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Experiences in remote teaching: challenges and notes for the use of technologies in EJA/EPT





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Abstract: This qualitative research explores EJA/EPT students' perceptions of distance education during the pandemic, with data collected through focus groups. The findings show that limited access and lack of technological literacy due to socioeconomic inequalities impacted learning. However, distance education highlighted the importance of digital inclusion and the potential of hybrid education for EJA.

Keywords: EJA; Remote education; Digital inclusion

Vivências no ensino remoto: desafios e apontamentos para o uso das tecnologias na EJA/EPT

Resumo: Esta pesquisa qualitativa investiga a percepção dos estudantes da EJA/EPT sobre o ensino remoto durante a pandemia, com dados coletados por grupos focais. Os resultados mostram que o acesso limitado e a falta de conhecimento tecnológico, devido às desigualdades socioeconômicas, afetaram a aprendizagem. Contudo, o ensino remoto destacou a importância da inclusão digital e o potencial do ensino híbrido para a EJA.

Palavras-chave: EJA; Ensino remoto; Inclusão digital







Experiencias de enseñanza a distancia: desafíos y sugerencias para el uso de las tecnologías en la EJA/EPT

Resumen: Esta investigación cualitativa explora la percepción de los estudiantes de EJA/EPT sobre la enseñanza a distancia durante la pandemia, a partir de datos recopilados mediante grupos focales. Los resultados muestran que el acceso limitado y la falta de conocimientos tecnológicos, debido a las desigualdades socioeconómicas, afectaron al aprendizaje. Sin embargo, la enseñanza a distancia ha puesto de manifiesto la importancia de la inclusión digital y el potencial de la enseñanza híbrida para la EJA.

Palabras clave: EJA; Enseñanza remota; Inclusión digital

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1 INTRODUCTION

During the critical period of the Covid-19 pandemic, in 2020 and 2021, social isolation was necessary to prevent the spread of the disease. Presential education was suspended and distance education emerged with the main purpose of providing temporary access to schooling processes to reduce the negative effects of social distance. Schools had to adapt and redefine their ways of working and interacting, but this was done without adequate reflection and preparation by the school community.

At the time, there was no prospect of establishing a new model of education. The focus of distance education was on transferring presential education to virtual education while maintaining the traditional pattern of teaching and learning. The form of interaction used was preferably synchronous, one-way, with the teacher acting as a transmitter of content in expository classes and the students listening passively. The space for dialog was reduced and there was little interaction. Planning was individual, with little or no guidance. There was an excessive concern with workload to equate distance learning with presential teaching. The assessment also followed the traditional model based on the completion of activities or tests (Joyce; Moreira; Rocha, 2020).

Distance education created problems for families, students, and teachers. Teachers and students faced difficulties in this process, mainly related to the lack of access and specific training for the use of technology in the classroom. In addition, there was the physical and emotional stress of social isolation, concern for family and friends, and fear of contracting the virus.

The context was even more complex for the students in the Youth and Adult Education (EJA, as it is called in Brazil) program, since they are working-class, low-income subjects, often the result of processes of social marginalization, and who in most cases have difficulty, little or no access to technology. In addition, this situation made EJA subjects more vulnerable to the effects of the Covid-19 pandemic, in terms of vulnerability to contamination, treatment of the disease, and the economic consequences arising from social distancing (Nicodemos; Serra, 2020). Furthermore, the difficulty and complexity of remote education brought other issues, such as dropout, retention, and meaningful appropriation of knowledge, which must be taken into account, especially when we think about EJA.

One thing we cannot deny is that distance education has exposed the complexity of the







use of technology in education in general. Therefore, the objective of this work is to present the results of a survey carried out at the Federal Institute of Goiás (IFG), Anápolis, on the perceptions of EJA/EPT students about distance education in times of the Covid-19 pandemic, and to discuss the limits of distance education and its possibilities and contributions to the use of technologies in youth and adult education. To achieve this objective, qualitative research was conducted using focus groups and a virtual questionnaire for data collection, the details of which are presented in the next section.

This work contributes to the understanding of the socio and historical reality of social distance and distance education in EJA during the Covid-19 pandemic and directs academic efforts towards issues that arise in education today, such as the importance of using technology in youth and adult education. From this perspective, the pandemic, social isolation, and its consequences for education through distance education must be considered as experiences lived in the EJA community, analyzing their challenges and contributions in relation to the pedagogical use of technologies in this type of education. Therefore, it is essential to reflect on the challenges and opportunities that distance education brings to the use of technologies in an inclusive way for those who have not had access to formal education at an appropriate age.

2 METHODOLOGY

2.1 Study Characterization

Considering that the objective of this study is to investigate the perceptions of EJA/EPT students about remote teaching during the Covid-19 pandemic, analyzing its limitations, possibilities, and contributions to the use of technology in youth and adult education, this research is characterized as qualitative in nature, exploratory, descriptive and explanatory. According to Medeiros (2003), exploratory research aims to clarify phenomena by studying and recording facts in a specific context, especially about the opinions of the subjects involved. Descriptive research focuses on the relationships between variables to subsequently determine their effects on a given reality. Explanatory research, on the other hand, goes beyond the recording of facts to the analysis, interpretation, and identification of their causes.

Thus, this study is exploratory, descriptive, and explanatory because it explores and records the perceptions of EJA students about distance education, describes the relationship between these students and the use of technology in this context, and also analyzes and interprets the complexities and difficulties of incorporating technology and its use in distance



education in EJA. In addition, it identifies and analyzes the main contributions of this teaching modality to the incorporation of technologies in the teaching and learning process in EJA.

The field research was carried out at the Federal Institute of Education, Science and Technology of Goiás, in the city of Anápolis/GO. The research universe consisted of 73 students enrolled in the two EJA/EPT courses: School Secretariat and Cargo Transportation in the second semester of 2021, the period in which the research was conducted.

The following inclusion criteria were adopted to select the students: 1) Be regularly enrolled in the EJA program at IFG/Anápolis and attend classes, with a minimum attendance of 75% in all subjects of the course; 2) Agree to participate in the research by signing the Free and Informed Consent Form (TCLE). Subjects who did not meet the inclusion criteria were excluded. In total, 42 students were selected for the research.

The virtual recruitment of participants was carried out as follows: 1) In August 2021, we contacted the coordinators of the integrated technical courses in the EJA modality at IFG/Campus Anápolis via email to inform them about the research and to ask for authorization to invite students to participate. 2) After receiving authorization from the course coordinators, we contacted the students virtually via email and WhatsApp to request their participation. 3) Then, we scheduled virtual meetings via Google Meet to hold the focus groups, where the TCLE was presented and sent via email for signature by the participants, who signed and returned the scanned copy with the signature to the researcher's email.

2.2 Ethical Aspects

This research was approved by the IFG Research Ethics Committee (Opinion number 5,034,288).

2.3 Data Collection

Data collection happened in the second half of 2021 and was carried out in two phases: in the first, a virtual questionnaire was proposed with questions related to the profile of the research subjects: gender, family income and access to technology¹. The second phase was

¹We would like to clarify that this study was carried out entirely during the Covid-19 pandemic. In the second half of 2021, there were no in-person classes at IFG due to the need for social isolation to prevent the spread of the disease. For this reason, the entire research process was carried out virtually. Given that moment and historical context, there was no possibility of in-person meetings at the institution under study. It is important to emphasize that the entire data collection process was carried out via



conducted through virtual focus groups using the Google Meet meeting application with EJA students. The focus group is a data collection method that uses an open group discussion on a topic common to the participants (Kind, 2004). Group interaction allows for the production of data that would not be obtained outside of the group, taking into account much more than just the sum of opinions, but the individual feelings and points of view involved that crystallize into a product of mutual interaction..

The focus group discussions were conducted through meetings with approximately 12 to 15 participants representing the study sample. Since 42 students met the inclusion criteria, they were divided into 3 focus groups, each with 14 different participants. The discussions took place in virtual meetings organized for this purpose.

The dynamics of the focus groups followed the proposal of Kind (2004) with six moments: introduction, preparation, group debate, group closing, questions after group evaluation, and subsequent action. To conduct the focus groups, a set of guiding questions for the debate was developed around the theme of distance education, the Covid-19 pandemic, and EJA, revolving around three main themes 1) What was it like for you to study through distance education? 2) What are the positive aspects of distance education? 3) What are the negative aspects of distance education? The focus group discussions were virtually recorded, fully transcribed, and later subjected to content analysis.

In order to complete and clarify the information from the questionnaire and the focus groups, a telephone interview was conducted with the coordinators of the EJA/EPT courses at that time about the organization of pedagogical activities for students during distance education.

2.4 Data Analysis

The analysis of qualitative data followed the generic steps proposed by Bardin (1977):

Step 1: General reading of the collected material (transcription of the focus groups carried out), all data is read to obtain a general sense of the information and reflect on its global meaning;

Step 2: Detailed analysis of all material through coding;

Step 3: Establishing categories;







Step 4 - Cut the material into comparable recording units (words, sentences, paragraphs) with the same semantic content;

- Step 5 Grouping the registration units into common categories;
- Step 6 Progressive grouping of categories (initial \rightarrow intermediate \rightarrow final);
- Step 7 Inference and interpretation.

3 RESULTS AND DISCUSSION

3.1 Remote Education in the Perception of EJA/EPT People from IFG/Anápolis

At IFG, Anápolis Campus, there are two EJA classes integrated with Professional and Technological Education: School Secretariat and Cargo Transportation. According to the data collected at the Campus Academic and School Records Coordination (Corae), in the second half of 2021, when the data was collected, the two courses had 73 students enrolled. Of these, 42 responded to the questionnaire, 33 from the School Secretariat course, and 9 from the Cargo Transportation course, representing a total of 57% of the institution's EJA students.

Regarding the profile of the research participants, the majority were female (81%), married with children (63%), brown (64.3%), unemployed (57%), with a family income of up to 1 minimum wage (78%), with a heterogeneous age, ranging from 18 to 60 years old. The fact that the majority had a monthly income of up to one minimum wage shows that these students belong to the social strata with lower purchasing power and greater risk of social vulnerability.

According to Costa, Álvares and Barreto (2006), the subjects of the EJA, whether men or women, young or old, belong to the same social class, people with little purchasing power, who largely consume only the basics for survival, such as water, rent, electricity, medicine, and food. Looking at monthly financial income is important because it allows us to understand the issue of access to technology, which is a fundamental factor when we think about distance learning.

Regarding the perception of distance education, 2 main categories were listed for content analysis:

• Knowledge, access and use of technologies: addressed the difficulties and limitations in knowledge and access to technologies by EJA students during remote education.







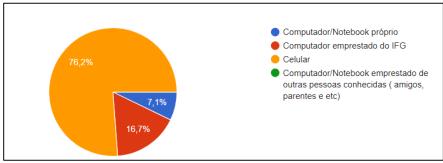
 Pedagogical mediation, technologies and social inequalities: refers to the relationship between digital inclusion and human interaction during the teaching and learning process and the social vulnerability of students.

3.1.1 Knowledge, access and use of technologies

The survey data indicated that the majority of participants were from the working class, with little purchasing power, which was reflected in family income and the lack of access to adequate technological devices for classes during the remote teaching period.

Graph 1 shows which artifacts students used to access classes and remote teaching materials:

Graph 1 - Technological artifacts used to access classes and remote teaching materials



Source: data from the research.

The students' responses highlight that the main tools used were cell phones and computers borrowed from IFG/Anápolis, with few reporting having their own computer at home. This finding has implications for the quality of access to technology, as mobile phones were often not adequately configured to access applications used for distance education, such as Moodle. Therefore, the results highlight that many students relied on borrowed devices or used phones with inadequate configurations, which limited the quality of interaction with digital educational tools.

Figure 2 shows the application most used by EJA students to conduct distance education activities:

CC (I)

Whatsapp

Moodle do IFG

Telegram

Email

Graph 2 - Most used application for carrying out remote teaching activities

Source: data from the research itself.

According to the course coordinators at the time (2021), at the beginning of distance education, EJA students had great difficulty accessing and using the official application to conduct EaD activities and classes. As an alternative, teachers and course coordinators began using WhatsApp, the most popular instant messaging application in Brazil. Most of the activities were shared through WhatsApp groups, and students completed the tasks suggested by the teachers in notebooks, by hand, taking photos and sending them through the application. This was the alternative found to avoid increasing the already high dropout rates and to include those students who did not have access to or acquisition of the knowledge necessary to use technological artifacts in distance education. Of course, the possibility of using an unofficial application had consequences for the teaching work, but this is not the objective of this research, so we will not discuss this aspect.

Regarding the negative aspects of remote teaching, the majority cited the difficulty of access to and knowledge of the applications used for remote teaching:

The difficulty I had was keeping up with the classes because my cell phone was not very good and I had a lot of difficulty keeping up with the assignments when my girl was here to help me I could do it, otherwise I couldn't (Interview given by Participant 5, on 09/16/2021).

My difficulty sometimes is to use certain applications, to do certain types of tasks because the way teachers teach is not the same as when they teach in the classroom, it is very different, so my difficulty is more related to that, to use these applications (Interview given by Participant 18, on 09/16/2021).





The lack of knowledge and skills to use technological resources was one of the major obstacles for EJA students at IFG/Anápolis during distance education. Many of these students had little or no knowledge of how to use computers, smartphones, and other technologies. Without this knowledge, they had difficulty accessing and using online learning platforms such as Moodle, submitting assignments, and communicating with teachers and peers.

Leite and Souza (2021) reported similar findings in a study of EJA students from a public school in São Paulo. The authors point out that most participants had little knowledge of how to use technology, which led to difficulties in accessing distance education platforms. In addition, the researchers noted that many students did not have access to technological devices at home, which made it even more difficult for them to participate in EaD activities.

Another study by Ferreira and Silva (2021) showed that EJA students in Minas Gerais also had difficulties with the technologies used in distance education. This lack of technological knowledge made it difficult to carry out the activities proposed by the teachers, in addition to hindering communication with colleagues and interaction with the content.

The lack of practical knowledge and access to technology made it even more difficult to keep up with the pace of instruction. These technological barriers affected the quality of education for these individuals during the pandemic, as they did not have equal access to the same educational opportunities as other students and had little knowledge of technological resources.

3.1.2 Pedagogical mediation, technologies and social inequalities

All of the students emphasized that distance education was essential because of the need for social isolation due to Covid-19, and provided the opportunity to continue their studies during the critical period of the pandemic. Another important point was that despite the great difficulties they had in accessing technology and using Moodle, virtually all of the women who participated in this research claimed that distance learning brought benefits in that they did not have to travel to the institution, allowing them to stay at home and carry out domestic tasks such as taking care of the house and children, as we can see from the reports below:

I really enjoy the EaD because when you're my age, married, have kids and work outside the home, it gets very difficult. There are days when I come home from work and I'm connected to the class. If it was in person, I wouldn't be able to attend (Interview given by Participant 1, on 09/16/2021).

For me, EaD was good on the one hand, being at home with a little daughter, not having to go there at night with her, on that side it was really good, I have nothing to







complain about (Interview given by Participant 3, on 09/16/2021).

Distance education was good for me, being at home with my children gave me time to do things while watching the classes (Interview given by Participant 12, on 09/16/2021).

Distance education was good for me, it wasn't bad because I was able to be at home, I was working, because I have two small children I was able to be at home with them (Interview given by Participant 13, on 09/16/2021).

The testimonies bring the context of gender relations and the increase in work, the Covid-19 pandemic contributed to exacerbate the modes of labor exploitation through the intensification of the working day, which is in line with what has been demonstrated by Souza et al. (2021). In Brazil, domestic work is assigned to women, who are primarily responsible for this work and for caring for family members and young children (Macêdo, 2020; Oliveira, 2020).

In general, women tend to work longer hours and feel exhausted due to the care required for all family members. The issue of family care and housework appears in the participants' statements. In this sense, EJA students saw distance learning as an opportunity to reconcile all their activities: housework, paid work and study.

Another positive aspect of distance education was the saving of transportation costs:

The big positive point is the travel, you don't have to travel to the place, it's sometimes a cost saving (Interview given by Participant 5, on 09/16/2021).

Distance education brings financial advantages, in the case of those who take the bus, the financial issue, you know, to be at IFG I have to spend 200 reais per month round trip, and IFG gives a grant in the amount of 120.00 which does not meet the student's needs, in fact this grant has been outdated for 10 years, there is no increase or monetary correction, so it does not meet the need for transportation (Interview given by Participant 10, on 09/16/2021).

It is important to consider the financial aspect when thinking about EJA. As the data shows, the vast majority of survey participants earn up to the minimum wage to live on. As a result, transportation costs are a significant burden on family budgets, and many students stop attending classes and others drop out because of these costs. During the critical times of the pandemic, distance education provided some relief from transportation costs for those who lived far from the institution.

An important issue highlighted as negative in remote teaching was the lack of dialogue, social contact with colleagues and teachers, the lack of knowledge exchange, as we can see in some examples below:

The negative points are that you didn't have this interaction, because in the classroom the class is bigger (the interaction), you could later look for a teacher to talk to, to





clear doubts, even to explain your situation as a student, as a person... that's what's bad (Interview given by Participant 2, on 09/16/2021).

Being away from the classroom is not very good because you don't learn what you need to learn because some students have more difficulty learning than others. So being out of the classroom is really bad, really bad. And then there are students who can't keep up, I'm one of them myself (Interview given by Participant 3, on 09/16/2021).

In my opinion remote education is not good at all, not being in the classroom, not communicating, writing, learning, reading books, I didn't find anything, nothing good at all (Interview given by Participant 4, on 09/16/2021).

Social interaction and dialogue are fundamental components of the teaching and learning process, as they allow students to share ideas, experiences, and knowledge and to build knowledge together. During distance education, EJA students at IFG/Anápolis felt isolated and disconnected from their peers and teachers, which made it difficult for them to engage in the pedagogical practices proposed during EaD.

Different studies with different theoretical approaches have confirmed the need and importance of human interaction and mediation in educational processes during the EaD period. These studies have shown that the lack of dialogue, interaction, and social contact has led to lower student participation in activities and discussions in virtual classes, which affects student learning and engagement with the content. In addition, these studies have shown that distance education can lead to social and intellectual isolation of students, hindering the building of interpersonal relationships and the collective construction of knowledge (Unesco, 2020, Fundação Lemann; Itaú Social, 2020).

This evidence shows that technology does not replace human mediation in the learning process. Technologies are artifacts created by human work and cannot be social mediators. They complement and facilitate social mediation, as in the case of distance education, where presential teaching was not possible. However, technologies have not satisfied the need for human contact. This is evident in the language of the participants in this study. Most of them reported difficulties in acquiring knowledge. The lack of contact and dialogue with teachers and colleagues greatly hindered learning during the distance education period.

The results of this research are similar to those of other authors, who found that WhatsApp was the most used application to carry out activities in distance education in EJA, and pointed out as the main challenges of this period the difficulty of Internet access, the lack of knowledge to use technological resources, and learning difficulties due to the lack of inperson interaction with the teacher and colleagues. The main positive point highlighted by the research was the convenience of studying at home (Artuzi; Voltolini; Bertoloto, 2021; Ferreira; Silva, 2021; Lellis; Florentino; Costa, 2021; Leite; Souza, 2021, Silva; Freitas; Almeida, 2021).





In general, through the statements of the research participants, this study identified several difficulties related to distance education, the main ones being access to technology, pedagogical supervision, and lack of social interaction. Many EJA students did not have access to technology and the Internet at home, and this lack of access created inequalities and digital exclusion. Distance education made it difficult for these students to receive pedagogical monitoring, as it was not possible to have the same presential teacher-to-student and student-to-student contact, resulting in a lack of social interaction, which hindered dialogue and knowledge sharing in the teaching and learning process. This showed that technology, despite being a resource for connection during social isolation, also led to a disconnection with the educational processes developed during distance education, indicating that pedagogical and human mediation cannot be replaced by the simple use of technological artifacts.

3.2 Pedagogical Mediation in Remote Education in EJA: Reflections from Vygotsky

In education, technological projects anchored in the ideologization of technology are often adopted in a passive and uncritical way, without questioning, so that technologies, instead of means, become ends in the educational process. In this way, a technical way of thinking emerged in education, leading to a technological utopia in which everything was reordered and solved only through technology in pedagogical practices (Silva, 2013). There was a myth surrounding the use of technology in education, based on the ideologization of technology, which was widely publicized and maintained in the pedagogical field, especially until 2019.

However, in 2020, with the Covid-19 pandemic, the need for social isolation, and the option of remote teaching to maintain the continuity of educational processes and the connection with schools, this myth was debunked. In this unusual scenario, technologies were seen as the key to solving all the educational and social problems caused by the pandemic, but the reality was very different. Distance education proved to be a complex and challenging task, with many limitations and challenges to overcome in terms of technology and pedagogy.

The results of this research confirm the debunking of the myth that technology alone was not enough to solve the challenges facing education then and now. The data showed that many EJA students did not have access to the Internet or qualified electronic devices to follow the virtual classes and activities proposed in distance education, which highlights the social inequalities that already existed in education.

In addition, distance education has highlighted the importance of pedagogical and human mediation as an essential component of the teaching and learning process. Vygotsky's uma Licenca Creative Commons



historical-cultural theory (2007) helps us to understand this fact. According to this perspective, human development is strongly influenced by the social and cultural environment in which people live. According to the author, learning and the development of higher cognitive processes depend on social interaction and the mediation of cultural tools, such as language and technological artifacts themselves. Therefore, for the author, learning is a social process that occurs through the interaction of human beings with each other and with the culture in which they are embedded.

Thus, Vygotsky (2007) brings an important concept to help us understand the importance of the social environment in the construction of learning: mediation. Mediation is the process of influencing a mediating component in a relationship; this interaction ceases to be direct and becomes mediated by this component. For him, mediation is fundamental to the development of human psychological functions (Martins; Moser, 2012). Thus, learning is directly related to mediation and not just any mediation, but social mediation, which can only occur through human social contact.

Therefore, from the perspective of Vygotsky's historical-cultural theory, technology can be seen as a social construction, the result of the interaction between human beings and their social context. In this view, technology is not just a tool, but a cultural object that reflects the social relations and needs of a given society in a given historical period.

Historical-cultural theory allows us to develop a broader view of technology as a cultural artifact created by human beings in a given society in its historical context, mediated by the culture and mental processes of the subjects. This is important for us to think about the use of technologies in EJA, which aims at the comprehensive education of students, linked to their social and historical context, as a means of expanding their critical knowledge and autonomy.

In this context, technology is an expression of culture and its role in human development depends on how it is used and understood by society. Therefore, mediation in the use of technological artifacts in teaching and learning processes is important because technology, like any other cultural object, can only be used effectively and consciously if the subject appropriates the historically produced technological knowledge. For this appropriation to take place in a meaningful way in the learning process, pedagogical mediation is essential.

The data presented on EJA subjects' perceptions of distance education showed that technology alone is not capable of mediating the teaching and learning process. Students reported as a negative aspect the lack of contact and pedagogical mediation by the teacher during remote teaching activities. Thus, we realized that although technology plays an Esta obra está licenciada sob



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important role in the continuity of pedagogical and educational processes during social isolation, it alone is not capable of guaranteeing successful learning. The importance of pedagogical mediation, that is, systematic monitoring by the teacher, was emphasized so that the technologies were used and appropriated by the students appropriately for the construction of knowledge.

Peixoto (2004) highlights the importance of pedagogical mediation in the use of technologies in education, stating that a mediator is needed who understands the potential and limitations of technologies and who can guide students in their use critically and reflectively. For the author, pedagogical mediation is not limited to the pure and simple use of technologies but involves a series of issues such as the organization of the learning environment, the selection of relevant content, and the promotion of dialogue and interaction among students and between them and the teacher. In this context, it is essential to understand technologies as cultural artifacts and not just as tools and to recognize the importance of pedagogical mediation for the critical and reflective use of technologies in EJA.

The need for widespread use of technology during the pandemic brought to light issues that debunked the myth that technology is the solution to all educational problems. This view, rooted in technological determinism and a naive view of the role of technology in society, fell apart as the many challenges of distance education began to unfold. Social and educational inequalities, as well as access to and prior knowledge of technology, were exposed. The pandemic revealed several contradictions within capitalism, and the use of technology in education was one of them.

The fall of the myth of technology as the savior of education in distance education has brought important reflections for us to think about the future of technological artifacts in EJA. One of them is that pedagogical mediation is essential for students in this type of education to make conscious and critical use of technology. This mediation involves teachers' guidance in the use of technological resources so that subjects can develop the knowledge necessary for their effective use. In addition, pedagogical mediation should stimulate reflection on technological artifacts in students' personal and social lives, aiming to develop a comprehensive education in EJA, which also involves critical training about the digital world.

3.3 Contributions of Remote Education to the Use of Technologies in EJA: Flexibility and Hybrid Education

Despite the challenges, distance education Esta obra está licenciada sob uma Licenca Creative Commons



technology in this type of education. In this study, one of the positive aspects of distance education highlighted by most participants was the ability to study at home without having to go to campus every day. This data is important because it demonstrates the needs of these working students in the face of social inequality in which they work to support their families, take care of children, and other family responsibilities that make it difficult to attend classes daily. Balancing work, studies, and family responsibilities is extremely challenging and exhausting for these individuals.

Another difficulty is the lack of financial resources for transportation for those who live far from the institution. Despite the existence of tuition assistance from IFG and free transportation for students, these resources are not sufficient, which also affects attendance and participation in classes. All of these factors combined can lead to dropouts and course avoidance.

Therefore, one of the contributions that distance education has made to the prospects of EJA has been the possibility of making the curriculum more flexible, using technology as a contributor to this process. Making the EJA curriculum more flexible may be an important strategy to reduce the dropout rate of these working students. According to Cury and Santos (2017), making the EJA curriculum more flexible can be a way to adapt teaching and learning to the needs of students. This can include offering different class schedules, allowing students to choose which subjects to take, and using different teaching strategies. These measures can help to reduce dropout rates by providing opportunities to adapt studies to the work routines and daily lives of EJA subjects.

To avoid difficulties related to the lack of pedagogical mediation in the teaching and learning process, an interesting alternative for curricular flexibility in EJA would be hybrid education. Hybrid education can be defined as a pedagogical model that combines moments of presential education with moments of distance education carried out through educational technologies. In this model, the student has access to learning materials and resources in different formats, such as videos, texts, interactive activities, and discussion forums, among others, made available through virtual teaching platforms (Schiehl; Gasparini, 2016).

Thus, with hybrid teaching, it would be possible to combine presential and distance education in EJA. Students would receive in-person support and pedagogical supervision from teachers, while at the same time using technology as a tool to participate and carry out activities. In this way, students would make better use of their school time without having to attend school every day. This would make it easier for them to balance their studies with work and other daily activities, and could also help reduce dropout rates and increase class participation.

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Although distance education has shown that it is possible to use technology to make the curriculum more flexible in EJA, it is not a simple and easy process. With EaD, we are aware that some measures need to be taken in order for the use of technologies in EJA to be effective in supporting the teaching and learning process, the most important of which are: digital inclusion, integration of technologies in the EJA curriculum and teacher training.

Distance education has brought the need to rapidly adapt pedagogical processes to digital technologies. In this context, the digital inclusion of EJA students has become a relevant and urgent issue. The lack of access and knowledge of these students regarding the use of technological devices in educational processes became evident, which showed a serious deficiency in EJA, as digital inclusion was not taking place. Pedagogical work with technology was either non-existent or relegated to the background in EJA curricula before the pandemic, with negative consequences for these students.

Therefore, the pandemic and distance education have demonstrated the need to work on the digital inclusion of EJA subjects. According to Delgado and Saito (2018), digital inclusion is an essential condition for the full and effective participation of students in contemporary society, including education. According to the authors, digital inclusion includes not only access to digital technologies but also the ability to use them critically and creatively for learning and personal and professional development.

Digital inclusion in EJA is not a simple process; it involves not only the availability of equipment and Internet connections, but also the formation of digital knowledge, such as browsing the Internet, conducting virtual research, using educational applications, and participating in virtual learning environments. Digital inclusion in EJA must be approached in an integrated manner, taking into account the specificities of adult students and their educational and professional needs (Cury; Santos, 2017).

Furthermore, it is necessary to establish public policies and pedagogical practices that value the learning of adult students and their inclusion in the digital world. Thus, digital inclusion must be understood as a continuous and dynamic process, which involves constant adaptation to new demands of society and the creation of opportunities for the development of digital knowledge of EJA students (De Luca; Santos, 2020).

For digital inclusion to occur, technologies must be integrated into EJA curricula, that is, the institutionalization of the appropriation of technological knowledge as part of the education of young people and adults. This issue has been pointed out by several authors as fundamental for the subjects of this type of education to be able to deal with the technological and social transformations of the contemporary world, allowing students to have access to



resources and knowledge that were previously unavailable to them. In addition, the acquisition of technological knowledge is currently essential for insertion and performance in the world of work (Silva; Couto Junior, 2020; Joaquim; Vóvio; Pesce, 2020).

Another aspect highlighted by distance education in EJA was the need for teacher training for digital inclusion. Many teachers had to adapt quickly to the use of technologies in education and were not prepared for the pedagogical use of digital technologies and for meeting the needs of EJA students with different levels of technological knowledge. From present and future perspectives, it is necessary to think about pedagogical training processes so that the digital inclusion of this target group takes place.

Teacher training should focus on the development of inclusive pedagogical practices that can ensure that digital technologies are used in a way that promotes the inclusion of all students, regardless of their limitations. In this context, teachers must be prepared to encourage EJA students to actively participate in the teaching and learning process using technology by creating spaces for debate, reflection, and dialogue. Without adequate teacher training, digital inclusion cannot be achieved.

It is essential to recognize the social inequalities that permeate EJA, influenced by the contradictions of the capitalist mode of production. Digital inclusion in EJA is not a simple task and involves multiple factors. Peixoto and Echalar (2019) highlight the contradictions that permeate digital inclusion in the context of neoliberal policies, where digital inclusion is seen as a solution to social inequality, but faces tensions that hinder its implementation. These tensions include the limitation of digital inclusion to mere access to technology, ignoring its social and cultural dimension; the technocratic vision that emphasizes only technical mastery to the detriment of students' critical and reflective skills; and the educational model that can promote a technicist view of technology or encourage a critical perspective on its role in society.

Therefore, digital inclusion cannot be seen in a naive and neutral way, but as a political issue. It is necessary to critically reflect on digital inclusion in the context of neoliberal policies and to seek ways to promote a more conscious and equitable digital inclusion that takes into account social inequalities and the specific educational needs of each group of students, especially when it comes to EJA.

Moreover, according to Peixoto and Echalar (2019), these tensions demonstrate the importance of government action to promote digital inclusion through public policies and educational programs that aim not only to acquire technologies but also to develop critical and reflective digital skills and competencies. In this sense, it is necessary to take into account the complexity of using technologies and the education required for their critical and effective use.



In the case of EJA, it is necessary to invest in the training and pedagogical qualification of teachers and students themselves so that they can consciously appropriate technological knowledge.

As a result, the pandemic disproportionately affected EJA students, who already faced educational and social challenges before the pandemic. Distance education brought these disparities and challenges to the fore. While distance learning provided opportunities for us to design a curriculum for EJA that is more flexible and meets the needs of these working students through digital technologies, it also highlighted the faces of social and digital exclusion of these subjects.

It became clear that digital inclusion in EJA is not a simple issue and that it goes beyond simple access to technological resources. It is necessary to take into account social inequalities, the context of neoliberal policies that affect education, the lack of training necessary for the critical and conscious use of technologies, and the guarantee of quality education that goes beyond market demands.

4 FINAL CONSIDERATIONS

During the COVID-19 pandemic, distance education became a reality for many students in youth and adult education (EJA) integrated with vocational and technical education (EPT). Although technology can make important contributions to teaching and learning, the lack of technological literacy and access to technological artifacts and the Internet posed significant challenges for EJA during distance education. The pandemic highlighted the social and digital inequalities in our society, especially in education.

Therefore, lack of access to technology and socioeconomic inequalities made the teaching and learning process difficult for many EJA students. In addition, the lack of pedagogical and human mediation has hindered students' learning since social interaction and knowledge exchange are fundamental to ensure the appropriation of knowledge. This research allows us to conclude that distance education has brought challenges and contributions to the understanding of the gaps that exist for the use of technology in EJA pedagogical processes. The historical period of distance education has shown in practice that technologies will not solve all the problems in education, much less in EJA.

The lack of access to technological devices and the Internet, as well as the difficulty of acquiring technological knowledge by EJA students, demonstrated the need for the implementation of public policies that guarantee digital inclusion, as well as the continuous



training of teachers in the use of technology in the classroom. Pedagogical and human mediation must be valued and teaching methods that respect the specificities of EJA students must be developed.

Furthermore, this research points to hybrid education as a way to make EJA curricula more flexible. Taking into account the perceptions of the research participants, we believe that the institutionalization of hybrid education in EJA would be a way to contribute to the historical challenge of dropouts in this type of education and to help adapt school hours to the needs of these working-class students. By combining presential education with distance education activities, hybrid education could help these students combine their studies with other responsibilities, such as work and family care. Another important factor is that in hybrid education there would be in-person contact between teachers and students, and between students themselves, which would contribute to maintaining dialogue and knowledge exchange.

Due to the pandemic and the impossibility of holding presential meetings, this research has as a limitation that data collection was done remotely, using only the online meeting application, which may have made it difficult to deepen the discussions in the focus groups held. Furthermore, it is necessary to develop new research with a specific focus on hybrid education and EJA to clarify doubts and point out new ways to proceed on this issue. Finally, it is important to reaffirm that EJA plays a fundamental role in promoting social inclusion and democratizing access to education. Therefore, it is necessary to invest in this teaching modality and to ensure that students have access to quality education, regardless of the format in which it is offered.

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