methodological approaches in qualitative research (Bortoni-Ricardo, 2008).

In this article, we contemplated the interpretivist paradigm which, like any other, does not specifically constitute a research method, is only concerned with translating/interpreting subjective and sociopolitical meanings and symbolic actions in the way that, through subject-object interaction, the person (re)constructs his own reality (Thanh; Thanh, 2015).

However, as reality will never be ready, as it is always changeable, the subject-object interaction enables the (re)construction of different worldviews, which is why interpretivist research assumes that what the researcher has as a result of his investigation are not the facts of an objective reality, but, above all, the interpretation that the researcher makes about the interpretations of the subjects who participate in the investigated phenomenon (Bortoni-Ricardo (2008).

Thus, for the development of this research, we adopted the perspective of analysis

¹⁸ The area of NLP, particularly in the Portuguese language, is influenced by several other currents that, by nature, require a multidisciplinary treatment, such as, for example, the areas of Linguistics, Logic, Computer Science, Psychology, among others.

centered on the interpretative paradigm that seemed appropriate to me, since we sought, at a level of subjective experience, to understand the reality experienced in the before-during-after-ERE from the point of view of Language(gens) teachers at IFPA, *Santarém* Campus.

3 METHODOLOGICAL PERSPECTIVE: TYPES OF RESEARCH

In this investigation, we adopted the qualitative approach as a methodological path, understood as a situated activity that inserts the researcher in the context of the phenomenon studied. This type of research consists of a

[...] a set of material and interpretative practices that give visibility to the world. These practices transform the world into a series of representations, including field notes, interviews, conversations, photographs, recordings, and reminders [...] (Denzin; Lincoln, 2006, p. 17).

The qualitative research "[...] explores the characteristics of individuals and scenarios that cannot be easily described numerically" (Moreira; Caleffe, 2008, p. 73). For this reason, we are situated in a qualitative perspective, linked to studies of an ethnographic nature and an interpretative approach.

In turn, ethnography seeks to understand the meaning of actions and events in the way they are perceived by people or groups in their respective cultural contexts (Lüdke; André, 2012). In this sense, ethnographic research is less concerned with describing social events or processes only from reports, but, above all, from "[...] an understanding of the social processes of production of these events and from an internal perspective of the process through participation during its development" (Flick, 2009, p. 31).

Ethnographic research is characterized by direct contact between the researcher and the situation investigated, which enables the construction of processes and relationships that shape the daily experience of professional life, involving "[...] linked and re-elaborated knowledge, attitudes, values, beliefs, ways of seeing and feeling reality and the world" (André, 2009, p. 34).

In the context of this qualitative investigation, we turned to the contents that emerged from the experience reports of each teacher, seeking to understand the creative role they assume in the construction of their teaching practices. To this end, we use Content Analysis, defined as a methodology that

[...] brings together a set of communication analysis techniques aimed at obtaining, through systematic and objective procedures for describing the content of messages, indicators (quantitative or not) that allow the inference of knowledge related to the conditions of production/reception (inferred variables) of these messages (Bardin, 2016, p. 48).

Content Analysis, understood as a method of empirical nature, underlies the set of content analyses that we carry out in this research. Its application depends on the

[...] type of "speech" to which he dedicates himself and the type of interpretation that is intended as an objective. There is no ready-made thing in content analysis, but only a few basic rules, sometimes difficult to transpose. The content analysis technique appropriate to the intended domain and objective has to be reinvented at every moment, except for simple and generalized uses [...] (Bardin, 2016, p. 36).

The application of Content Analysis allowed us to make logical and reasoned inferences about the origin of the messages, considering the sender, the context of production and the possible effects produced by the analyzed discourse. According to Bardin (2016), the objective of this method is to explain, systematize and reveal the meaning contained in the messages that constitute the object of analysis. For this, quantitative and/or qualitative data are used, recorded through a set of partial but complementary techniques.

According to Bardin (2016), conducting Content Analysis involves three main phases: (a) organization of the pre-analysis; (b) exploration of the material, with the processes of coding and categorization; and (c) treatment of results, inference and interpretation. The observance of each of these steps proved to be essential to ensure the coherence and reliability of the results obtained.

As a research methodology applied to the area of Education, we explore the experience report, which, according to Furtado (2018, p. 48), "its conduction is not a mere description", as it seeks to reflect and narrate "educational actions from a consolidated epistemology". In this investigation, the adoption of this methodology enabled the teacher-researcher to describe and infer aspects experienced in the use of DICTs in the daily life of her teaching practice in Spanish, in addition to favoring the deepening of knowledge that contributed to her professional training in the context of the Doctorate.

In the procedures for generating records for Content Analysis (Bardin, 2016), we explored different tools of DICTs, which enabled the application of the synchronous online focus group interview technique. This methodological choice proved to be pertinent in view of the restrictions imposed by social distancing during the period of the covid-19 pandemic.

As a technique for recording the material intended for analysis, we understand the interview, in the conception of Moreira and Caleffe (2008, p.166), as "[...] a conversation with purpose".

From the perspective of Schmidt, Palazzi and Piccinini (2020, p. 961), "[...] Online interviews are an alternative for the continuity of research that was already in progress, or even for carrying out new studies during the Covid-19 pandemic". The authors reinforce that this interview format constitutes an effective strategy for the registration of analysis material in qualitative investigations, especially because it enables interaction between researcher and participants in contexts of face-to-face restriction, without compromising the quality of the data obtained.

The combination of *online* interview techniques and synchronous *online* focus group techniques has become increasingly frequent in different areas of research, both nationally and internationally, with varied applications in various fields of human activity (Murray, 1997; Gondim, 2002; Fox; Morris; Rumsey, 2007).

The synchronous online *focus group* is an effective tool for the production of analysis material, based on collective discussions centered on a specific theme, as highlighted by Gondim (2002) and Fox, Morris and Rumsey (2007). In this format, discussions should flow spontaneously, without a rigid structure, and should be conducted by a moderator, usually the researcher responsible for the study.

According to Gondim (2002, p. 151) it is the moderator who "[...] assumes a position of facilitator of the discussion process, and its emphasis is on the psychosocial processes that emerge, that is, on the interplay of interinfluences of the formation of opinions on a given topic".

According to Murray (1997) and Gondim (2002), it is up to the moderator to conduct the discussion in such a way as to allow the group to explore the proposed theme in a broad way, considering and comparing the opinions of each participant, since the dynamics of the focus group reflect the individual expression of its members. When an opinion is presented by only a few participants, Gondim (2002, p. 151): "[...] for the purpose of analyzing and interpreting the results, *it* (the opinion, emphasis added) is referred to as the group's".

In the synchronous online *focus group*, all participants interact with each other, simultaneously, in real time, in chat rooms or through TDICs tools that enable *online conferences* (Fox; Morris; Rumsey, 2007). To this end, there is a need for a script, Theme

Guide or Discussion Guide, which includes all the topics to be addressed in order to ensure that all these topics are adequately addressed (Gondim, 2002).

According to Flick's opinion (2009, p. 189) that "[...] as an analytical technique for focus group data", the exploration of Content Analysis is recommended. For this reason, I chose as the *corpus* of analysis of the research the content present in the participants' experience reports about the object of the study: the application of DICTs and active, collaborative and hybrid methodologies in the development of pedagogical practice in the teaching of Languages, face-to-face and in the ERE at IFPA/Santarém.

Thus, the corpus of analysis focused on the experience reports on teaching practice, produced through the application of the interview technique in a synchronous online focus group format, structured specifically for this research.

During the elaboration of the protocol of the Discussion Guide for the synchronous online focus group, which is part of the second part of the recording instrument, the contribution of verbal interaction to the understanding of the mechanisms of speech use in pedagogical practices was considered, providing subsidies for the analysis of Language(gem) activities mediated by DICTs (Bortoni-Ricardo, 2008; Thanh; Thanh, 2015).

3.1 CONTEXT, SUBJECTS AND PROCEDURES

The *locus* of this research was the Federal Institute of Education, Science and Technology of Pará (IFPA), Santarém Campus, in the state of Pará, an institution created by Law No. 11,892, of December 29, 2008. The IFPA aims to offer Basic Education, Technical Professional Education and Technological Professional Education, as recommended by Brazilian educational legislation (Brasil, 1998).

3.1.1 Research Subjects

At IFPA/Santarém Campus, we identified a faculty composed of ten (10) teachers with training in the areas of Languages (Portuguese, Spanish and English), Computational Language and Philosophy, who work in the courses of Technical Professional Education, Technological Professional Education, Proeja and Graduate Studies.

During the period of Emergency Remote Education (ERE), seven (7) teachers agreed to participate in the research reported in this article, three (3) of whom were self-declared as belonging to the male gender/sex, hereinafter identified by teacher(s), and four (4) belonging to the female gender/sex, hereinafter identified by teacher(s).

These professors worked in the area of institutional management, coordinating and supporting professors and students in the development of courses in synchronous and asynchronous formats. In addition, they played an essential role in assisting students and families, contributing significantly to the continuity of teaching activities during the pandemic period.

To register the specificities related to the identification of the sample participants, we adopted a coding strategy that employs fictitious names composed of only three letters, defined according to sex/gender. This form of identification is not directly related to the order of the schedule of the synchronous online focus group meetings (Table 1).

The procedure adopted is in line with the regulations of the National Health Council (Brasil, 2012; 2013; 2016), ensuring compliance with the ethical principles of scientific-academic research and the preservation of the integrity and rights of the professors who voluntarily participated in the study.

3.1.2 Registration, Analysis and Interpretation Procedures

After the issuance of the favorable opinion by the Research Ethics Committee of the State University of Western Paraná (Unioeste), the actions scheduled for the insertion of the project in the investigative locus, the Federal Institute of Education, Science and Technology of Pará (IFPA), Santarém Campus, began.

The actions were developed in specific phases. In the first, the researcher's initial and official contact with the General Directorate of IFPA/Santarém took place. With institutional consent, the project was presented to the Board of Education, Research and Extension and, later, to the professors invited to participate in the study.

With the agreement of the professors, with the consent of the aforementioned professors, the copies of the Project were forwarded to the Opinion of the Ethics Committee, the Informed Consent Form for the Use of Image and Sound of Voice (ICF/TCUISV) and the Declaration of Use of Data. Still in this phase, upon authorization from IFPA to carry out the research, we requested support from the Coordination of the Courses to contact each of the possible and probable participating teachers.

In the second phase, we carried out the initial approach with the participating teachers by *email* and *WhatsApp*, presenting the project and sending the ICF/TCUISV and the Declaration of Data Use. We asked each professor to authorize, through these documents,

their participation in the research, the recording of voice and image during the synchronous online focus group interview and the collection of the corresponding signatures.

After this initial stage, we scheduled the following meetings with the purpose of clarifying any doubts and discussing the possible ways of generating the information necessary to meet the objectives defined in the research.

In the second phase, as face-to-face contact was not possible due to the covid-19 pandemic and social distancing measures, we decided to hold the focus group in a synchronous *online* format, through the *Google Meet* platform. All invited teachers, contacted first by *WhatsApp* and then by *email*, agreed to participate, pointed out *Google Meet* as the most appropriate resource and suggested possible dates and times for the meeting.

During this stage, with the support of the IFPA/Santarém Course Coordinations, considering the availability of the group of professors, who committed to collaborate with the research, by mutual agreement, three moments were defined for the realization of the synchronous online focus group meetings on different days and times.

The first meeting took place on October 5 and was attended by a teacher. On October 6, 2021, we held the second and third meetings. The second had the participation of a teacher and a teacher. And, in the third, three professors participated, one professor and two professors.

In the third stage of the study, the theoretical foundation of the thesis was resumed, as well as the transcription and analysis of the content produced in the experience reports during the synchronous online focus group meetings. At this stage, the Sociodemographic Registration Units, which characterize the research sample, were also organized and examined (Table 1).

Table 1

Sociodemographic registration units

Sociodemographic Registration Units (Self-declaration – from or on)
Belonging to the male or female sex/gender, age, marital status and offspring.
Professional training and academic title for teaching.
Time of teaching and professional performance at IFPA.
Weekly workload and shift of professional activity at IFPA.
Functional situation at IFPA and in another Higher Education Institution (HEI).

Accumulation of functions/positions (teaching and institutional management), participation in study groups and/or in research and/or extension projects at IFPA and/or another HEI.

Source: Adapted from RIEDNER, 2024, p. 79.

4 RESULTS AND DISCUSSIONS

As for the generation of sociodemographic information, this occurred through the electronic form [*on-line*], sent by institutional e-mail (*e-mail*), which facilitated the application of the synchronous online focus group technique , since previous knowledge about the context and the participants contributed to the elaboration of the sociodemographic profile and the professional training of the participant.

The electronic form consisted of a kind of questionnaire, characterized as an excerpt from the first part of the record generation instrument (Table 1: Sociodemographic Registration Units) and aimed to outline a professional identity profile of the participants in order to present the reader with a brief characterization of the sample.

Some sociodemographic specificities of the participants registered were analyzed/presented here. Starting with initial academic training in Higher Education. Among the teachers, there was a predominance of training in Languages (Portuguese/English and Portuguese/Spanish and English Language and Literature) and in Pedagogy. The teachers revealed initial training in Philosophy, Languages and Technology in Computer Networks, the latter being especially focused on the Language of Digital Communication and Information Technologies, important for the conduction and effectiveness of the ERE at IFPA/Santarém.

In the synchronous online focus group meetings , we found that all IFPA/Santarém professors participated in and/or coordinated study groups or research or extension projects. The study groups and/or research/extension projects were listed in alphabetical order (Table 2).

Table 2

Study groups and/or research/extension projects at IFPA/Santarém

Study group and/or research/extension projects
Linguistic Atlas of Brazil (ALIB).
Coloniality of power, knowledge and art: transversal critiques.
Study and research at the Internship Center.
Software Development Teams.
Digital Genres in Vocational Education.

Geosociolinguistics and Socioterminology (GeoLinTerm).
Study Group on Digital Genres in High School and in the National Program for the Integration of Professional Education with Basic Education, in the Youth and Adult Modality (Proeja).
Research group on Language and Linguistic Processing.
Workshop on Cyberculture.
The impacts of the Continuing Education Program (Alfmat) of the Municipal Department of Education of Belém, PA, on the pedagogical practice of teachers of Cycle II of the School of Early Childhood Education and Elementary Education Prof. Pedro Demo.
Research and development of the Structuring Teaching Nucleus of the Technology in Events Course.
Protagonists of Contemporary Youth Narratives.

Source: Adapted from RIEDNER, 2024, p. 82.

The organization of the Registration Units and Context Units (Bardin, 2016) for the analysis of the content present in the reports of the teachers who conducted the discussions in the synchronous online focus group meetings (Table 3), occurred based on the questions proposed in the Record Generation Instrument.

Table 3

Registration and context units guiding the synchronous online focus group

Order	Registration Units	Context Units
1st	Experiences	Reports of experiences lived with the use of educational technologies during the process of professional training (initial and continuing) of teachers.
2nd	Active, collaborative, and hybrid practices	Participants' perception of the preparation of teachers and students for the exploration and application of DICTs in contexts that combine active, collaborative, and hybrid methodologies in the classroom that lead to the (un)success of language teaching in <i>offline</i> and <i>online modes</i> , expressions of synchronous and asynchronous classes during ERE in the covid-19 pandemic.
3rd	TDIC in Offline and Online Language Teaching	Conditions, scenarios and contexts of use of DICTs at IFPA, <i>Santarém Campus</i> , to lead teachers to reflect on challenges, limits and possibilities of DICTs in the language classroom, synchronous and asynchronous in ERE in the covid-19 pandemic.
4th	Educational policies in Technical and Technological	Teachers' perception of educational policies at IFPA, <i>Santarém Campus</i> , institutional incentive, ease of access to the Internet, student motivation to study with TDICs, incentive to active and collaborative learning, teacher's

	Education in <i>offline</i> and <i>online</i> <i>teaching</i>	motivation to work in hybrid teaching, offline and online modalities and synchronous and asynchronous classes in ERE during the covid-19 pandemic.
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Source: RIEDNER, 2024, p. 83

To generate the analysis material from the synchronous online focus group , according to each Registration and Context Unit, the Google Meet platform was used , which enabled the recording of the experience reports in the voice of the participants, according to previous authorization. These recordings were transcribed, faithfully respecting the content present in each participant's report.

The fourth and last phase of the research corresponded to the organization of the academic report, appreciation by the participants of this report and the defense of this thesis.

4.1 LIMITATIONS AND DELIMITATIONS OF RESEARCH

In this item, we present the main limitations and limitations that affected the development of the research, especially with regard to the time allocated to the meetings, the choice and application of the data generation instrument, the analysis of experience reports and the scarcity of studies related to the exploration of DICTs in the pedagogical practice of language teachers.

These considerations, which concern the real and methodological conditions of the investigative process, were originally discussed in the doctoral thesis (RIEDNER, 2023) and are resumed here because they are essential to understanding the course of the study and the circumstances that involved the generation and analysis of the data:

i) First Context Unit – lived experiences: reports of experiences lived with the use of educational technologies during the professional training process (initial and continued) of the teachers participating in the synchronous online focus group .

ii) Second Context Unit – active, collaborative and hybrid practices in the Languages classroom: participants' perception of the preparation of teachers and students for the exploration and application of DICTs in contexts that combine such methodologies in the classroom, which leads to the (un)success of Languages teaching in *offline* and *online modes*, expressions of synchronous and asynchronous classes in ERE during the period of the covid-19 pandemic.

iii) Third Context Unit - DICTs in *offline* and *online* language teaching: conditions, scenarios and contexts of use of digital technologies at IFPA/Santarém, to lead teachers to reflect on the challenges, limits and possibilities of DICTs in the classroom of synchronous and asynchronous languages in the ERE of the covid-19 pandemic.

iv) Fourth Context Unit – educational policies at IFPA/Santarém in *offline* and *online* teaching: perception of the teachers participating in this research on educational policies, institutional incentive, ease of access to the *Internet*, student motivation to study with DICTs, incentive to active and collaborative learning, teacher motivation to work in hybrid teaching, *offline* and *online modalities* and synchronous and asynchronous classes in the ERE of the covid-19 pandemic.

In this sense, when we consider the experience reports lived by teachers with educational technologies during the professional training process, we observe that, despite the limitations and challenges faced at the time, initial training provided only basic computer knowledge.

Currently, in view of the accentuated technological evolution, it is essential to offer the future teacher, who will work in educational institutions, new learning opportunities in the computational area. Such training should enable the didactic-pedagogical use of technological resources, respecting the context, conditions and reality of each teacher, so that the use of DICTs is effectively integrated into the academic routine.

5 CONCLUSION

Considering the guiding question of this research, which seeks to discuss the potential of Digital Information and Communication Technologies (DICTs) as a didactic-pedagogical resource in the Language(gens) classes of the Federal Institute of Education, Science and Technology of Pará – Santarém Campus (IFPA/Santarém), an institution that offers Technical and Technological Professional Education both in the face-to-face modality and in emergency remote teaching (ERE), we propose to reflect on the possibilities of integrating DICTs into teaching methodologies and strategies applied to teaching practice and language learning.

In this sense, we seek to favor the analysis, reflection and (re)construction of pedagogical practice in face-to-face teaching, presenting below some considerations arising from this discussion. We observed that the experience reports lived by each teacher participating in the synchronous online focus group meetings, corresponding to the respective Context Units, were organized into distinct sections and subsections, in order to

facilitate the analysis of the content and, consequently, enable a broader understanding of the situations experienced and the challenges faced.

Thus, we found that the results of research, both national and international, corroborate the understanding that the process of appropriation of DICTs in the pedagogical practices of teachers who work in professional, technical and technological training courses is still in the consolidation phase, not being fully established (Kenski, 2013; Silva, 2015; Pinto, 2015; Williamson, Eynon, Potter, 2020; Barin *et al.*, 2020).

Thus, based on the analyzed reports and considering the aforementioned assertion, according to which the process of appropriation of DICTs in pedagogical practices is still being consolidated, we present and discuss the content related to the second Context Unit: active, collaborative and hybrid practices in Language classes.

Thus, when we analyze the reports of experience lived by teachers with the use of educational technologies during the professional training process, we found that, even in the face of the limitations and challenges faced at the time, there was a subtle advance in the field of information technology during initial training.

In this scenario of accelerated technological evolution, it is essential that new learning opportunities in the area of digital technologies are provided to the future teacher, who will work in educational institutions, enabling him or her to develop his or her practice with greater didactic-pedagogical exploration of technological resources, in line with his or her context, conditions and reality. The purpose is for the use of DICTs to be effectively and meaningfully integrated into the academic routine.

In addition, in view of the trajectory of this research, we recognize the relevance of carrying out a systemic evaluation that contemplates the institutional efforts undertaken, identifies achievements and eventual (un)successes, and systematizes the aspects that showed greater weaknesses and functional limitations.

Such evaluation points could serve as preparation for facing possible future situations that require emergency actions, such as academic dropout and massive failure, which compromise the organizational structure of the institution and require an active search for students, or, in the opposite direction, automatic or massive approval, which requires curriculum replanning, diagnostic evaluation to guide the recovery of learning and review of promotion criteria, among other measures (Brasil, 2021b).

From the results of this research and the analysis of the experience reports, we show that the use of Digital Information and Communication Technologies (DICTs) constitutes a

promising path for the expansion and improvement of pedagogical practices, especially in the teaching of Languages. The experiences of teachers during Emergency Remote Education (ERE) allowed us to identify not only challenges, but also opportunities for innovation and collaboration that can inspire the face-to-face context.

In this way, we propose to expand the possibilities of inserting DICTs as didactic-methodological resources integrated with face-to-face teaching, favoring the (re)signification of teaching practices and strengthening professional training. We believe that the consolidation of a critical and reflective digital pedagogical culture can contribute to the development of more meaningful practices, contextualized and committed to the contemporary demands of education.

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