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THEORETICAL AND TECHNOLOGICAL KNOWLEDGE IN DISTANCE EDUCATION: AN ANALYSIS OF DIDACTIC RESOURCES IN THE PEDAGOGY COURSE

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ABSTRACT

The present study analyzes the challenges and demands of students of the Distance Education Pedagogy Course at UFPR in relation to theoretical and technological knowledge. The research, of a qualitative and exploratory-descriptive nature, was conducted based on the netnographic methodology, examining the interaction of students with analog and digital didactic resources. Responses were collected from 41 students, through questionnaires applied in the Virtual Learning Environment (VLE). The results indicate that, although analog resources are still widely used and valued by students, digital technologies have become increasingly present and essential in the training process. Among the main digital resources pointed out are the use of notebooks, cell phones, videoconferencing platforms and digital materials. The study highlights the difficulties faced

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Revista ARACÊ
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by students in handling these tools, especially in the context of the pandemic, which accelerated the transition to digital education. It is concluded that the integration between analog and digital resources is fundamental to meet the contemporary demands of Distance Education, and it is necessary to have a pedagogical planning that promotes inclusion and technological accessibility for all students, in order to enhance learning and promote effective teacher training.

Keywords: Distance Education. Pedagogy. Didactic Resources. Digital Technologies. Teacher Training.

Revista ARACÊ
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INTRODUCTION

The substantial and progressively accelerated metamorphoses that unfold in the twenty-first century encompass multiple domains and permeate a large part of the social spheres. In incessant evolution, theories and practices within the scope of the history of education are proposed to adapt to this dynamic context. The contingent of educators, notably mature individuals, exhibits proficiency in conventional analog didactic methods. However, when confronted with the digital sphere, the question arises about the effectiveness of the significant transformations promoted, raising reflections on the present and future impact of these changes on the formation of adult learners.

As outlined by Freire (1999), the educational process demands, on the part of the educator, a commitment to education throughout the life of the human being in its entirety, considering the intrinsic condition of incompleteness that characterizes humanity. In this context, the educator is called upon to reexamine and adopt new didactic-pedagogical paradigms, in an attempt to promote effective communication with students, since learning is recognized as a central and primordial function of human existence. The educator's openness to the challenges and demands inherent to the act of educating becomes imperative.

In the face of the advent of digital technologies, in particular the New Information and Communication Technologies (ICT), there are diversified inquiries about the impacts, whether gains or losses, especially with regard to human cognition (CHAGAS, 2018). The author highlights that the current educational system demands different knowledge, as well as the interaction between technological cognitive skills and practical knowledge of educational communication, which are revealed as fundamental elements in the new school practices.

Freire (1985, p. 51) points out that "education is not possible if man isolates himself from the world, creating it only in his consciousness, because in this way he would be incapable of transforming it". Therefore, one cannot approach the world and man, but consider the intrinsic relationship between both, in which the transformation of the former occurs through the intervention of the latter. This relationship is effective when the actions of human beings, their quest to dominate the world, imprint their mark on nature, develop their culture and build their history, form a totality in which each aspect has meaning not only in itself, but as a function of the whole (FREIRE, 1985, p. 7). In this way, education assumes a specifically human nature, being an intervention in the world that, in addition to

Revista ARACÊ
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the contents learned, requires mastery in the practical application of this knowledge in the social context of everyday life.

Having as object of research the cognition and learning of adults in the face of theoretical and technological domains, it is understood that human cognition is a form of biological adaptation, in which knowledge is built little by little and, from the development of cognitive structures, these are organized according to the stages of development of intelligence (PIAGET, 1976).

Cyberspace creates a new means of communication with the advent of New Technologies, that is, microprocessors, used in personal electronic devices that open space for interactivity, simultaneity and interaction between the local and the international.

Understanding how this construction occurs and its importance should contribute to the understanding of the demands and challenges in the cognitive construction and learning of adults, in the face of new ways of teaching. Furthermore, it is indicated, as a great value, to observe the teaching modalities with the use of new technologies, which adult teachers and students need to master, establishing the relationships between technological cognitive skills and experiential knowledge of educational communication – essential components of new school practices. In this sense, this article aims to identify the learning demands of the students of the Distance Education Course-UFPR, in relation to theoretical and technological domains in Distance Education (EaD).

THEORETICAL FOUNDATION

Before the emergence of technologies, these issues about the day-to-day life of the school were very much defined by limits that were easy to observe (walls, walls, doors, bars and windows) and others that were not so evident (power relations, authoritarianism and hierarchies). Education followed, until then, rules and routines, presupposing attitudes and relationships that seemed to last over time, regardless of the instruments, theories and time (Cordeiro, 2017).

In this sense, it is necessary to rethink the routines and rhythms of school practices, as well as the urgency of enabling non-linear and less verticalized processes, transforming each practitioner of this daily life into an author in the process of knowledge construction and protagonist of their history (Cordeiro, (2017).

Kraviski (2019), concludes that the continuing education course, in its entirety, between online and face-to-face moments, fully contributed to the perception of the

Revista ARACÊ
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importance of the employability of active methodologies and innovative practices in the classroom in the daily lives of the participating teachers. The knowledge of the promotion of the implementation of new approaches to the training of the professional was achieved, with a commitment to active participation and acceptance of new models of teaching and learning, based on the reality of the time lived, in education and in the change of the profile of the current student.

Feitoza (2019), in his thesis, addresses the theme of the "teacher of the twenty-first century", represented in video classes of a distance learning course on hybrid teaching. Regarding the results, in the representations constructed about "the teacher of the twenty-first century", the author found evidence that the proposal considered innovative places technologies at the center of the learning process and the teacher would then be responsible for the mediation between the student, the tools and the information. In addition, the author discusses the form and interests with which these discourses are [imposed] and the strategies employed by the proponents of the course.

The transpositions from the face-to-face model to the virtual model change the forms of communication in the sense that mediation in the VLE requires other modes of communication based on dialogical, hypertextual and imagery language. This mode of language does not always promote interaction between the actors of the teaching-learning process, as it requires an affective, friendly and effective pedagogical mediation.

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Silva (2015) demonstrates that there is a broad dialogical effervescence, both in virtual and face-to-face environments, which enabled the joint construction of knowledge, overcoming the boundaries of academic time and space and provoking new looks of these subjects at themselves and at the social reality experienced.

Lopes (2018), when verifying how the use of mobile devices can affect the university school culture, it was noticed that at the higher level, digital technology becomes

Revista ARACÊ
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increasingly present as a resource of academic activities and as a result of a digital culture of today's society.

Silva (2018) when verifying the contributions of the YouTube platform showed that the use of contemporary teaching approaches, using social networks such as YouTube, for example, allows the engagement of informal teaching, as well as the development of more advanced communication and interpretation skills, favoring the development of students' autonomy.

Virtual Learning Environments (VLE), Websites, Blogs, social networks and video transmission channels, other information promotion systems have presented innovative possibilities with promising meanings and conjunctures to researchers in the social sciences, which motivate the propagation of new research instruments that have been minimally discovered until recently (TAVARES; PAULA, 2014).

The teaching practice in all stages of teaching is composed of challenges that have in their overcoming the specific purpose of promoting integral education – people, academic and professional. The Information and Knowledge Society makes teaching work more than just an occupation, a career. Teaching practice becomes a challenge. The teacher must be able to promote the learning of the contents and, in addition, it is his role to guide pedagogically and ethically the use of digital technologies (CHAGAS, 2018). Students need to connect with their theoretical knowledge and build their technological knowledge. Finding the way to promote this construction requires cognitive skills, which are: knowledge, understanding, application, analysis, synthesis and evaluation (Bloom, 2010).

In order for the individual to learn, understand and aggregate information in an expressive way, he makes use of cognitive skills. Once information is learned, it is also understood and assimilated, resulting in its materialization, becoming what is called knowledge (CHAGAS, 2018). Nascimento (2009, p. 267) advocates that "cognitive competence is a factor that is highly demanded in the school context". The professors realize the importance of developing cognitive skills in themselves and in the students. To this end, they promote the improvement of cognitive skills using digital technologies. However, teachers need to have experiential knowledge in this field, equipping themselves with skills to establish a relationship between theoretical and technological knowledge. Thus, it is essential that teachers and students realize the potential of digital technologies as they can help promote learning strategies that consider the pros for all those involved in the teaching and learning process (CHAGAS, 2018). The ways in which the teaching and

Revista ARACÊ
ISSN: 2358-2472

learning processes take place change spontaneously and the students' desires, with regard to the curricular designs and methodologies used in schools, are often profoundly affected (HASE; KENYON, 2000). As Hase and Kenyon (2000) point out, verticalized teaching, with the educator as the greatest possessor of knowledge in the classroom, transmitting ready-made and delimited knowledge to passive students, became meaningless. A portion of students are used to having access with their smartphones, tablets, smart TV, notebooks, to an immense range of possibilities for learning, interactions and socialization of their own constructions. Formal education needs to be (re)thought at all levels, from elementary to higher, as it is important for the democratization of the promotion and dissemination of knowledge, which can enable everyone, considering the differences in social classes, purchasing power or other excluding elements, to have access to technology, and its attributes in order to intervene in changes, in the pedagogical didactic processes of teachers and students, both today and in the future (HASE; KENYON, 2000). The educator must (re)think that the teacher of traditional education does not fit into the teaching and learning models that have been designed. It must be (re)invented, seeking an association of a guiding agent model, capable of learning at the same time as it teaches how to learn (FREIRE, 2000). Contemporary educators live in the real world and in cyberspace – a generation in which the boundaries sometimes seem blurred. For the teaching and learning process to occur, the school needs to consider this and transmute itself, becoming virtual in addition to physical (RUY, 2020). The author also considers that the "School must be able to exist as a material entity in the physical and virtual world in cyberspace, with all the prerogatives of the formal school, but also now with a cyberidentity". For him, the school fits and connects to the way human development of this time is processed, to the way the neural characteristics and thought processes of children and young people are formed. A weaving between theoretical and technological knowledge (re)thought in the light of incessant interventions, initial and continuing education, with diverse technological resources, which glimpses the knowledge of the teacher and develops their skills and competences, considering their creativity and that of the students.

METHODOLOGICAL PATH

Because it is a subjective theme and deals with subjects, the research is qualitative in nature, exploratory-descriptive with a netnographic methodological focus. Qualitative research enables an examination of the intrinsic subjectivities in day-to-day practices, being

Revista ARACÊ
ISSN: 2358-2472

effective in determining the method of theories that need to be woven together to result in a scientific diagnosis, even if with different aspects (FLICK, 2009).

The netnographic research approach allows the researcher to get closer to the reality of what is being investigated virtually. By opting for this methodology, it is understood that there is a greater probability of working with a universe that involves cyberculture and cyberspace that is little visited by some and/or only practiced by others. Cyberculture, often considered ephemeral, volatile and inconstant, actually has as its greatest characteristic fluidity and constant transformations. Netnography arose from the need for a methodology that would transit through the market and communicational events that emerged in virtual communities at the end of the 80s. It mobilized a large number of researchers, who realized its possibilities for investigating the political actions of individuals and digital and social inclusion via the internet (NOGUEIRA; GOMES; SOARES, 2011).

In a first phase of the investigation, an exploratory research was carried out, consisting mainly of a survey of the bibliographic production related to the theme. Thus, activities of locating, selecting, reading and analyzing bibliographic references were carried out, from which a central body of knowledge was organized to understand the theoretical and technological domains.

The present research was developed at the Federal University of Paraná in the Distance Learning Pedagogy Course, totally virtually, through online questionnaires and observation of the Virtual Learning Environment (VLE) Moodle platform, called UFPR Virtual. This made it possible to align with the environment in which academic practices and knowledge are revealed, built and with significant insertion in the virtual community. For Kozinets (2014, p. 14), these researchers are considered netnographers who, according to the author, are "of great significance to the fact that people turn to computer networks to participate in sources of culture and obtain a sense of community". Although a virtual environment is the locus of the research, the concern in this investigation will be with human attitudes in relation to technological resources as teaching and learning tools.

Practicing a participant observation, from the perspective of netnography and observing the ethical procedures, a descriptive data collection was carried out on the interaction of students in synchronous classes in the VLE, enabling an observation of the context about the knowledge and practices of these students. The participants in the research are the academics of the Distance Learning Pedagogy Course-UFPR who entered in 2021 and enrolled in the disciplines of Technologies and Teacher Training and

Revista ARACÊ
ISSN: 2358-2472

Introduction to Organization in the Study of Distance Education, offered in the 2nd semester of 2021, and who were interested in participating. 41 students of the 151 enrolled in the class agreed to participate in the research and answered the questionnaires. In order to preserve the identity of the participants and in compliance with the ethical issues that guide the research, they had their names replaced by the first three letters of the word educando, "EDU", and the order number assigned by the chronological delivery of the questionnaire recorded by the Google Forms system. Thus, the 41 students are identified: EDU01, EDU02, EDU03, until ending with EDU41. The students and tutors of these disciplines participated in the study, with regard to the events that took place virtually, including communications in chats, e-mails, Facebook, WhatsApp, YouTube, Instagram, Facebook Messenger, LinkedIn, forums and synchronous classes by web conference or YouTube.

By analyzing the collected data, the stages of netnographic research were followed, with the purpose of categorizing the resources in view of the pedagogical trends of face-to-face and distance education pointed out by the participants in the form. It was analyzed how the processes of learning and human development take place, with a careful look at the interface between theoretical and technological knowledge, as well as how analog and digital technologies collaborate, influence and have repercussions on the initial training of students, in both theoretical and technological knowledge.

This stage is divided into three moments: (I) elaboration; (II) application and (III) analysis of the data obtained. In the elaboration phase, a study was carried out to observe and identify existing questionnaires with proposals equivalent to this research, in order to support their validation.

ANALYSIS OF THE RESULTS

The speeches of the participants of this investigation, their stories of school trajectories in the face of technological domains and their demands for learning in distance education were analyzed from the answers applied to 41 students who answered the question proposed in this investigative field.

The questionnaire aimed to identify the analog and digital didactic resources used in their school trajectories, from Basic Education to Higher Education. This Data Collection Instrument based on didactic resources and the various forms, records and different types of supports; about the technological evolution they have experienced to this day, during their school career, asking them to point out the analog technological resources that

Revista ARACÊ
ISSN: 2358-2472

contributed to their education; on digital educational resources that have repositioned educational resources; about the perception of the pressures imposed by the expansion of digital technology and its insertion in the distance education scenario in the Pedagogy Course; on the relationship of the learning of the contents by the students with analog and digital resources, in order to achieve the objectives foreseen in the plan of the disciplines, to have consistency of the learning content, pointing out the analog and digital didactic resources that they consider relevant for learning in distance education

To meet the objective, a netnographic analysis will be carried out, with a view to categorizing the resources, in view of the pedagogical trends of face-to-face and distance education and the different didactic resources, pointed out by the research participants.

The students were asked to point out the analog and digital technological resources that contributed to their training, considering everything from their Basic Education to the Distance Learning Pedagogy Course. The didactic resources were presented in various forms and recorded in the most different types of supports, considering all the technological evolution experienced to this day, during their school trajectory, presented.

From the answers, the word cloud was built, demonstrating with which frequencies to analog and digital technologies were part of the training process of the participants, which is presented in the

Revista ARACÊ
ISSN: 2358-2472

Figure 1 - Types of Didactic Resources in the Lives of Students

ANALÓGICOS		DIGITAIS	
Item	**Freq.**	**Item**	**Freq.**
Livro	10	Computador	08
Caderno	06	Internet	07
Caneta, Material Impresso Máquina de Escrever, Rádio TV	21	Celular	05
		Notebook	04
		Calculadora, DVD,	06
		CD, *Google Meet, Microsoft PowerPoint, Podcast*	08
Apostilas, Borracha, Fita VHS, Jogos, Lápis, Livros Didáticos, Quadro giz, Retroprojetor, Slides, Videocassete, Vídeos*	24	*Data Show, Disquete, E-mail*, Fórum, *Google*, Impressora, *Microsoft Teams*, Texto em Formato Digital, *Microsoft Word*, Multimídia	23
Áudios, Cassete, Correios, Dicionários, Enciclopédia, Filmes, Fotocópia, Gravador, LP, Máquina Fotográfica, Mimeógrafo, Relógio Analógico, Telefone Fixo*, Vídeo Aulas	14	*Anchor*, Aplicativos, *Canva, Chat, Padlet, Paint*, Reprodutor de Video, *Smartphones, Tablet, Wi-fi, Wordpad, Youtube, WhatsApp*	10
TOTAL	**75**	**TOTAL**	**61**

Source: Lopes (2022)

It is perceived that analog resources were the most mentioned by the participants. Observing the word cloud, the books stood out.

Revista ARACÊ
ISSN: 2358-2472

Figure 2 - Terms Used in Participant Surveys

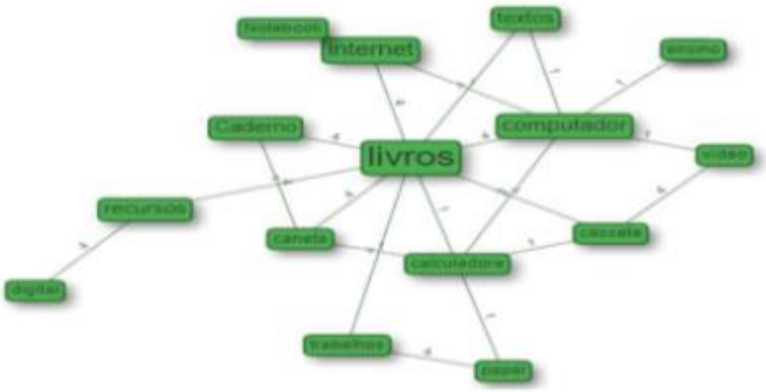
Source: Lopes (2022)

A reading of the terms presented in the answers made it possible to group the didactic resources into two types, analog digital, which are presented in the

Figure 1 - Types of Didactic Resources in the Lives of Students

. The mining of the terms and the relationship they establish in relation to the students' answers to the first Question of the Diagnostic Form, which can be observed in the **Erro! Fonte de referência não encontrada.**.

Figure 3 - Interrelations of Analog and Digital Technologies



Source: Lopes (2022)

The students, when answering the question about the technological resources that contributed to their education, considered the most different types of supports, in view of all the technological evolution experienced to date, answering that:

Revista ARACÊ
ISSN: 2358-2472

> In a digital age, analog resources still have their importance. Books and even didactic material that include available textbooks and texts can be in analog form, printed, or even in digital media. For my training there was and is a great contribution of the texts. (EDU10, 2022).

It is clear that analog resources had great importance in the school trajectory and that digital resources are being present. As occurred in the fourteenth to sixteenth centuries, when a similar movement of "innovation", known as the Renaissance, brings a rupture in the ways of thinking and doing until that period. Just as in the modern Renaissance, in which the emphasis was given to the human and its transformative capacity, in the twenty-first century, these ideas are taken up again from the perspective of digital technologies that enable, among other things, the production of meanings, identities and "a new form of global culture" (SANTAELLA, 1996).

One student states that, in his training, "analog technological resources were contributed to the DVD, CD and Paint are the ones that were used at that time". Another statement denotes the relevance of digital technologies in the process of acquiring knowledge, when he states that: The notebook and the cell phone, with technology we are faced with information that is processed and shared in real time through digital media. Contributing to my knowledge, assisting new discoveries and investigations (EDU 9, 2022).

Both statements speak of evolution, from analog to digital. Castells (1999) considers that, when moving from analog to digital, one moves from human to robotic, and the "real time" in which five seconds to start receiving the internet is compared to an eternity. For the author, borders are really falling, time and space are relative, social revolutions happen in the virtual and then in the real – in short, it is a hybrid and connected society that feeds on the immense and constant generation of knowledge through information, its instruments and, consequently, its influences in the rapid and immediate transformation of culture and all social relations. All new existing technologies are fundamental for the integration of a global networked world (Castells, 1999).

So, understanding how this occurs in the student training process of students of the Distance Education Pedagogy Course at UFPR and perceiving how they deal with the pressures imposed by the insertion of digital technologies in the teaching and learning process can contribute to the proposition of new teaching practices. It was questioned how the students perceived the pressures imposed in the formative journey for the insertion of digital technologies in the educational space. With the purpose of perceiving how their formation, pressures, time influenced them in the formation of themselves. The answers

Revista ARACÊ
ISSN: 2358-2472

were read according to the understanding expressed about the questioned. From this reading, the Figure 4, a word cloud that makes it possible to visualize qualitatively the terms mentioned and, quantitatively, how many times these terms are repeated by different students.

Figure 4 - Second Investigative Field Word Cloud

Source: Lopes (2022)

In some answers, the term resources stands out, as can be seen in the Figure 5.

Figure 5 - Digital Technological Resources and Student Trajectories

D...	Esquerda	Termo	Direita
1...	sociedade atual é carregada de	recursos	digitais no nosso dia a

2 Ainda temos muito que aprender, mas é possível realizar várias coisas com a tecnologia digital, como pesquisas mais amplas e mais interessantes, obtendo maior informação sobre qualquer assunto, nós auxiliando a nós tonarmos exploradores e pensadores críticos e independentes. A sociedade atual é carregada de recursos digitais no nosso dia a dia, assim os estudos tiveram que mudar. Antigamente consultávamos livros para estudar hoje é em pdf. Com a pandemia se forçou-se a algo que a sociedade cobrava que era usar recursos digitais nas aulas, a sociedade já cobrava isso antes. Já que sempre os

Source: Lopes (2022)

To analyze the answers of the survey participants, the term "resources", indicated by the software in yellow, works as an adjective of the term "digital", and it is noticeable that in one of the statements the term "resources" is preceded by the expression "today's society is loaded with digital resources in our daily lives (...)" (EDU 34, 2022).

Analyzing the entire placement of the students, it is possible to see how digital resources have foisted the need for adaptation in their training. It is important to note that in the discourse the pandemic is mentioned as a "force" towards the use of digital technologies, already considered necessary by society that "demanded" their use. The students needed to seek new tools, which required learning in the practical use of digital technologies, thus facing, in the new context of the school, different learning, difficulties that

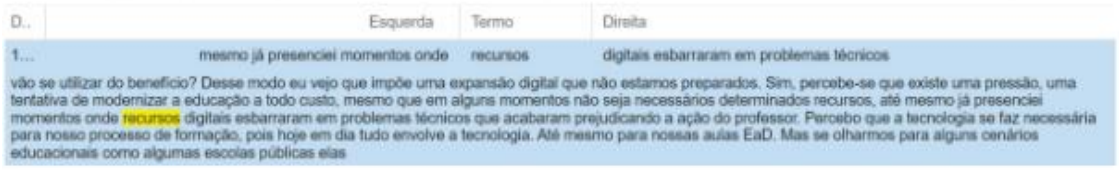
Revista ARACÊ
ISSN: 2358-2472

the student had to overcome in order to achieve the goals established to meet his study plan, as he did not have face-to-face moments.

It is observed that one student begins her answer by pointing out the possibilities of obtaining more information and knowledge in research in an expanded way and with the use of digital resources, stating that with technologies "(...) become explorers and critical and independent thinkers" (EDU 25, 2022).

Another issue emerges about the difficulties in the management of digital technologies, presented in the Figure 6.

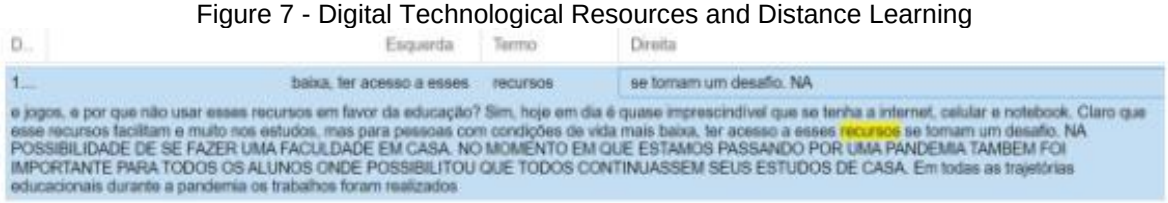
Figure 6 - Digital Technological Resources and Management Difficulties



Source: Lopes (2022)

This issue is perceived in the students' statements, as they bring in the reports of experiences, problems in operating technological resources that often hindered learning in the performance of tasks. Even so, the perception of digital technology is reported as necessary in the same statement, presented in the Figure 7.

Figure 7 - Digital Technological Resources and Distance Learning



Source: Lopes (2022)

In view of what the student reported, it is worth highlighting what Oliveira (2017) says about Distance Education: it enables individuals to acquire or advance in their training processes, preparing them better for the contemporary world. One of the courses in this modality, Pedagogy, has a vast field of action, from school to non-school institutions, which can be reached in the most distant Brazilian municipalities, by Distance Education.

Pereira, Moraes and Teruya (2017) consider that the democratization of access to education is relevant and promotes citizenship and development, especially in poorer countries, recommending the adoption of more flexible educational practices, with the use of Information and Communication Technologies. Therefore, it is essential to have an

Revista ARACÊ
ISSN: 2358-2472

education system that presents a new, more flexible and adequate model, which avoids waste of human and material resources, as is the case with distance education.

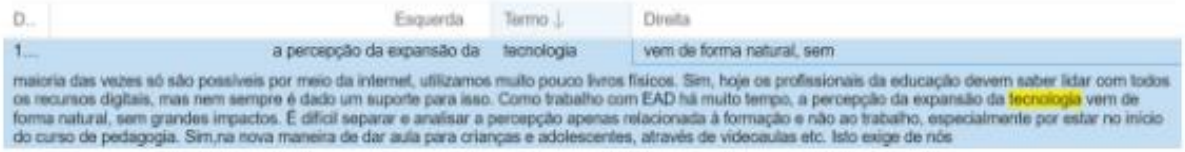
As the analysis progresses, it is perceived that the insertion of digital resources brings another issue besides the technique and its mastery, about how much they facilitate the learning process. However, it goes beyond the difficulties in operating the resources, with access due to economic power in the acquisition of tools being another barrier pointed out.

It is important to highlight the statements that reveal the presence of digital technologies in the learning process of students of the Distance Learning Pedagogy Course at UFPR with the indisputable presence of these resources with increasing intensity, technical difficulties and access to these resources.

The training of students is essential in the process of inserting digital technologies in the classroom. The relevance of quality training aimed at the use of digital technologies in order to favor learning is immeasurable. For Tajra (2012, p. 106), all students and educators need training, because success in the management of these digital resources in the educational environment depends on this domain.

As Freire (1997, p. 23) states, "there is no teaching without discency", and educators and students learn all the time. The author emphasizes that educators will never be replaced by the computer, but it is relevant that they and the students master these technological resources for an attractive and inspiring teaching practice, which can be confirmed in the student's statement presented in Figure 8

Figure 8 - Training for the Unification of Technological Resources



Source: Lopes (2022)

It is perceived in her answer that the student establishes relationships between the internet, digital resources and distance education, which, in her perception, are the result of the expansion of technology when she states that it is necessary to associate the learning process with the work experience, with regard to the use of technologies. He also says that the increasingly significant presence of technologies in his life is not of great impact and

Revista ARACÊ
ISSN: 2358-2472

natural. It is noteworthy that this is the speech of an experienced student dealing with technologies.

FINAL CONSIDERATIONS

According to the analysis of the data collected from the students of the Distance Education Pedagogy Course, they revealed that they began to dominate different media, favoring and enhancing the methodological processes of teaching and learning through their integration. It can be seen that the development of studies and research on the pedagogical implications of this teaching modality has been increasing. With the research developed, it is noted that there has been a growing opportunity for updating and professional training in various areas of knowledge in the academic space.

It is imperative to highlight that distance education requires planning that observes its specificities, considering the specific needs of the Pedagogical Project of the Course (PPC), with emphasis on the objectives to be achieved, available resources, target audience to be reached, among other aspects, which can be measured considering the participation of students in the Distance Education Course at UFPR.

From this perspective, the selection and definition of the digital media to be used in the feasibility of the aforementioned course become extremely relevant, since the resources that make up the didactic materials need to be appropriate to the context of the target population, in order to ensure access to information, respect for different learning styles, as well as the permanence of students in their media.

It is understood that technological resources provide communication channels and dynamic methodologies that allow not only to transmit information, but to make the student capable of "learning to learn" and "learning to do" in a meaningful way, respecting their autonomy in relation to time, style, rhythm and learning method, making them aware of their capabilities and possibilities for the initial training of students of the Distance Learning Pedagogy Course of the class of 2021, that are still in formation.

New investigations can be thought of in the sense of what can be done, based on what has not yet been done, that nothing is finished and determined (FREIRE, 1999). It is the hope that we can be better and that the university can generate a better country, a better world. Ramos and Grangeia (2020) highlight that excessive disciplinary fragmentation makes it difficult to understand the reality and meaning of what is taught. Reversing this situation requires that interdisciplinarity/transdisciplinarity, with the mastery

Revista ARACÊ
ISSN: 2358-2472

of digital technologies, remove the walls between the disciplines of the course, so that students take over the daily life of teaching and continue to build bridges between them with support in scientific concepts and associate themselves with the context and presence, increasingly intense, of digital technologies.

This study can contribute as a reference to the organization of communication in the institutions that are part of this process that materialize in the transcribed texts of the video classes, highlighting mainly the crystallization of a discourse of approximation with its recipients, in order to achieve greater adherence to the proposal of implementing a teaching model that apparently would solve the problems of an education in crisis.

Revista ARACÊ
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