Distance education in Brazil: An integrative review

La educación a distancia en Brasil: revisión integradora

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ABSTRACT

The present study aims to raise and discuss the academic production in several areas of knowledge about the Distance Education (DE) in Brazil. The method utilized was the integrative review. The search tool was the journal portal “Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES)”, specifically on the icon “search subject”. The descriptions were: “distance education”; “teaching”; “epistemology”; “pedagogy” and “university”. The inclusion criteria established were the time lapse between 2015 and 2020, articles available in whole and in Portuguese and the exclusion criteria repeated articles, theses, books, previous notes and summaries. As results, it were found 22

articles, being 6 of them selected for analysis. It as possible to build four categories: focus on professor, curricular perspective, distance teaching ambience scenario, DE aspects. It was concluded that the instructor formation is an important subject regarding DE, since the professor need to identify how the learning process should be guided and to observe each student's specifics.

Keywords: Education, University Education, Distance Education, Integrative review.

RESUMEN

El objetivo de este estudio es relevar y discutir la producción académica en diversos campos del conocimiento sobre la Educación a Distancia (ED) en Brasil. El método utilizado fue una revisión integradora. La herramienta de búsqueda fue el portal periódico de la Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES), concretamente en el icono "buscar assunto". Los descriptores fueron: "educación a distancia"; "enseñanza"; "epistemología"; "pedagogía" y "universidad". Los criterios de inclusión establecidos fueron el corte temporal entre 2015 y 2020, artículos disponibles en su totalidad y en lengua portuguesa y los criterios de exclusión fueron artículos repetidos, tesis, libros, notas previas y resúmenes. Como resultado, se encontraron 22 artículos y se seleccionaron seis para su análisis. Fue posible construir cuatro categorías: enfoque en el profesor, perspectiva curricular, panorama del entorno de la educación a distancia, aspectos de la educación a distancia. Se concluyó que la formación del profesorado es un punto importante en lo que respecta a la educación a distancia, considerando que el profesor debe identificar cómo promover el proceso de aprendizaje y observar las peculiaridades de cada alumno.

Palavras-chave: Educação, Educação Superior, Educação a Distância, Revista Integradora.

1 INTRODUCTION

Higher Education in Brazil is offered by universities, university centers, colleges, higher institutes and centers of technological education. Regarding universities, Brazil has 63 (sixty-three) Federal Public, 38 (thirty-eight) State Public, 1 (one) Municipal Public and 95 (ninety-five) Private Institutions (profit or non-profit), totaling 197 (one hundred and ninety-seven) universities offering undergraduate courses, which, in turn, are distributed by administrative categories.

As for the course, the student can opt for three types of Undergraduate degrees (Bachelor's, Undergraduate and Technological). After graduating, the student can continue on to post-graduate Lato Sensu courses (Specializations and MBAs) and Strict Sensu courses (Masters and PhDs), whether academic or professional.

In addition to the face-to-face form, it is possible to enter the Distance Learning teaching modality (EAD). This teaching alternative is anchored, above all, on the new Information and Communication Technologies (ICTs), and in hybrid forms through semi-attendance courses.

In this way, education is impacted by the new technologies. The path to a democratic citizenship goes through the right to distance education, which can prepare and increase a global

communication, participative and of intellectual interdependence, so that everyone can exercise the "status of citizen of the world" (HABERMAS, 1997).

This paper seeks to survey and discuss the academic production in various fields of knowledge about Distance Education (DL) in Brazil. It is, therefore, an integrative literature review, which, besides the possibility of synthesizing the state of knowledge and/or the state of the art of a given subject, allows for its synthesis and the elaboration of general conclusions.

DL is linked to several educational principles, and with open learning throughout life, that is, a permanent education. Araújo et. al. (2015) sought to elucidate the DL in Brazil through a literature review through the preparation of an article by means of descriptive research with a qualitative approach, through the gathering of articles that brought arguments for the foundation of this study.

2 METHODS

The integrative review has six steps for its development: 1a identification of the topic and selection of the research question; 2a search sites, inclusion and exclusion criteria; 3a identification of pre-selected and selected studies; 4a categorization of articles; 5a construction of the analysis of results and 6a presentation of the synthesis of knowledge.

Complying with the steps (Souza; Silva and Carvalho, 2010), the theme of the study is DL in Brazil, with the guiding question being how is the trajectory of DL in the Brazilian context and in teacher practice? The search was carried out in the periodicals portal of the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES), specifically on the "search subject" icon. The descriptives used as a basis for the search were: "distance education"; "teaching"; "epistemology"; "pedagogy" and "university", using the boolean AND on 04/08/2021. The inclusion criteria established were the temporal cut between 2015 and 2020, articles available in full and in the Portuguese language, and the exclusion criteria were repeated articles, theses, books, previous notes and abstracts. Twenty-two articles were found, and after reading them in their entirety, 6 articles were selected.

The 4th and 5th steps were carried out simultaneously, occurring the analysis and interpretation of results (Souza; Silva and Carvalho, 2010). The 6th step consisted in the presentation of the review and synthesis of knowledge itself, where the discussion of the categories was developed (Souza; Silva and Carvalho, 2010).

3 ANALYSIS

In Brazil, the implementation of DL is still in its implementation phase in the various educational spheres, in qualification programs, professional training, and in corporate education. Within this prism, Araújo et. al. (2015) highlights that higher education in Brazil has been undergoing transformations and, according to data from the National Census of Higher Education, the number of enrollments in 1962 was 107,506 students. In 2011, the mark reached 6,741,700. It can be seen that in 50 years there has been an approximate 62-fold increase in the number of students in Higher Education.

Also according to the authors, during this period, the private sector increased its participation in the total number of enrollments, since in 2011, approximately 72% of the enrollments in higher education were in private universities. It is noteworthy that distance learning has assumed a relevant role in the supply of vacancies, since, also in 2001, approximately 15% of enrollments were for this modality (Araújo et. al., 2015).

Among the articles that addressed the area of education, the articles that presented identification and correlation with the theme were read in full. The remaining articles are described in Chart 1 below.

Quadro 1. Artigos selecionados

Autor	Ano e periódico	Artigo	Objetivos
1.ARAÚJO, Tamires Sousa et al	Revista de Contabilidade & Finanças-USP, 2015.	Problemas percebidos no exercício da docência em contabilidade	Mapear os principais problemas enfrentados pelos docentes de Contabilidade no ingresso na carreira e nas fases posteriores
2.GODOY, Elenilton Vieira; DE MACEDO SANTOS, Vinicius	Educação Matemática Pesquisa, v. 19, n. 3, 2017.	O Currículo da Matemática escolar e a centralidade da dimensão cultural	Identificar, no debate nacional e internacional sobre o currículo envolvendo as disciplinas escolares, a presença e a ausência de um currículo escolar de Matemática
3.LIMA, Francisco José de	HOLOS, 2018	Por que ensino como ensino? Contextos e Narrativas da trajetória de um professor formador de professores.	Apresenta reflexões a respeito da trajetória docente
4.PALANCH, Wagner Barbosa de Lima; PIRES, Célia Maria Carolino.	Revista Educação Matemática Pesquisa, 2017.	Um Panorama das Pesquisas Centradas nas Implementações e Organizações Curriculares no período de 1987 a 2012.	Refletir sobre as pesquisas centradas nos Currículos Praticados na Educação Matemática expressos nas teses e dissertações produzidas no período de 1987 a 2012, de forma a compreender a configuração desta temática no campo da Educação Matemática brasileira e o que se tem produzido sobre os currículos em ação e os currículos realizados.
5.ROSA, Milton; OREY, Daniel Clark	Educação Matemática Pesquisa: Revista do Programa de Estudos Pós-Graduados em Educação Matemática, 2017	Uma fundamentação teórica para as coreografias didáticas no ambiente virtual de aprendizagem	Discutir sobre a fundamentação teórica para a utilização da plataforma Moodle no contexto da Coreografia Didática e do design instrucional considerando os novos desafios midiáticos e colaborativos enfrentados pelos professores em sua prática pedagógica no ambiente virtual de aprendizagem.
6.VIEIRA, Marilandi Maria Mascarello.	HOLOS, 2018	Formação de professores da Educação Profissional: análise de produções acadêmicas	Conhecimento sobre a formação de professores para a Educação Profissional e inventariar as produções acadêmicas sobre o tema no período de 2010 a 2017

Fonte: Elaborado pelos autores

4 DISCUSSION

From the reading of the articles it was possible to identify four categories: Focus on the teacher, Curricular perspective, Overview of the distance learning environment, and Aspects of ODL, which will be presented below:

4.1 FOCUS ON THE TEACHER

In an approach on the problems perceived in the exercise of teaching, Araújo et. al. (2015) mapped the main problems faced by accounting teachers in Brazil at each stage of the professional life cycle. For them, the expansion of enrollment identified in the last five decades, associated with the processes of inclusion and quotas allowed great diversity in the educational environment, whether in primary, secondary or higher education. This context has brought impacts to the consolidation of education in Brazil, especially higher education.

Among the challenges identified by the authors, it is worth mentioning the training of teachers to welcome this diversity according to the individual's training needs. Diversity is increasing and demands teacher skills for the proper treatment of differences during the teaching and learning process. According to Vieira (2018) the expansion of vacancies in educational institutions requires the hiring of more teachers, which reinforces the importance of professional training.

To identify the challenges faced by teachers during their professional career, Araújo et. al. (2015) drew on the studies of Huberman (1989), who reported the phases of the teacher's professional life, emphasizing the problems faced in several countries, highlighting the characteristics of each of these phases between the years 1960 and 1984. After identifying the phases, the authors also performed the analysis of the teachings arranged in Veenman (1984) apud Araújo et. al. (2015), which dealt with the challenges perceived by teachers throughout these stages, which concludes that the recognition of the problems that most affect teachers can collaborate to the design of teacher training programs in relation to the content and the most appropriate strategies. According to Araújo et. al.(2015):

Knowing the problems faced by professionals who choose the academic area becomes important, because from the previous knowledge of such problems, solutions to them can be discussed and made possible. It also stands out, by identifying these problems, the possibility of seeking solutions for the improvement of teaching [...] (Araújo et. al. 2015, p. 94).

Thus, it is verified that the teaching of varied areas of knowledge requires studies of distinct epistemological nature, according to their peculiarities. The authors paraphrase Huberman (1989)

apud Araújo et. al. (2015) and assert that the development of a teacher's career is a process composed of several cycles that suffer interference from the direct relationship with the problems he faces in the performance of his work. In this way, the teacher may feel motivated, enthusiastic, discouraged, tired, etc.

In this context, Lima (2018) notes that professional performance and involvement with teacher training is a process that requires continuous learning and presupposes the contact of this professional with various experiences, knowledge, and methodological alternatives. Such elements may trigger improvements in teaching practice, in which teachers must reflect on their own experience and (re)know the need and importance of continuous learning throughout their career.

It is important to highlight here the stages that arise for the teacher during the development of his career and the problems he faces when carrying out his teaching practice: the groping stage is the first one where he faces the greatest problems, but it is also when he is most enthusiastic. The stabilization phase comes right after, because that is when the professional has greater decision autonomy and assumes greater responsibilities. For Huberman (2000, p. 40) apud Araújo et. al. (2015, p. 95) the stabilization phase "slightly precedes or accompanies a growing sense of pedagogical 'competence'".

The stage that follows is known as the experimental phase, where the teacher begins to analyze their career possibilities. In these moments, they employ alternative ways of teaching, by means of the material used, student evaluation models, they have greater security, among other aspects. It can be observed that teachers are more motivated at this stage and more committed to the pedagogical field. The distancing stage, on the other hand, usually occurs when teacher and students are of different age groups and the dialog becomes more difficult.

The study by Veenman (1984) cited by Araújo et. al. (2015), conducted a survey to identify the problems that most affect teachers at each career stage. The authors believe that problems seen as obstacles can hinder the goals of these professionals. Using questionnaires, a point scale, and interviews, Veenman (1984) apud Araújo et. al. (2015) indicated that the first problem affecting early career teachers is classroom discipline; however, the concept of discipline may vary among teachers.

In the perception of Araújo et. al. (2015) the performance of an experienced university professor is essential to establish a climate of respect, rigor, and love for studies, in addition to defining the relationship of students with the educational institution during their training. The second problem refers to the motivation of students, as novice teachers face greater difficulties in getting

students involved, especially when they find themselves unable to encourage them in the teaching and learning process.

For Lima (2018) the adherence to a more rigid posture of the teacher in the classroom is influenced by his experience as a student, due to these memories of teachers who mastered the content, who maintained discipline and organization, who demanded improvements in learning, in addition to teachers who diversified the teaching methodology.

The difficulty in dealing with individual differences, evaluation of student work, and the relationship with parents were other problems that arose in the course of the discussion. Individual differences refer to diversity, so it becomes necessary to vary curricular and instructional practices to meet the particularity and individuality of students. Citing Krasilchik (2008) apud Araújo et. al. (2015), the authors assert that the increase in the number of openings forms very crowded classes which further aggravates the daily battles faced by teachers.

Evaluating students' work is a challenge due to the accumulation of information and lack of experience. The relationship with parents is an issue reported by beginning teachers, as there is a lack of confidence in beginning teachers (Araújo et. al., 2015).

In addition, it is cited the study conducted by Araújo et. al. (2015) with a sample composed of 574 teachers of both genders who work in the accounting area, it is noteworthy that among the participants, approximately 57% teach in public institutions and 43% in private institutions. Considering that the sample does not reflect the Brazilian reality, since the number of private institutions is much higher than the number of public ones.

The main challenges found were: lack of student motivation; class heterogeneity; amount of administrative work; large classrooms; and lack of time. The results corroborate the research of Veenman (1984) apud Araújo et. al. (2015), whose conclusion informs that student motivation is among the most reported problems and that, nowadays, heterogeneity is one of the most pointed out difficulties due to the expansion of access to education that has occurred in recent decades. The authors consider that this diversity occurs both in relation to customs and to previous schooling, motivations and expectations of the students.

Another aspect reported identifies the administrative work overload. In the case of higher education institutions, generally, teachers take on several activities - besides the classes themselves - , being closely linked to the last challenge encountered, which is the lack of time.

When placing a magnifying glass on the variables presented between public and private institutions, the results showed discrepancies, which were: the amount of administrative work and the

lack of guidance from the Higher Education Institution (HEI). The amount of administrative work in public institutions tends to be greater, because they concentrate a larger number of faculty members with an exclusive dedication regime, leading them to assume tasks related to teaching, research, extension, and especially administrative activities. The lack of orientation also seems to be greater in public higher education institutions, due to the decentralized decision making process.

According to Araújo et. al. (2015), the results indicate the need for pedagogical training of teachers to overcome the obstacles that plague the (un)career paths of these professionals. At the same time, it is urgent that they know the academic standards and have access to guidance from the HEIs. Equally important is the need for pedagogical training that allows them to have access to a range of skills and competencies that help this professional deal with the diversity of students and the tools needed to motivate them.

For Lima (2018) the contexts and narratives of the teacher's trajectory as a teacher trainer require a Pedagogy course that prepares the educator to have the necessary knowledge about the content taught so that he or she can perform pedagogical mediation between the teaching and learning processes, identifying heterogeneity, which constitutes a complex universe imbued in the classroom and in the student and teacher learning environment.

According to Vieira (2018) teaching knowledge is a craft of knowledge in which the teacher needs to know how to do and know how to be a teacher.

4.2 CURRICULAR PERSPECTIVE

In recent years, much has been questioned about the curricula in Brazil, according to Palanch and Pires (2017) this occurs mainly due to the debates held at the National Education Council and by the Ministry of Education, mediated by the publication of the National Curriculum Guidelines, the National Curriculum Parameters, and the Curriculum Proposal for Youth and Adult Education, in addition to the National Textbook Program.

According to the manual of the National Curriculum Guidelines (DCN) for the organization of the curricula for basic education, one should observe the guidelines common to the stages and respect their specificities, as well as the idiosyncrasies of the subjects to whom they are addressed.

It is observed that the curricular organization goes beyond, when, in the face of the educational process, teachers and students are able to identify the complexity that surrounds the process, where the formation of the human being in its multidimensionality takes place. In this sense, the DCNs bring together guidelines for the development of specific foundations for each stage and modality of basic

education. In this process, the students must present aspects of development, being recognized in their relations with others who compose the school environment collectivity, in union with other school units and with society. From the perspective of social inclusion, education must be exercised in commitment to equity and quality: "One must think and conceive the political pedagogical project, the relationship with the family, the State, the school, and everything that is done in it" (Palanch and Pires, 2017).

Everyday, the curricular organization usually presents numerous divergences, among them the competence to define the curricula, because although there is no consensus on such factor, it is believed that society should have broad participation in the construction of the school curriculum. According to Palanch and Pires (2017, p. 54): "the need to base future curricular innovations on a well-structured conceptual framework and the proven results of research requires delimiting the field of these studies and updating their foundations". Also according to the authors, the purpose of curriculum organization is to regulate the role of the State as an intervener in social life, since through the organization and distribution of content in all educational spaces, there is the possibility of directly influencing cultural aspects of society, which also has an impact on the economic aspect. The proposal of a minimum common curriculum ensures the inclusion of all individuals in school, guaranteeing the right to equal opportunities and, at the same time, allowing control over the educational process. In this space, the teacher acts as a key player in relation to the students, as he or she is able to adapt the contents according to their reality, aiming at the effectiveness of their learning. In this process, due importance is given to the choices the teacher makes in relation to content, methodologies, and forms of assessment.

Still from this perspective, Godoy and Santos (2017) emphasize the premise of cultural centrality, referring to the set of systems of meanings that are established in the context of human actions, so that education becomes a social practice that expresses, communicates and produces meanings, in which it presents cultural specificity. As these authors point out, the impact caused by cultural centrality in influencing school thought reaches the curriculum, making it a tool in dispute for meaning and identity.

In the study, one can also reach conclusive points regarding the importance of strategies that serve the students, qualified teaching; the relevance of the content taught; collaborative work favoring collective practices; qualification of didactic actions; reflective and committed action of teachers; didactic organization allied to the contents and experiences; and the implications that external and

internal evaluations have on teaching and learning (Palanch and Pires, 2017). Godoy and Santos (2017, p. 282) add to this reflection:

The practices of signification and the symbolic systems, constituents of a system of representation, act in the constitution of the subject, his subjectivity and identity, and in the manufacture of forms of differences between the elements of the same or different social group. This subjection is responsible for the production of differences, which are intrinsic to the constitution of identities, regulating the subjects and their behaviors.

As for the learning process, it is also understood that it requires attention to issues such as diversity, multiculturalism, and critical education, among others. Observing them as complementary elements for a more qualified education with better results, by understanding each student as an individual made up of beliefs, values, and knowledge that, in the interaction with the environment and with others, generates relations, attributes senses and meanings, forming new learning and expanding what they already know. On this path, each student has a unique way of learning, and this fact should be considered as a space for reflection, research, and training. The educational field needs a wide range of pedagogical strategies that enable access to information for all students in any educational space (Palanch and Pires, 2017).

In the search for meaningful learning, Lima (2018) suggests that classes should associate curricular knowledge with the students' daily lives, enhancing the meaning and re-signification of the contents. It is important, here, to know if the work developed by the teacher helps in the development of the intellectual activity of the students and what its significance is for them.

4.3 OVERVIEW OF THE DISTANCE LEARNING ENVIRONMENT

Rosa and Orey (2017) consider that the rapid progress of technology has provided the development of several specific tools for virtual teaching. Likewise, learning has acquired innovative pedagogical dimensions due to the dissemination of information and communication technologies, through the internet as a means of education.

The study of these authors refers to the use of the Moodle platform, which is widely used by higher education institutions, since this tool provides a series of curricular activities, facilitating the creation and development of online courses. The platform offers the use of several communication tools in order to promote the interaction between teachers, students and tutors, which is so necessary in the virtual learning environment.

On this aspect, Rosa and Orey (2017, p. 436) conceptualize the Virtual Learning Environment (VLE) as a:

Place where learning is deflagrated through the use of technological resources as pedagogical tools and the didactic choreographies as an instructional design, which seek to engage the participants of this learning environment in the process of exchange of experiences, collaboration and (re)signification of the contents when using the technological resources made available in this platform.

By observing the new media and collaborative challenges faced by teachers in their pedagogical practice in the virtual learning environment, the authors highlight the work of Martin Dougiamas, who made it possible to analyze the use of free software for the use of social constructivist epistemology in the teaching and learning process, developing the Moodle platform, which aims to develop a collaborative virtual learning environment. This platform aims to help teachers of online courses with a focus on interaction and collaborative construction of curricular content.

The metaphor used by Rosa and Orey (2017) about didactic choreographies identifies the complexity of the interactions that occur in the teaching and learning process. From then on, a sequence of didactic steps is formed to direct students to learn the contents of a particular subject. In this opportunity, didactic elements are made available to students that can be used in the teaching and learning dyad initiated by teachers with the collaboration of tutors in a given virtual learning environment. Such didactic choreographies, can be used to determine the paths to be followed so that teachers can meet the learning styles of the students and verify how this process becomes inherent to teaching.

The educational process is a phenomenon, which teaching and learning occur simultaneously. This requires that didactic choreographies be structured according to planning components (scene placement, script and learning product) and elements related to the actions of teachers, students and tutors in a given virtual learning environment. In this way, teachers should carry out a survey of the learning they want students to acquire and the skills they should develop during the teaching process, by planning curricular activities.

It is necessary that teachers reflect on the pedagogical possibilities offered by the DL learning environment, as well as on the students' learning styles and the content to be taught, in order to promote a quality learning process. In the meantime, it is important that teachers are clear about the definition of the desired results and that they seek to select appropriate activities to achieve these goals.

Virtual learning environments are perceived to benefit the collaborative construction of knowledge. However, this requires the understanding and training of teachers in relation to the

planning and development of DL learning platforms that meet the demands of the students. In distance education, technological resources can significantly expand the possibilities of learning, interactivity, and collaboration that occur in virtual learning environments. However, it is necessary to establish a dialogical relationship between pedagogical conceptions and the needs of the subjects involved in the educational process (teachers, students, and tutors) so that new learning possibilities occur in virtual learning environments. It is relevant to note that the integration of interactive resources allows the development of collaborative activities for students to build new knowledge in a collective and contextualized way (Rosa and Orey, 2017).

According to Vieira (2018), in current times, teachers face challenges related to organizational changes that are intertwined with technological innovations, as well as their impact on work, cultural, and professional activities. From this perspective, symbolic systems end up playing a new role in structuring work, increasing demands on the quality of work. This represents, in reality, new demands for the construction and (re)signification of knowledge, insights, reflections, and critical and creative interventions in relation to labor activity.

4.4 ASPECTS OF DISTANCE EDUCATION

The regulations for distance education were created as of the year 2003, in addition to the emergence of quality guidelines, principles and criteria that guide the quality of services provided by institutions that offer this type of course. According to Rosa and Orey (2017), the ethical aspects of DL should also be emphasized, since the educator who works in distance education should have the ethical commitment to develop a humanized project that can free citizens from cultural massification, in addition to focusing on their learning, in order to overcome technological rationality.

In effect, the distance learning regulation observes the quality of its constituent processes, seeking to be a reference for evaluations of projects aimed at distance learning courses. In relation to the student, it emphasizes the student's autonomy and establishes guidelines for programs to privilege the student's autonomy, so that he or she can control the development of learning and organize their time.

The growth in the number of educational institutions accredited by the Ministry of Education (MEC) to provide distance education or to offer hybrid modalities (semi-attendance) in the teaching-learning process as a strategy to democratize the access to education is noticeable. In this sense, corporate education both in the country and internationally, is in rapid expansion, based on the offering of courses through learning methodologies with virtual support, which allow asynchronous

communication of the student and teacher, as well as the transmission of learning elements over the Internet. Consequently, professionals of this generation and the next will have to base teaching on the development of groups of skills that have become essential for meaningful learning (Araújo et. al., 2015; Rosa and Orey, 2017).

In the ODL environment, the learner needs to go through the process of understanding, recognizing, constructing, and (re)signifying knowledge. In this context, as important as learning the contents, it is essential to know the languages and methodologies that will build such knowledge (Vieira, 2018).

In this way, learning to perform presents itself as an important competence of the teacher to make the individual capable of facing challenging situations, even in an organizational environment. Proportionally, professional training is insufficient for a given activity in a dynamic reality, since the irregularity of opportunities for higher education and the demands imposed by the labor market contribute to the constitution of such a scenario. Thus, training should be continuous and according to the dynamism of the market (Vieira, 2018; Lima, 2018).

In this same context, developing the ability to learn to live together allows the individual to live in a society that promotes work environments with progressive complexity, requiring the professional to work with interdisciplinary teams to solve problems (Palanch and Pires, 2017; Rosa and Orey, 2017). ODL must provide the full development of the individual, as it is necessary for them to develop all their potentialities in an integral way.

Rosa and Orey (2017) point out that the virtual learning environment, generally related to ODL, presents a multiplicity of resources to achieve the educational goals, they also serve to teach the student to study alone and ensure the interactivity of those involved in the process.

An education for all is based on the principle of isonomy, on accessible and permanent education to any individual, at any time and place, offering a second chance to those who did not complete their studies and/or did not have access to education previously (Araújo et. al., 2017).

In both public and private institutions, ODL extends and democratizes access to education, generating favorable conditions for continuous learning. The use of electronic platforms for learning management allows universities to gather and organize themselves in virtual environments with diverse possibilities (Rosa and Orey, 2017; Araujo et. al., 2017).

Between 2009 and 2016, the number of educational institutions authorized to offer this type of courses grew by 15%. The large increase in ODL is mostly due to flexibility, which allows students to organize their time so that they can study wherever and whenever they wish. DL has enabled greater

access to higher education, especially for individuals who live in the countryside and would not be able to commute to face-to-face courses (Araújo et. al. 2017).

Under the constructivist view, each student should be understood individually and the technology employed for the teaching-learning process should offer the teacher and/or tutor an individualized perception regarding the learning of each student, so that autonomy can be managed (Rosa and Orey, 2017).

In this opportunity, it is also highlighted that the teaching-learning process should be implemented through ethical, political, and pedagogical inspirations. However, for this autonomy to be managed, promoted, and built by the student, it is necessary that distance education programs consider and choose the best tools.

Distance learning courses provide a redirection from the classroom to online platforms as an environment for knowledge construction. Likewise, the roles of those involved in the learning process change. In DL, besides the role of teacher and student, there is also the tutor who collaborates with the teacher's work. Through pedagogical mediation, the teacher organizes, plans, and gathers experiences that emerged throughout his or her praxis systematizing it to ensure the mastery of new knowledge by the student (Araujo et. al., 2017; Lima, 2018; Palanch and Pires, 2017).

Generically, the teacher needs to develop the minimum competencies, which are classified as domains: cognitive, technical, management, pedagogical, communicative, and social support; while the tutors have the domains: cognitive, technical, pedagogical, communicative, and social support. As for the students, the domains: organizational, communicative, and technical are delegated, aiming to facilitate organization and understanding. In this sense, both teachers and tutors should be competent and capable of recognizing the fundamentals of DL and the existing tutoring/mediation models. These skills, should enable these professionals to be empathetic with the student, identifying their difficulties, anxieties and challenges, using the media and means of communication available as tools/means to deliver the course.

In this context, Vieira (2018); Lima (2018); Rosa and Orey (2017) emphasize that the training of educators should encompass the competencies that allow the knowing; the doing; the theory and practice; the principles and processes of educational technology.

Concluding the integrative review, it became necessary to rescue the guiding question and answer it: How is the trajectory of ODL shown in the Brazilian context and in the teacher's practice? Thus, the trajectory of DL in the Brazilian context is growing in the number of institutions using it as a strategy to democratize access to education. And the teacher's practice depends on the knowledge

domain in relation to this strategy, highlighting the importance of his training as a facilitator of the learning process. The relevance is shown in having a panorama of DL in Brazil, while the limitation is expressed by the small number of articles found, which strengthens the need to develop studies on the subject, giving importance to this article.

5 FINAL CONSIDERATIONS

Based on the selected articles, it can be verified that teacher training is an important point when it comes to DL, since the teacher needs to identify how to promote the learning process and observe the peculiarities of each student.

Even with the creation of quality guidelines for distance education, this aspect still needs more attention. It is perceived that experienced teachers are individuals capable of promoting innovative processes for the apprehension of new knowledge. They, in turn, must understand the VLEs, because that is where large investments are made in equipment and means of communication to teach the distance learning courses, and for these to be efficient. It is known that the terminology of distance education is seen as a branch of the human and social sciences with multiple terms due to its linguistic expansion in ICTs.

Today, the internet has become a democratic tool of access to knowledge for society, which identifies it as a facilitator of paths to reach knowledge. The role of the teacher in this new perspective is to value cooperative learning, to encourage continuous learning and the development of students' reasoning for better learning.

The choice of distance learning for non-mandatory courses demonstrates the degree of confidence given to this modality to promote the individual's education. In Brazilian basic education, distance learning is still not widespread, because it is not offered in the country's public schools on a mandatory basis. In higher education, however, these practices are already consolidated. Distance learning is optional, but it is favored due to convenience and price.

It can be seen that there is agreement among the institutions about the benefits of technology in relation to distance education, since the learning process is facilitated by this tool.

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