Teacher training and educational practices adopted during the pandemic: difficulties and challenges

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SUMMARY

This study aims to analyze emergency distance learning offered in teacher training courses, based on existing literature. More specifically, it seeks to identify the challenges and possibilities of emergency distance learning and teaching/pedagogical practices that may prevail/remain after the coronavirus pandemic in teacher training courses. This is a literature review, which considered data from the SciELO and Google Scholar databases using the following terms/descriptors from the Portuguese language: coronavirus pandemic, teacher training, emergency distance learning, using the logical operators "AND " and "OR" to combine the above terms. In the selection, only studies that made the full text available for consultation were considered, published between 2020 and 2022 and that addressed the challenges and possibilities of distance learning in undergraduate courses, as well as the pedagogical/didactic practices adopted for distance learning. , consequently, its description. The data was organized into three categories of analysis: challenges of remote teaching work, possibilities of remote teaching and pedagogical practices that will remain post-pandemic. With the analysis, we found challenges such as understanding the dynamics of virtual environments, precarious access to technological equipment and the Internet, as well as emotional control to work in an environment unsuitable for teaching and learning. As a possibility, the quality of life provided by its implementation stood out, with savings in money and time due to the absence of travel, the organization of new pedagogical sequences, as well as the use of an immense educational digital collection, which at the time became flexible. if available. Among the practices that may prevail post-pandemic are the use of the virtual learning environment (VLE), which was already something worked on in the area of distance learning; digital books; online reviews; and the increasing appropriation of digital culture, working with methodologies such as, for example, the flipped classroom, the online laboratory and rotation. The work does not present immutable, unquestionable data, it proposes a reflection on the teaching offered in teacher training courses.

Key words: Covid-19 pandemic. Initial formation. Emergency Remote Teaching.

ABSTRACT

This study aims to analyze emergency distance learning offered in teacher training courses, based on existing literature. More specifically, it seeks to identify the challenges and possibilities of emergency distance learning and teaching/pedagogical practices that may prevail/remain after the coronavirus pandemic in teacher training courses. This is a literature review, which considered data from the SciELO and Google Scholar databases using the following Portuguese language terms/descriptors: coronavirus pandemic, teacher training, emergency distance learning, using the logical operators "AND" and "OR" to combine the terms above. In the selection, only studies that made the full text available for consultation, published between 2020 and 2022 and that addressed the challenges and possibilities of distance learning in undergraduate education, as well as the pedagogical/ didactic practices adopted for distance learning, were considered, consequently, its Description. Data were organized into three categories of analysis: challenges of remote teaching work, possibilities of remote teaching and pedagogical practices that will remain post-pandemic. With the analysis, we found challenges such as understanding the dynamics of virtual environments, precarious access to technological equipment and the Internet, as well as emotional control to work in an inadequate teaching and learning environment. As a possibility, the quality of life provided by its implementation was highlighted, with money and time savings due to the absence of displacements, the organization of new pedagogical sequences, as well as the use of an immense educational digital collection, which at the time flexibility was made available. Among the practices that may prevail in the post-pandemic are the use of the virtual learning environment, which was already so-

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something worked on in the EaD area; digital books; online assessments; and the growing appropriation of digital culture, working with methodologies such as, for example, the inverted classroom, the online laboratory, and rotation. The work does not present immutable, unquestionable data, it proposes a reflection on the teaching offered in teacher training courses.

Keywords: Coronavirus Pandemic. Teacher Training. Emergency Remote Teaching.

1. INTRODUCTION

Covid-19 is a disease caused by the coronavirus SARS-CoV-2, a deadly virus that spreads immediately through droplets released by infected people. SARS-CoV-2 first appeared in the city of Wuhan, China, and quickly spread around the world. In Brazil, it was in February 2020 that the first records of its presence occurred (SANTOS JÚNOR; MONTEIRO, 2020).

Its rapid expansion has caused many deaths and patients in need of specialized medical care, creating a global emergency, forcing countries to take combative measures and follow the recommendations of the World Health Organization (WHO), including social distancing and suspension of commercial activities. and educational measures to contain the transmission of the virus and protect the lives of citizens.

In March 2020, the World Health Organization (WHO) decreed that the world was experiencing a pandemic caused by the new coronavirus, recognizing the geographic presence of the virus and COVID-19 (CoronavirusDisease2019) in different countries and regions of the world. Thus, around the world, public and private educational institutions halted their activities in an attempt to contain the transmission of the virus.

As a prophylactic measure, social distancing was implemented in Brazil. In this context, it was necessary to review teaching and learning methods and seek viable strategies for the educational process. All education networks had to adopt new training practices. Distance Emergency Didactics (ERE), therefore, emerges as a non-face-to-face teaching modality approved by the Ministry of Education (MEC, 2020), providing for the replacement of face-to-face classes with digital classes during the New Coronavirus (COVID-19) epidemic. 19).

The adoption of Emergency Remote Teaching by educational institutions has resulted in high investments in technology and teacher training, in addition to continuous adaptation to digital teaching platforms. This process, in turn, brings benefits and harms to the teaching-learning process.

In view of the adoption of practices to work with emergency distance learning, the degree, as well as other levels and teaching methodologies, have undergone continuous adaptations to alleviate the absence of face-to-face classes in an institutional space. Opinions about ERE are many and varied, leaving an analysis of its use in times of pandemic to the subjects who benefit from it in the training process.

It is worth noting that ERE has caused interference in family life, variations in routines, work and occupations (MEDICI; TATTO; LEAO, 2020), a fact that has worsened the economic and psychological situation of many people.

Therefore, the present study is justified by providing an opportunity to understand the challenges and possibilities amid the emergency provision of distance education in university courses. Furthermore, for having brought clarifications about its functioning and functioning in institutional spaces. It is about enabling an analysis of the learning achieved in times of pandemic with the use of digital educational platforms and presenting the positioning of the subjects who were part of this training experience. Understand the adaptations, difficulties, overcoming difficulties faced in training, as a strategy to be prepared for future situations and perceive technology as an educational support tool with significant value in times of pandemic.

To better understand the ideas presented here, the work is organized with a theoretical framework, containing reports about the pandemic and the differentiation between distance learning and distance learning; methodology, throughout the research; results and discussion, where the data identified with the research and a brief reflection on them are presented; and final considerations. The work does not intend to present immutable, unquestionable data, but to stimulate reflections in the field of teacher training.

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The general objective of this article is to analyze emergency distance learning offered by teacher training courses, based on existing literature. It aims, as specific objectives, to identify the challenges and possibilities of emergency distance learning in courses and teacher training; relate teaching/pedagogical practices that may prevail/remain after the coronavirus pandemic; reflect on teaching practice in emergency distance learning.

2 METHODS

This study was developed according to the precepts of research as a systematic literature review, which, according to Gil (2010, p. 50), "[...] develops from material already prepared, consisting of books and scientific articles".

The SciELO and Google Scholar databases were searched using the following terms/descriptors in Portuguese: coronavirus pandemic, teacher training, emergency distance learning. When tracking publications, the logical operators "AND" and "OR" were used to combine the terms mentioned. Only studies that made the full text available for consultation, published between 2020 and 2022, were considered. For the selection of bibliographic sources that addressed the challenges and possibilities of distance education in teacher training courses, pedagogical/didactic practices adopted for distance education and, consequently, its characterization, and those who did not respond to the research objective were excluded.

From the search in the indicated databases, informing the terms presented, 453 articles were found, 5 in the SciELO database and 448 in Google Scholar. Of these, it was verified which ones made the full text available for consultation and were published between 2020 and 2022, reaching a total of 389, whose titles were read. From this reading, 11 scientific articles were selected, 2 from the SciELO database and 9 from Google Scholar. In Figure 1, a flowchart of the research phases, which allows a better visualization of the results related to the selection of sources.

Figure 1 -Flowchart of the methodological procedure
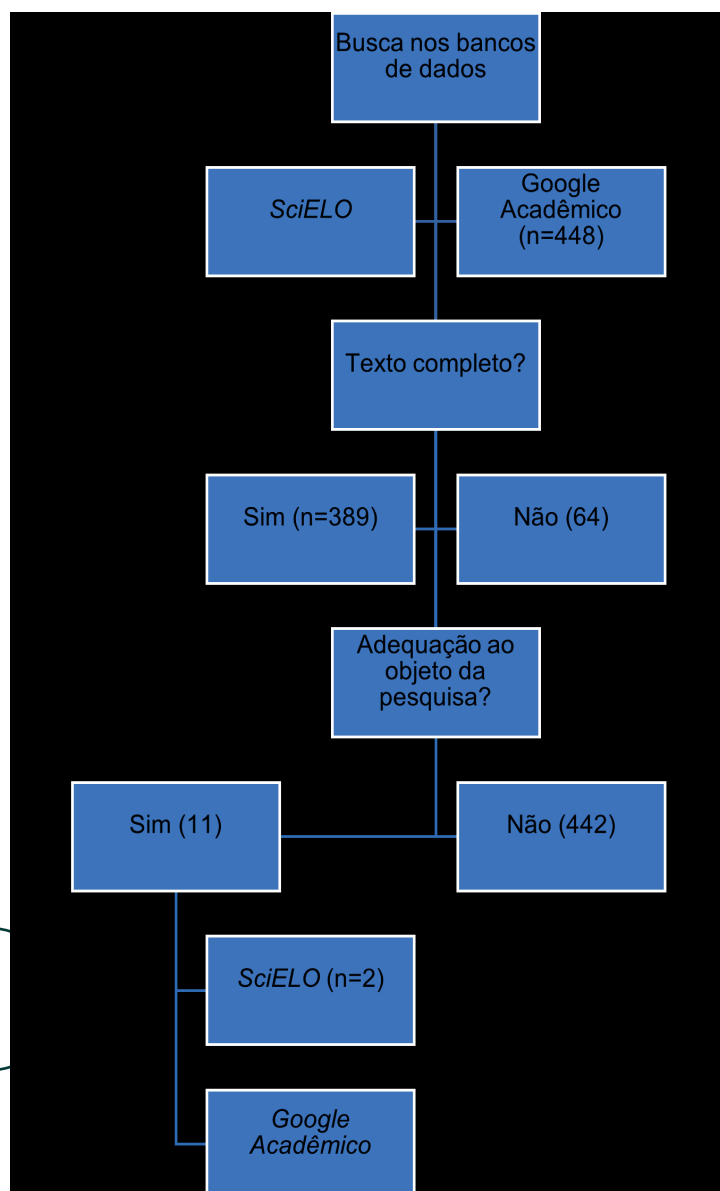
Source: Research data, 2022.

The selected articles were read analytically with the aim of ordering and synthesizing the information. formations they contain in order to obtain answers to the research problem. Therefore, after selecting the articles, the data was analyzed taking into account three categories: challenges of remote teaching work, possibilities in remote teaching and pedagogical practices that will remain post-pandemic.

Regarding ethical aspects, production rights were respected through the commitment to cite the authors used in the study in accordance with the standards of the Brazilian Association of Technical Standards – ABNT.

3 BRIEF HISTORY ABOUT REMOTE TEACHING IN BRAZIL

3.1 REMOTE TEACHING IN THE NEW CORONAVIRUS PANDEMIC

In March 2020, with the WHO declaration on the state of the Covid-19 pandemic, Brazilian states gradually took measures to ban the movement of people, adopting social isolation measures. At that time, educational activities of different educational modalities and levels were suspended after the publication, by state bodies, of the decrees that instituted this measure. After some time, private institutions, both in basic and higher education, following the guidelines of the National Council and State Education Councils, began to implement learning platforms along the lines already used in distance learning. This also happened with the Municipal and State Departments of Education, with different degrees of adherence (SARAIVA; TRAVERSINI; LOCKMAN, 2020).

Contrary to what happened in the United States of America - USA and Europe, where in a few weeks there was a migration from face-to-face teaching to distance learning, in many Brazilian universities the lack of training of students and teachers has been justified by the limitation of this measure . Thus, with the exception of universities with greater concentration in some areas of knowledge, such as, for example, those of Alfenas, Itajubá and Lavras, among others (MACEDO; ORNELLAS; BOMFIM, 2020), the others simply suspended teaching activities, starting negotiations for the resumption of distance learning from August 2020, that is, around 150 days after the suspension of face-to-face classes and, despite this, some of them indicated complementary activities to the academic calendar that had originally been planned for the academic year 2020 (SARAIVA; TRAVERSINI; LOCKMAN, 2020).

According to the United Nations Educational, Scientific and Cultural Organization - UNESCO, a total of 165 countries were affected by the Covid-19 pandemic. Taking into account the number of children and young people who live there, there are 1.5 billion people, which corresponds to 87% of the world's student population. Faced with the challenges perceived in this new context, UNESCO launched the "Learning Never Stops" campaign, organizing a portal in which it made solutions available to countries to deal with this new situation, thus allowing the use of this data by researchers and educational policy makers. in affected countries (JOYE; MOREIRA; ROCHA, 2020).

Brazilian public universities have been faced, however, with two dilemmas: one, linked to the historical view of the distance learning modality, with its little application among them and the negative association with the breadth of its offer by the private sector; and the precarious knowledge of the social conditions of their students, as well as the difficulty of establishing individual contact with them. This type of situation hampered efforts for several months, from carrying out survey-type surveys on computer use and the challenges experienced in practice in relation to Internet access among teachers and students, to the preparation of notices and other supply measures and purchase of equipment and data packages for registering students interested in providing distance learning (SARAIVA; TRAVERSINI; LOCKMAN, 2020).

According to Macedo, Ornellas and Bomfim (2020), in relation to higher education, attributing access to technology as a justification for interrupting academic activities, even knowing that many students They are already familiar with information and communication technologies and make use of them at some points in their academic life. daily life, is also linked to the creation and implementation of the Open University of Brazil – UAB in Brazil, through Ordinance No. 5,800/2006, which presents rates of progressive decline in enrollment among the Federal Institutes of Higher Education – IFES.

In 2013, due to the expansion of federal higher education through the Support Program for the Restructuring and Expansion Plans of Federal Universities (REUNI), distance learning enrollments showed erratic behavior (MACEDO; ORNELLAS; BOMFIM, 2020). Subsequently, the peak observed in 2017 represented an increase of around 40% this year compared to the previous year, thus interrupting the trend of

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drop that had been observed. However, in 2018 and 2019, the scenario fell again, 8% and 12% respectively, registering in 2019 a total of 81,119 enrolled in the distance learning modality at IFES. In the private sector, however, the movement was reversed: enrollments in distance learning grew throughout the decade, so much so that, in 2019, the number registered was three times greater than that recorded in 2010 (SANTOS JÚNIOR; MONTEIRO, 2020).

Taking a look back at education in the Covid-19 pandemic, some authors, such as Macedo, Ornelas and Bomfim (2020), Santos Júnior and Monteiro (2020), and Rodrigues, Pinheiro and Vasconcelos (2021) have the conception that the concepts of Emergency Remote Assessment and the ERE are the most appropriate to describe the practices recorded in the first phase of confronting the pandemic. This is because, according to the authors, there would be no immediate initiative to review the dynamics of distance learning in institutions; on the contrary, we sought to construct emergency responses for assistance during the period of in-person suspension of various activities of daily life, including educational ones.

Therefore, considering these notes, the following text presents the distances and approximations of the meaning of emergency EAD and EAD.

3.2 REMOTE TEACHING AND DISTANCE EDUCATION – EAD

With the development of information and communication technologies - ICT, society began to think about new forms of social, economic, political and educational organization, constituting the Information Society - SI (SANTOS JÚNOR; MONTEIRO, 2020).

Due to these transformations, reality began to mirror the new educational paradigms brought about by the rapid growth of ICT on a global scale. The great challenge, therefore, for teachers and managers is to think about 21st century education for this information society, through teaching that promotes challenges that contribute to the inclusion of the individual in contemporary society, generating new forms of life, work, relationship, production and offering services (MACEDO; ORNELLAS; BOMFIM, 2020).

All this without forgetting that the impact of the Internet has led this new generation of young people not only to look for information, but to create complex educational, social and global networks, thus contributing to the birth of what have become virtual societies. In Santos Júnior and Monteiro (2020) it is possible to identify four forces or factors driving the rapid expansion of these companies in the modern world, namely: the development of global economies; national Internet support policies; the growing digital literacy of the population; and the progressive improvement of the technological infrastructure made available to the general population.

Such driving forces, according to Santos Júnior and Monteiro (2020), are linked to the following spheres of incidence: global economies and the digital literacy of the population at the individual, group and business level, which are reflected, respectively, in the following forms: teleworking/ telelearning, virtual teams and virtual organizations. Supportive policies and technological infrastructures impact the community and social sphere, producing virtual communities and societies as virtual social forms.

The fact is that, with globalization, companies expanded their markets to different continents, so that the use of ICT became widely adopted to enter world trade. Thus, according to Rodrigues, Pinheiro and Vasconcelos (2021), the support policies signed between different countries have taken advantage of the teleworking process, which has become established in the global market, bringing the need for training staff to different parts of the world and expanding the job market. telelearning.

In this way, the most developed countries have increased their investments in ICT, improving their infrastructures and communication networks, helping their citizens to face the challenges of commerce (e-business), work (e-work), governance (e- governance) and education (e-learning) (RODRIGUES; PINHEI-RO; VASCONCELOS, 2021).

In this scenario, it is clear how every day individuals find themselves inserted into the virtual society, bringing to the population the imminent need for new literacy practices involving digital tools and resources (new literacies), being necessary, in the face of these multiliteracies, which renew the old ways of dealing with such phenomena, because, according to Lemke (2010, p. 457-458):

> It is no longer enough to imagine that societies are individual, autonomous 'minds' somehow dissociated from the material world. We cannot continue to think that there is only one 'literacy', that this is just what individual minds do when confronted with one symbol at a time.

For the author, it is necessary to abandon the paradigm of conventional literacies, centered on the valued cultures of the press, and make room for new literacies arising from new technologies, starting from the

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assumption that "[...] community potentially represents a new literacy". Every new system of conventional practices for meaningful communications is already a new literacy, enclosed in new technologies" (LEMKE, 2010, p. 460-461).

Given these notes, it is also important to consider the great progress recorded in the educational area, mainly in the field of Distance Education - Distance Learning, with significant use within higher education institutions. However, there is no need to confuse the concepts of EaD and ERE, as they refer to two situations that, although they are similar to each other, also carry distances.

The ERE, according to Oliveira, Corrêa and Morés (2020), was designed with the aim of avoiding the total suspension of school activities during the period of social isolation resulting from the Covid-19 pandemic. Therefore, it would appear in 2020. In other words, it emerged as a strategy to not harm the students' school year (WILLIAMSON; EYNON; POTTER, 2020). In the same sense, Moreira and Schlemmer (2020, p. 7) argue that ERE was born from the migration of students and teachers "to the online reality, transferring and transposing methodologies and pedagogical practices typical of physical learning territories". EaD had its first news in 1904, with the offer, in a newspaper advertisement, of a correspondence typing course on typewriters. It is, therefore, an educational modality that is opposed to face-to-face teaching (WILLIAMSON; EYNON; POTTER, 2020).

Oliveira, Corrêa and Morés (2020) also point out a basic characteristic that distances the conception of ERE from that of EaD: while in the former, student monitoring can be carried out both synchronously (in dialogic and expository classes), using digital to interact during meetings, as it is asynchronous (when reading the indicated bibliography, for example), in EaD, as classes are usually recorded, there is no real-time interaction between teacher and student, which is why asynchronous teaching predominates here. In this regard, Moreira and Schlemmer (2020) emphasize that ERE's concern is to reproduce face-to-face teaching as faithfully as possible - its typical methodologies and pedagogical practices - hence this difference in conception.

Castro and Queiroz (2020), in a study to analyze the use of remote activities to replace face-to-face classes due to the Covid-19 epidemic, found that, initially, the acronym EaD was applied indiscriminately to refer to school activities carried out during the period of social isolation. However, in his opinion, the correct name is ERE, as Distance Education, as regulated in the Law of Guidelines and Bases of National Education - LDBEN (Law nº 9,394/1996), as it reveals a different way of carrying out educational practice, which includes the differentiated use of technological resources, methodologies, legal regulations and access policies established at national and institutional level, which does not apply to ERE.

4 RESULTS AND DISCUSSION

In Table 1, the works selected for the research, indicating the challenges and possibilities of Emergency Distance Learning and notes on the permanence of practices adopted in times of the Covid-19 pandemic, in teacher training courses.

Table 1 –Articles selected for research

AUTHOR(S)	WORK	YEAR	DATA BASE OF THE
WEBER, DJ; ALVES, E.J.	(RE)thinking teacher training: what does emergency remote teaching say about teacher training?	2022	Google Scholar-monkey
FERNANDES, AC	Emergency remote teaching in the context of the Covid-19 pandemic: Reports of a challenging and successful experience in a Chemistry Degree class at IFRN	2021	Google Scholar-monkey
PEREIRA, RCM; MILK, EG; FRANCISO, EG	Teacher training in the pandemic context: reconfigurations of teaching actions by undergraduate students in supervised internship in emergency remote teaching	2021	SciELO

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RABELLO, C.	Technology-mediated language learning and teacher training: digital resources in online learning beyond the pandemic	2021	SciELO
SOUZA, GHS de;*et al.*	Emergency Remote Education (ERE): An empirical study on Educational Capabilities and Teaching Expectations during the COVID-19 Pandemic	2021	Google Scholar-monkey
VINHAS, T.; SANTOS, LMS dos; BARRETO, A. CF	Supervised internship and emergency remote teaching: what are the challenges for teacher training?	2021	Google Scholar-monkey
ZANOTTO, L.; OLIVEIRA, RFB from; SOMMERHALDER, A.	Teaching in the face of remote teaching: limits and challenges to teaching in teacher training	2021	Google Scholar-monkey
ALBUQUERQUE, A. de; GONÇALVES, T.; BAN-DEIRÁ, M.	Initial teacher training: the impacts of remote teaching in the context of a pandemic in the Amazon region	2020	Google Scholar-monkey
FERREIRA, LFS;*et al.*	Considerations on teacher training to work online in times of the COVID-19 pandemic	2020	Google Scholar-monkey
OLIVEIRA, RM de; CORRÊA, Y.; MORÉS, A.	Emergency remote teaching in times of Covid-19: teacher training and digital technologies	2020	Google Scholar-monkey
RONDINI, CA; PEDRO, KM; DUARTE, C. dos S.	Covid-19 Pandemic and Emergency Remote Teaching: changes in teaching practice	2020	Google Scholar-monkey

Source: Survey data, 2022.

4.1 CHALLENGES OF WORKING IN THE REMOTE LEARNING FORMAT

Regarding the challenges of working in the ERE format, Oliveira, Corrêa and Morés (2020), carrying out a study on teacher training and the use of digital technologies, found that as teachers are currently experiencing the teaching and learning process, as many do not they had an affinity with the use of technologies, the need to rethink the teaching of content and create assessments and activities considering digital tools. However, according to the authors, this has generated a lot of work for the teacher, as, in addition to teaching online, he still needs to adapt all the material he had prepared to explore in person.

Thus, the authors highlight that ERE promoted significant changes in the way of planning, developing and evaluating classroom activities, requiring teachers to overcome their difficulties, since initial training only included the instrumentation of Digital Information Technologies and Communication – TDIC, and not the actual creation of a digital space to interact with students. At the same time, ERE contributed to strengthening education at the time, all made possible by the use of TDICs (OLIVEIRA; CORRÊA; MORÉS, 2020).

Ferreira et al (2020) also address the training of teachers to work in ERE, but focusing their attention on continued training and the need to redirect practices previously established with the use of TDIC as a fundamental interface for such a situation. In this context, the authors highlight that thinking about the teacher's role in a moment of transition from in-person to distance learning, mainly mainly due to the lack of training, and, here, focusing on the continued training of professionals, strongly affects mind the contemporary dilemmas of the urgent sand mandatory use of digital interfaces, reinforcing the instrumentalist character of the practice – which, as highlighted by Oliveira, Corrêa and Morés (2020) and Zanotto, Oliveira and Sommerhalder (2021), is not what is expected in the context of 21st century teaching.

Still on the challenges for the ERE context, Weber and Alves (2022) argue that, in addition to training to work with technologies, which teachers do not have, whether initial or continued, there are other issues that negatively impact the period, such as, for example, the presence of students without internet access and discouraged; Work overload for teachers due to processing a multitude of tasks, among others.

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Albuquerque, Gonçalves and Bandeira (2020) and Souza et al (2021) also present important considerations about the relevance of educational competencies and skills in ERE, highlighting, in addition to the professional issue related to teacher training, other aspects concerning the teacher's personal life. 'teacher. Souza et al (2021), for example, highlight challenges such as teachers' individual needs and their family and domestic needs as possible barriers to the effective development of ERE. Problems related to the availability of computational and digital equipment, and even the Internet, were also reported by them, as well as by Albuquerque, Gonçalves and Bandeira (2020), who, in a regionalized context (Amazonas), also cited emotional issues and psychological problems , health problems of family members and graduating students, socioeconomic conditions due to lack of economic resources due to unemployment, lack of time to follow distance classes and difficulties arising from changing teaching methodology.

Vinhas, Santos and Barreto (2021), in turn, analyzing the context of ERE in relation to supervised internship, highlighted the need to restructure the way in which activities and classes are carried out in this modality, so that this discipline, considered to mobilize research and reflection on the concrete relationships of practice, it underwent a very significant structural redefinition. Therefore, according to the authors, the main challenges imposed were the need to transfer knowledge from theory to pedagogical practice during the Supervised Internship, without actually going into the field. Therefore, the practices aimed to redefine the proposition to force the student to think as if they were in practice, but only in the simulation format. Thus, the preparation of lesson plans, among other documents and the activities experienced by students in their daily practice, were incorporated into this new context, under this different reading and vision.

Pereira, Leite and Francisco (2021) address this need for reconfiguration of didactic action by university students in the supervised internship at ERE, both in the observation phase and in the conducting phase, having however noted the presence of obstacles in the interaction between teacher trainers with preceptors, interns and basic education students, either due to the lack of technological resources, or due to the difficulties of teachers and interns in constructing resources and providing artifacts capable of constituting learning tools. In this context, the authors emphasize that, although distance learning has its possibilities, it is also true that it has characteristics that favor difficulties in its implementation, covering both the initial and ongoing training process.

4.2 POSSIBILITIES OF REMOTE TEACHING

Rondini, Pedro and Duarte (2020), when promoting reflections on the changes promoted by ERE in teaching practice, conclude that, in addition to the difficulties, distance learning promoted important changes as it demonstrated its possibilities, which go beyond the character until then attributed to the use of ICT in education. This same perception is shared by Weber and Alves (2022), who warn, however, that the potential of distance learning would only be achieved in depth if the platforms were used in a reflective and broad way. In this sense, Zanotto, Oliveira and Sommerhalder (2021) teach the importance of better exploring the possibilities of distance learning to promote truly effective teaching, capable of supporting the construction of knowledge by the student.

According to Fernandes (2021), the ERE in the context of the health crisis caused by the Covid-19 pandemic exposed a series of possibilities. Especially if we consider that, in contemporary society, the formation of a reflective and critical subject, with the capacity to face the most diverse and relevant themes in this context, such as education, technology, politics and the environment, considers teaching contextualized based on scientific and of an educational practice in which the student is placed as the subject of their own learning. Thus, you are given a leading role in the process of building your knowledge.

However, from this point of view, teachers also receive a self-reflective look at their educational practice and training. Therefore, in the context of 21st century education, teaching under a Traditional perspective is no longer accepted. Therefore, the change and consequent break in paradigms in teaching models considers the need to place the teacher at the center of this process of change, assigning him the role of fundamental subject for carrying out any educational reform that may be necessary. In the midst of this, traditional teaching gives way to investigative teaching, whose proposal would be to personify the student and the teacher as active subjects in the teaching-learning process (FERNANDES, 2021).

Pereira, Leite and Francisco (2021), in turn, emphasize that, despite the various adjustments that have been necessary, such as, for example, students' access to technological resources with the support of the Internet, the distribution of activities on paper for those who do not have technological resources (excluding

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digitally), and psychological support for students due to the emotional overload required by social distancing, it is certain that distance learning has possibilities that favor the teaching-learning process in which the student is the author of their own knowledge, becoming a protagonist in this context , mediated by ICT.

In other words, it is necessary to develop specific skills and competencies, so that the student can stop learning only what the teacher teaches. Instead, he becomes responsible for constructing his own learning, which can result in a meaningful education. Therefore, in his opinion, distance learning has its possibilities of benefiting the teaching-learning process, such as, for example, the quality of life provided by its implementation, with savings in time and money due to the absence of travel, or even flexibility of study plans (PEREIRA; LEITE; FRANCISCO, 2021).

Another possibility of ERE, well received by students, was the virtual environment most used by teachers, that is, Google Sala de Aula – GSA or Google Classroom. The choice for its use would be based on the organization of the environment and the student's ease of adaptation to the classroom context, in addition to being freely accessible and integrating the package offered by the Google platform, only upon registration. In it, the teacher can organize classes separately, create subjects and modules or units, publish notes and asynchronous activities for students or even generate a link to synchronous moments, among many other features (FERNANDES, 2021).

4.3 PRACTICES THAT CAN REMAIN AFTER REMOTE TEACHING

Ferreira et al. (2020), when making considerations about the training of teachers to work online in times of health crisis experienced with the pandemic, highlighted that, although several difficulties have been encountered, including an increase in teachers' workload, it is certain that the implementation of the ERE has had an impact on the way teachers work and the way many students study. This is because, from this new context, a state began to be experienced in which the learner was responsible for building their own knowledge, thus disseminating issues related to collaborative and meaningful learning. With this, again according to the authors, it is believed that the use of digital tools in the post-COVID-19 moment can remain, but without the pure characteristic of a tool, but rather as a very important teaching resource for the teaching process- learning.

The considerations of Pereira, Leite and Francisco (2021) were also in this sense, when they argued that, in the context of the pandemic, it was necessary to reconfigure the educational action previously instituted so that it was possible to adapt to the new conditions and needs that emerged. Weber and Alves (2022) also highlight this change in teaching behavior, highlighting, in relation to the training process itself, the need to change the view of ICT as the only teaching tools, starting to attribute to them the real value they have, which is related, according to Souza et al. (2021), to the perception of the concessions made possible by this new scenario. In this regard, he cites as examples the quality of life provided by its implementation, with savings in time and money due to the absence of travel, the organization of new pedagogical sequences, the use of an immense educational digital collection, which he made available and the flexibility of schedules .

For Rondini, Pedro and Duarte (2020), the Covid-19 pandemic has contributed to the migration of educational institutions around the world from face-to-face teaching to distance learning as a way of continuing the academic year. In the midst of all this, however, teachers were asked to reinvent themselves daily so that pedagogical activities could continue. However, according to the authors, while the period was challenging, it also opened up possibilities in the educational context, with the increased use of digital technologies in the teaching-learning process, at all levels of education. Thus, if before they were used only as resources to support the process, from then on they became main artifacts, which does not mean, however, that, as a result, classes became more interesting, demanding teacher makes a differentiated effort to maintain student learning, attention and involvement during the entire school year. However, it is something that may prevail, according to the authors, even after in-person classes return.

This same perspective is found in Fernandes (2021), who defends the importance of using of the Virtual Learning Environment – AVA (in this case, the GSA) in a hybrid teaching modality, where the elements of face-to-face teaching are juxtaposed with remote control, as in the case of using a VLE. This is because, in his opinion, the experience has been well received by students, highlighting the need to think about the application of digital tools together with teaching in an investigative way, leaving room for future improvements in teacher training and, consequently, in the environment and long-term teaching.

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Also Rabello (2021), when carrying out action research in an English Language discipline at Literature course at a federal university in the ERE modality with the objective of evaluating, from the students' point of view, the English language learning experience mediated by digital technologies, in addition to identifying the contributions of digital resources and the methodology used in the design of the discipline for L2 learning within this modality, verified the possibility of using language learning mediated by technology in hybrid, online or face-to-face contexts – Computer Assisted Language Learning – CALL.

FINAL CONSIDERATIONS

The results obtained from the bibliographic survey showed that the pandemic caused by the new coronavirus has had a strong impact on people's routine, mainly due to the measures adopted to control the spread of the disease, such as social isolation. This is because it exposed issues related to the daily lives of people and institutions. And in education it was no different.

In teacher training courses, the implementation of ERE has occurred in some institutions more hesitantly and in others at a more frantic pace. The fact is that its implementation influenced the way teachers work and how many students study. The learning carried out during this period was closely linked to the use of digital tools and the construction of moments of collaborative learning.

The pandemic brought a new learning environment and with it challenges and possibilities for teaching and achieving students. Thus, as challenges of working in the distance learning format, the sources consulted revealed the difficulty experienced by many in understanding the dynamics of virtual environments, precarious access to technological equipment and the Internet, as well as emotional control for the working in an unsuitable environment for teaching and learning, health problems arising from isolation are also cited.

However, it cannot be denied that ERE has presented some possibilities for work and study that benefit the teaching-learning process, such as, for example, the quality of life provided by its implementation, with savings in money and time due to the absence of travel. , the organization of new didactic teaching sequences, as well as the use of an immense digital teaching collection, which became available. Furthermore, the flexibility of schedules is also a positive point.

On the other hand, it requires the development of specific skills and competencies, which make the teacher increasingly present themselves as a mediator between the student and the content taught, freeing the student from inertia and proposing meaningful learning. The student becomes directly responsible for their learning.

Among the practices listed and cited by the researched authors, which may prevail in the post-pandemic period are the use of the Virtual Learning Environment - VLE, which was already something worked on in the field of distance learning; digital books; online reviews; and the increasing appropriation of digital culture, working with methodologies such as, for example, the flipped classroom, the online laboratory and rotation.

For future studies, a more in-depth study of the topic is suggested, trying to corroborate or refute what is presented here, considering that digital technologies are already permeated in cultures, therefore being a reality to be experienced and shared. Only in this way will it be possible to create a teaching construction scenario that incorporates local and global culture, effectively contributing to the formation of a truly integrated and civic-minded society.

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