# International Journal of Human Sciences Research

BRIEF REFERENCES
ABOUT TEACHER
TRAINING IN
PORTUGAL: THE
IMPORTANCE OF
SCHOOL ASSOCIATIONS
TRAINING CENTERS
- CFAE AND THE
COLLABORATIVE
EXPERIENCE BETWEEN
BRAZIL AND PORTUGAL
IN CONTINUOUS
TRAINING THROUGH
THE DIGITAL TEACHING
ON NETWORK COURSE

*Luiz Alberto Rocha de Lira* http://lattes.cnpq.br/4715197481059481

José António Marques Moreira http://lattes.cnpq.br/9800508476476626

*Ilka Maria Ribeiro de Souza Serra* http://lattes.cnpq.br/9701947243565086

**Susana Henriques** ORCID ID: 0000-0002-7506-1401



All content in this magazine is licensed under a Creative Commons Attribution License. Attribution-Non-Commercial-Non-Derivatives 4.0 International (CC BY-NC-ND 4.0).

Abstract: This article, is a clipping that derives from a post-doctoral research report carried out at the Open University of Portugal in the field of teacher training, it was sought, through a bibliographic and documentary research, approaches and historical evidence, from authors who discuss the theme in an evolutionary process, and also, in the legal basis in the educational context in Portugal. In this sense, it was possible to know the organizational aspects of the basic academic structure of teaching in Portugal with regard continuous training and specialized training of teachers, whose paths are directed to the possibilities of improvement and professional development throughout the life of these teachers in their careers. . It was also considered to analyze the rise and importance attributed to the Training Centers for School Associations - CFAEs, which act as decentralized networks integrating schools, teachers and managers through training plans organized territorially. At the end of the study, we carried out a brief analysis of the Course entitled, Digital Teaching in Network, idealized by the Open University of Portugal, having been applied to Brazilian and Portuguese professors in a collaborative regime through the Coordination for the Improvement of Higher Education Personnel (CAPES), the State University of Maranhão (UEMA) and the Open University of Portugal (UAB-PT).

**Keywords**: Open University of Portugal; Teacher training; Training Centers and School Associations; Digital Teaching in Network; Collaborative regime; Portuguese education system.

## INITIAL CONSIDERATIONS ABOUT THE STUDY

In this article, an excerpt from a postdoctoral research report carried out at the Universidade Aberta de Portugal in the field of teacher training, we seek historical evidence from authors who discuss the subject from different approaches, in an evolutionary process, and also in the legal bases. in the educational context in Portugal.

In the study, it was possible to know the organizational aspects of the basic academic structure of teaching in Portugal, with regard to continuous training and specialized training of teachers, whose paths are directed to the possibilities of improvement and professional development throughout the life of these teachers in their careers.

Under this condition, the regulatory acts that govern continuous training in the Portuguese educational field, record that this action represents a right and a duty of the State, in order to enable the deepening and updating of knowledge and professional skills, enabling the professional mobility and career progression.

Considering the typology of courses that are implemented with a view to continuing education, the following stand out: training courses, training workshops, study circles, short-term actions or, upon request to the Scientific-Pedagogical Council for Continuing Education, internships and projects.

Such costs are organized by a different group of training agents: (1) higher education institutions; (2) training centers for association of schools, on a municipal and inter-municipal basis, made up of schools and kindergartens that are associated for this purpose; (3) training centers for non-profit professional or scientific associations; (4) central services of the Ministry of Education, in areas considered relevant for the development of the education system; and (5) other institutions whose intervention is considered relevant in this area.

It must also be added that this study will also report on the importance assumed by the Training Centers of Association of Schools (CFAE) as a reference in continuous training in the Portuguese network of basic education. In Portugal, the importance of continuous training and professional development does not require an integration between practice and collaborative work, and also that it provides a combination of experiences, opening spaces for the processes of communication and interaction between teachers and their peers.

The Schools Association Training Centers (CFAE) work by drawing up the annual or multi-annual training plan, based on priorities indicated by the associated schools, and the continuing training actions become part of the Centers' training plans and, they are subsequently submitted for accreditation by the Scientific-Pedagogical Council for Continuing Education.

The year 2014 marks the publication of Decree-Law no. and focused on the priorities identified by schools in the professional development of teachers.

This new legal regime will be applied to all teachers of Portuguese public schools and, even those schools abroad, of the private and cooperative education system. And, in the requirement of evaluation of teachers' performance, changes were introduced in relation to the previous models, mainly with regard to the simplification of procedures, where the promotion of longer cycles of evaluation and the introduction of an external dimension focused on classroom observation stands out. Chapter 2, which follows, will demonstrate the field of discussions, as well as the legal bases on which this evolutionary process of teacher training was established.

### INITIAL STUDY ON THE THEORETICAL, LEGAL AND ACADEMIC - ADMINISTRATIVE MANAGEMENT BASIS OF CONTINUOUS TRAINING PROGRAMS IN PORTUGAL

Starting from a referential analysis on the

continuous training of teachers in Portugal, the year 1986 will bring the publication of Law no 46/86 of October 14, which establishes the Basic Law of the Portuguese Educational System, and, in its article 35° [...] will establish that continuous training must be diversified, making it possible to ensure the teacher, the complement, deepening and updating of knowledge and professional skills, as well as enabling mobility and career progression. This law will present in its article 30, the following principles:

[..] Training that, in reference to social reality, encourages an attitude that is both critical and active;

-Training that favors and stimulates innovation and research, namely in relation to educational activity;

-Participated training that leads to reflective and continuous practice of self-information and self-learning". (PORTUGAL, 1989, p.3075)

Such principles enshrined in the aforementioned law 46/86, indicate with some clarity, that there is a need for articulation between training and its impact at intra and inter-individual, organizational and social levels, that is, such reflections direct the actions of continuous training in Portugal in a collaborative and integrative format between the different agents.

A little further on, Decree-Law n° 344/89 of October 11th, will refer in its article 26, that continuous training can occur on a prospective basis aiming at: a) improving the professional competence of teachers in the various fields of their activity) encouraging teachers to actively participate in educational innovation and improving the quality of education and teaching; c) acquire new skills related to the specialization required by the difference.

The same Decree-Law in its article 29 will mention that the actions of initial

and continuous training are under the responsibility and competence of the General Directorate of Basic and Secondary Education, which is responsible for determining the needs and requirements of initial and teacher training, but also recognizes that schools need to participate in this process:

[...] the needs for the evolution of the educational system, the qualitative requirements of initial and continuous training of the respective teachers at the national level, on the other hand, recognizes the autonomy of basic and secondary education establishments to carry out a survey of the training needs of the their teachers and prepare the respective plan (article 30, nº 1). This last article intends to comply with article 14 of Decree-Law 43/89 of 3 February, which emphasizes that it is the responsibility of the school to:

- a) participate in the training and updating of teachers;
- b) make an inventory of shortcomings concerning the training of teachers in terms of scientific and pedagogical-didactic components;
- c) prepare the training and updating plan for teachers;
- d) mobilize the necessary resources for continuous training, through exchanges with schools in their area and collaboration with competent entities or institutions;
- e) promote the formation of teams of teachers who can guide the implementation of educational innovations. (PORTUGAL, 1989, p.3075)

It is important to highlight that the legal and organizational basis for continuing teacher training in Portugal will be completed through the creation of the coordinating council for continuing training, with representation from various training bodies and markedly the presence of the Ministry of Education, which will assume tasks in coordination, accreditation and evaluation of the entire continuous training system.

## CONTINUING EDUCATION IN PORTUGAL: THEORETICAL AND CONCEPTUAL REPORTS

In this subchapter, brief theoretical and practical reports will be presented, in addition to conceptual aspects addressed in research by authors who discuss the topic of continuing education in the Portuguese educational system. Of course, the reports discussed here do not exhaust the theme.

It is a consensus among Portuguese authors and researchers, as well as those from other countries, in their research and writings, that the topic of continuing education has important conceptual advances, in which the integration between theory and practice is recurrent and, approached as the fundamental in any policy., course or program that may be instituted in search of sustainable continuous training.

Authors such as (Fabre 1995 and Alin 1996) position themselves in relation to the theme, attributing to training [...] as a concept and practice, a relatively distinct and autonomous meaning in the face of what is defined as education. This same author will also mention the duality between the paradigmatic concepts that are often established for teacher training in their training process and reports that:

In this sense, it can be said that training is crossed by a duality of inspiration: as a technological paradigm of modeling the trainee or "adapting" to the job, one seeks to identify with a model and produce conforming copies; or, on the contrary, it is the biological paradigm that dominates and what is sought, then, is the supplementary adaptation of a subject to a changing reality (FABRE, 1995, p. 29).

From another perspective, in relation to continuing education, Rodrigues (1993) presents his perspective on continuing education throughout the professional career, regardless of the moment and time in his

teaching activity:

[...] continuing training will be that which takes place throughout the professional career after the acquisition of the initial professional certification (which only takes place after completion of in-service training), favoring the idea that their insertion in the teaching career it is qualitatively differentiated in relation to initial training, regardless of the time and time of teaching service that the teacher already has when he/she becomes professional, which is still considered a stage of initial training. (RODRIGUES, 1993, pp. 44-45).

It appears that the continuous training of the teacher requires alignment with their preparatory base at the university, since the various possibilities of professional growth will occur soon after their insertion in the educational service, when they assume their discipline of action and begin to understand that now, their professional life, will be instigated by the challenges that are imposed in the school experience.

For formosinho (1991) continuous training is sequential to initial training, acquiring different concepts from initial training, as it will be offered to people in adult condition and already with experience in education. Another important concept to be considered in our analysis of continuing teacher education was presented by howey, quoted by Rodrigues and Esteves, when he emphasized professional development:

The concept of development or team development can, however, be considered, in a literature review, as encompassing a set of dimensions, such as: continuous development; pedagogical continuous self-discovery and development; ongoing cognitive development; continuous development; theoretical continuous professional development; continuous development. (RODRIGUES; career

ESTEVES, 1993, p. 46)

Advancing a little further on the legal basis established by Law 46/86, article 35, item 1, bringing to light what continuous training in Portugal requires, this legal provision will mention [...] the complement, deepening and updating of professional knowledge and skills [...] improve professional competence [...] acquire new skills related to the specialization required by the differentiation and modernization of the educational system, and also, Decree-Law n° 344/89, article 26 n° 1, will point to:

[...] the promotion of training practices that are based on fundamentally analytical, critical, reflective and practical concepts. Considering that professional development is structured not only in the domain of knowledge about teaching, but also in teacher attitudes, interpersonal relationships, competences linked to the pedagogical process, among others, teachers will have to mobilize in their practices not only specific knowledge of the subjects that teach, but a set of other skills that contribute to the success of these practices and, consequently, to their professional and personal development and fulfillment.(PORTUGAL,1989, p.3.074)

When considering in this analysis, the legal aspects that guided the advancement and consecration of the importance of continuous training in the educational scenario of Portugal, Decree-law no 22 of 2/11/2014 which established the legal regime for continuous training and the decree-law no 127 of 7/7/2015, the legal regime of the Training Centers of School Associations - CFAE, represent important instruments in the educational field, strengthening the role of the school in continuous training. These centers were the result of groupings of schools in a given geographical area.

## THE IMPORTANCE ASCRIBED TO THE TRAINING CENTERS OF SCHOOL ASSOCIATIONS - CFAE IN THE SCOPE OF THE PORTUGUESE EDUCATIONAL SYSTEM

Specialists and other scholars in the field of continuous training in Portugal, add greatly to the importance of the Training Centers of School Associations - CFAE for the education system in Portugal, specifically, with regard to the continuous training of teachers:

[...] Twenty-five years after the creation of the formal system of continuous training of educators and teachers in Portugal, the Training Centers of Association of Schools (CFAE), with clear resilience and no less capacity to adapt, today constitute a "reality" whose indispensability – for teachers, for non-grouped groups/schools, for the education system – is consensually recognized. (MACHADO, E.A; SOUZA, J.C, 2018, p.5)

The reports emphasize that these training centers constitute important training spaces and were created, presupposing concepts autonomy and emancipatory bases and territorialization in the Portuguese educational system. However, beginning of the activities, some pressures for the financial execution of the European funds, made the referred centers act through actions directed to too much concern with the offer of courses, than with the qualified demand in the demand and, this fact, made it possible to raise doubts and concerns about the relevance of the centers' activities and their role in the professional development of teachers.

Notably, the CFAE throughout their history of operation, represent and develop actions that transcend the concept of mere instruments for the execution of European financial funds and, since their creation, they have been organized as decentralized networks, integrating schools and teachers and managers through democratized training

plans.

In their role, assumed in Portuguese education, the CFAE maintain institutional commitments for continuous training:

Moreover, if it were not so, it would be difficult to explain that, crossing a financial desert, without any European funds or other forms of financing, the CFAE would have managed to keep the light of continuing teacher training on, fostering partnerships, resources and will that have been able to build and consolidate over these two and a half decades. (MACHADO, E.A; SOUZA, J.C, 2018, p.5)

The CFAE's management and administration policies have advanced and internalized their training plans in recent years, which allowed the emergence of Pedagogical Councils, which began to assume the Training Plans and with that, some problems arose in articulating the demands of training in the same territory. And, from the current legal regime of continuous training, new training models were structured:

In addition, the current Legal Regime for Continuing Training (Decree-Law no. 7 de Julho) point to a model of continuous training that has two fundamental characteristics: on the one hand, an instituting character, insofar as it is considered that the Training Plan (FP) must result from needs and priorities (personal and organizational) immanent to each educational territory; on the other hand, a participatory nature within which - at different stages and with different competences - the intervention of various actors and many other processes of legitimation, validation and approval of the Training Plan are called upon. (MACHADO, E.A; SOUZA, J.C, 2018, p.5)

Such regulations brought an important logic to the concept of continuous training of educators and teachers, in the sense of promoting autonomy, the democratic and emancipatory basis as potentialities, but also added a certain organizational complexity to

materialize and make the training plans work. in each CFA. And, João Barroso, added in his studies on the transformations that have taken place in the management of continuing education programs and the relationships that are established between training and aspects of professional development:

[...] the evolution of continuing education for adults was conditioned by the changes that took place in the domain of theories of organizations and by the consequences they caused in the ways of organizing work and in the management processes. In the approach that this author proposed to make about the relationship between training and organizational development, two major phases in its evolution stand out. A first phase, from the period when adult training is seen as a response to the needs of each one, apart from organizational problems and outside work situations, until now; in a second phase, in which the needs of individuals are adjusted to the needs of organizations (BARROSO, 1997, p. 63).

From 1986 onwards, as we have already reported, a new scenario will be established in Portuguese education, the publication of Law nº 46/86 of October 14th, instituting the Basic Law of the Educational System, where continuous training arises as a a general right for all education professionals, with the aim of providing academic and political means, aiming at the updating and deepening of scientific knowledge, the development of professional competences and mobility and progression in the teaching career.

However, it will be in 1989, through Decree-Law n.º 344/89, of October 11, that the legal system for the continuous training of teachers will be structured) and, with the publication of Decree-law n.º 249/92, of 9 November - Legal Regime for the Continuous Training of Teachers, a national system of teacher training will be created, with the formation of Schools Association Training Centers (CFAE). Therefore, in the view of Barroso and

Canário (1999, p. 21) when mentioning the expectations attributed to the CFAE and their start in the redefinition of the teaching career:

[...] the need to design continuous training that contributes to educational change and to the redefinition of the teaching profession". In the preamble to the Legal Regime for the Continuing Education of Teachers, it is mentioned that "special emphasis must be given to the personal and professional development of the teacher". This was the task that the CFAE faced when they emerged at the end of 1992. [...] these centers carried a set of promises and fed a set of expectations regarding the possibility of, based on territorialized strategies, and contextualized training, can contribute to the construction of modalities of autonomy, on the part of schools and teachers". The start of the CFAE's activity took place at the end of 1992, in an environment marked by expectation and also by enthusiasm. (BARROSO; CANARIO, 1999, P.21)

However, it is considered that the CFAE were only born, in fact, from the ownership of their directors and, also, through their physical and administrative organization with space, equipment, staff support, and the immediate creation of the first courses, in view of immediate training demands, where:

The director, when installing his Training Center, had to learn how to obtain funding to implement his training plan and to minimally equip his administrative service. And he had to learn computers, notions of national accounting and the European Social Fund, he had to organize a secretarial service (file, correspondence, accounting processes, issuing certificates and declarations) and, often, tidy the rooms, transport overhead projectors, screens, make photocopies, open and close the school and fulfill your school schedule. (VIEGAS, 2007, p. 227).

Continuing with this reflection, authors and researchers in the Portuguese educational field mention in their studies on the creation and evolution of CFAE that, due to their proximity to schools, the administrative and managerial arrangement can be considered a conditional factor to give give them some autonomy, however, the work of the Scientific Pedagogical Council for Continuing Education - CPFC and the Ministry of Education still stand out, given that they make resources available and direct policies induced for the performance of CFAE.

Such institutional assumptions lead to an analysis that needs to be more in-depth about the relationship between the CFAE and the CCPFC, depending on the impacts of the decisions that emanate from the educational policy conducted by the Portuguese Ministry of Education to induce continuing education policies, as well as, on the action and involvement of local actors and, on these points:

[...] Today, 25 years later, there are two aspects that these data show: one has to do with the willingness shown by local educational actors to get involved in the development of the subsystem of continuous training, the other relates to the weight that the CFAE have been assuming in the field of public offering of training actions, since they were considered responsible for promoting about three quarters of the number of accredited actions" (SANTOS, 2009, p. 35).

It can be seen, then, that the performance of the CFAE will rise through its trajectory, already consolidated over the more than 25 years of its existence and, still, consecrated for playing a fundamental role in the continuous formation, where the democratic participation of the social body of the school and, fundamentally, of teachers, allows ample space for discussions about knowledge and experiences, in a process of reflection on pedagogical practices and also the directions in the scope of curricular and pedagogical transformation projects.

In chapter 3, which follows, we will present an experience of institutional partnerships in continuous training, made possible through a public policy involving the State University of Maranhão - UEMA, the Open University of Portugal-UAB-PT and the Coordination of Personnel Improvement Higher Education-CAPES, which, in a collaborative partnership, promoted the training course in Digital Teaching in the Network.

THE EXPERIENCE OF
PARTNERSHIPS THROUGH
PUBLIC POLICY IN A
COOPERATION REGIME
BETWEEN CAPES/UEMA/
UAB - PORTUGAL: A STUDY
APPLIED IN THE FRAMEWORK
OF THE TRAINING COURSE FOR
NETWORK DIGITAL TEACHING

In this chapter, the report inserts the experience of continuous training programs in a collaborative regime through the Digital Teaching in Network course, which was applied to Brazilian teachers through the State University of Maranhão - UEMA, object of a cooperation agreement with the Coordination of Improvement of Higher Education Personnel-CAPES and the Open University of Portugal – (UAP-Pt).

The shelter of the Digital Teaching course in the network at the State University of Maranhão - UEMA, considers its notorious qualification in the offer of distance courses, and this prerogative was granted by Ordinance No., published in the Federal Official Gazette, on October 15, 2001.

The aforementioned institution has been strengthened through financial support from the federal government and has intermediated, with its various Teaching Centers, the offer of distance courses, serving approximately 9,000 students, distributed in 37 municipalities in Maranhão, from the courses: Degree in Pedagogy, Degree in Philosophy, Degree in Geography, Degree in Music and Bachelor in

Public Administration and, from 2019, the new Degree in Physics.

With the intensification of CAPES' participation in ministerial public policy, linked to teacher training, as we have already mentioned, Law No. education and in the valorization of Brazilian Public Basic Education teachers. The agency, famously known for its role in expanding and consolidating the *National Postgraduate System* (SNPG), thus, he resumed Anísio Teixeira's ideal of an effective commitment by Brazilian higher education and postgraduate courses to the training of education professionals and a systemic view of this process.

About Universidade Aberta de Portugal (UAB-PT) that conceived the Digital Teaching course in Network, it defined the objective of the formation of the Course of Digital Teaching in Network, centered in the qualification of the participants to conduct educational processes using digital technologies, academically systematized in three modules and, in the Brazilian case, offered through the Eskada digital platform of the Nucleus of Technologies for Education (UEMAnet).

The program included that at the end of each module, there would be the mediation of Brazilian and Portuguese professors, by live broadcast on Youtube, with double certification and seal UAb-PT and UEMA. In this sense, the course inserts participants in discussions about alternative pedagogical models, enabling analysis of the different processes of communication and interaction in digital educational environments.

When discussing the possibility of offering continuing education courses that can occur through distance education technologies, such a perspective requires an organizational design that can support what is intended, and, in this aspect, authors such as Mill et al. (2010) when resorting to classical management

theories emphasizes on the main decisions of a manager regarding planning, direction, control and organization, in view of the main resources available in the organization such as space, time, money, facilities, information and technologies.

Mill's observation (2010, p. 47) will show us that the management of education systems, whether presential or distance learning, has as its objective "coordinate, guide, execute and monitor activities to achieve established objectives" from planning to the end of the course project.

Considering the initial proposal of this study to bring evidence in the field of teacher training in Brazil and Portugal, through historical, legal and critical approaches, it was possible to analyze the course of Digital Teaching in Network in the amplitude of the agreement 026/2010 registered in the Brazil Platform under number 904067/2020.

The aforementioned course started on November 22, 2021 and ended on December 21, with the participation of 10,496 Brazilian professors, and, on the methodology and aspects of academic architecture, the course was taught through the e-Learning modality and learning management (LMS) Learning Management System, software that allows the creation, management, organization and provision of online training materials, where 03 themes were developed (1) Education and Communication on line and virtual pedagogical models; (2) Platform and Digital Technologies on line and (3) Digital learning and assessment activities On line.

On topic 1, the contents addressed lead teachers to analyze the processes of communication, interaction and collaboration in networked digital education contexts, as well as the characteristics and specificities of communication mediated by digital technologies, and, for the sub-theme pedagogical models in virtual environments

the emphasis is on collaborative, constructivist and learning pedagogical models encouraged in different contexts of digital education.

Theme 2, online platform and digital technologies, is divided into two sub-themes: digital platforms and learning management systems, aimed at the potential use of digital platforms and the other sub-theme web applications and interactive technologies, will explore technologies aimed at editing the text, image and sound of the social web.

The approach to the third theme, entitled E-learning activities and digital assessment, was also subdivided into two sub-themes, E-digital learning activities, developing issues related to the creation and design of learning activities in networked digital environments and the other sub-theme online digital assessment, directed the content to the challenges linked to the contexts and assessment practices in virtual learning environments (VLE).

It is in this new context that the educational curriculum guidelines will be reorienting and adapting the teaching and learning process, where the teacher will no longer act as the absolute provider of knowledge, but as a collaborator and promoter of learning. And, in this rupture, in addition to mastering and teaching the content, this teacher will be responsible for promoting and encouraging the interaction and permanent motivation of their students.

According to Professor Jacques de Lima Ferreira (2014, p. 38) "the action of teaching requires specific training, mastery of theoretical knowledge and the practical reality of the profession". Under this approach, Professor Lima emphasizes that the teacher's training, initial or continuing, can give him conditions to reflect on the praxis in face-to-face or virtual classes, in order to allow an integration between theory and practice. And, on the integration between theory and

practice, Professor Lima still resorts to a reflection by Gamboa (2003):

[..] it is not possible to conceive of theory as separate from practice. It is the relationship with practice that inaugurates the existence of a theory; there cannot be a loose theory. It exists as a theory of a practice. Practice exists, logically, as the practice of a given theory. It is the very relationship between them that makes their existence possible (GAMBOA, 2003, p.125 apud FERREIRA, 2014, p. 35).

Regarding the possibility of carrying out an assessment of the level of satisfaction with the course, a questionnaire was applied to 1,124 Brazilian course participants, through google forms with scales and, from Likert, the analysis process took place, in order to identify the breadth of the degree of satisfaction or dissatisfaction, and through a group of 08 analysis requirements, thus considered (1) Opportunity of the course (2) Relevance of the topics covered; (3) Documentation made available; (4) Interaction between participants; (5) Open model and conference cycle; (6) Virtual learning environment; (7) Responses to needs and (8) Practical application of the skills developed. Below we report on the perception of the degree of satisfaction with the course in Brazil.

completely satisfied (a)				
ANALYSIS ITEM	SCALE	PERCENTA	GE ACHII	EVED
Course Opportunity	6 e 7	94		
Relevance of the Topics Addressed	6 e 7	95		
Documentation Available	6 e 7	93		
Interaction between Participants	6 e 7	71		
Open Model and Conference Cycle	6 e 7	86		
Virtual learning environment	6 e 7	88		
Response to Needs	6 e 7	83		
Practical Application of Developed Skills	6 e 7	91		
PERO	CENTAGE A	CHIEVED		
Practical APPLICATION of Competencies		1		
Response to needs	8			
Virtual learning environment				
Open Model and Conference Cycle				
Interaction between Participants				
Documentation Available			400	
Relevance of the topics covered				
Course Opportunity				
0	20	40 60	80	100

Table 01- Satisfaction Analysis Source: Research Data (2022)

completely dissatisfied (a)				
ANALYSIS ITEM	SCALE	PERCENTAGE ACHIEVED		
Course Opportunity	1 e 2	0,44		
Relevance of the Topics Addressed	2 e 2	0,53		
Documentation Available	1 e 2	0,44		
Interaction between Participants	1 e 2	2,22		
Open Model and Conference Cycle	1 e 2	0,8		
Virtual learning environment	1 e 2	0,53		
Response to Needs	1 e 2	1,42		
Practical Application of Developed Skills	1 e 2	0,53		
Application and Practice of Developed S Answers to Nee Virtual learning environm Open Model and Conference Cy Interaction between Participal Documentation Available Relevance of the topics covered	eds nent cle nts	ACHIEVED		
Course Opportunit	0 0,5	1 1,5 2 2,5		

Table 01b- Satisfaction analysis Source: Research Data (2022)



Figure 01 - Word Cloud Analysis Source: Research Data (2022)

It can be deferred that there was absolute supremacy in scales 6 and 7, which enhance the level of complete satisfaction, where the percentage achieved in these scales ranged from 71% to 95%, and it can be said that there was intense satisfaction in carrying out the course, as reflection on the item that showed 71% of attendance, refers to the Interaction between the participants, which, even integrating the maximum scale (6 and 7), requires a point of attention to be considered in the continuity of the application of the course.

The analysis also consisted of a block of word clouds as a visual representation of the most common terms that were part of the open responses. The word cloud allowed us to identify and highlight important terms in the responses, with relevant highlights:

opportunity, teachers, congratulations, platform, course, digital, excellent, a lot, time, more, which textually synthesize the discursive impressions present in the texts of the responses.

Regarding the same course applied to Portuguese teachers, the analysis carried out and published in the article entitled "Quality in Digital Education in Network: Innovation and Teacher Training", by the authors: HENRIQUES, Susana; MOREIRA, José António; BARROS, Daniela; SOLEDADE, Ana Filipa. This article emphasized in its objective the importance of encouraging teachers to develop basic skills by providing educational resources and possibilities of organizing digital educational environments in a network, having been developed in the e-learning modality in a learning management system - LMS asynchronously:

The course was taught in the form of e-Learning, using a learning management system (LMS) and in an exclusively asynchronous regime. The term "virtual environment" was applied to organized spaces where interactions with digital content and between trainees took place, creating a community for sharing knowledge and experiences, where trainees were encouraged, through the various problems posed, to to carry out significant learning.

The course consists of three themes, with a duration of 26 hours of training. (MOREIRA, HENRIQUES, BARROS, SOLEDADE, 2022, p. 06)

According to Moreira (2021, p. 11) the course was designed and implemented with the aim of responding to a "wider group of non-higher education teachers who were developing emergency remote teaching responses".

In its field of observation, one can infer about the emergency situation in which the provision of a short-term course took place that could deepen knowledge about digital network education, not only to meet the severity imposed by covid-19, in Portugal., a period that is demarcated in two moments (03/16 to 06/31/2020 and 01/22 to 03/15/2021), but to provoke a learning of innovative practices motivated by digital network technology that would certainly bring them benefits in the post-pandemic world. Therefore, reinforce it here, once again, on strong concepts in the Portuguese educational culture that mark the continuous training of teachers in which essential skills are acquired during and throughout life.

The article also reports, as a result of the application of the course satisfaction questionnaire, given to Portuguese teachers, an overall average of 6.7, on a 7-point referential scale, obtaining the maximum degree of satisfaction, and such approval, showed that there was attendance to the requirements of quality in training, giving sustainability to the pedagogical project in its academic structure, as, in fact, it met a need for digital training in a context of educational emergency.

#### FINAL CONSIDERATIONS

It is important to consider as important factors in this article, to present references on continuing education in Portugal, going through research reports on legal and historical bases, where it was possible to know and emphasize the organizational models of this process and, still achieve a recent collaborative experience between Brazil and Portugal through the continuous training course on digital teaching in a network.

This course will show the impulsive force of technologies applied to education that have entered the teaching structures and, in a way, have caused and continue to provoke rapid and conceptual changes, in the sense that it is possible for the educational system, at any level, to use alternative ways of teaching, learning, producing, transmitting and sharing knowledge with society.

From this perspective, in an information society, the strengthening of its structures occurs through symbiosis, where advances and technological resources produced in a globalized world are constantly intensified and innovated. (BAULMANN, 2001; SANTOS, 2002), and with the unconditional support of the internet, these processes are accelerated and are associated with a set of digital media and resources in which Levy (1999, p.17) conceptually broadened, naming cyberculture as being:

[...] the set of techniques (material and intellectual), practices, attitudes, ways of thinking and values that develop with the growth of cyberspace, defined by means of communication that arises from the worldwide interconnection of computers, encompassing not only the material

infrastructure of digital communication, but also the oceanic universe of information that it houses, as well as the human beings who navigate and feed this universe. (LEVY, 1999, p.17)

As we said, the evolution of communication and information technologies, especially the internet, has made the daily interactions of people in the educational, cultural, social, economic, political field, occur in an environment of constant transformation and impacts on the continuity of people's lives. people. In the educational field, the insertion of the Internet in the teaching and learning process will allow for facilities by force in the dissemination of information.

However, it must be noted that the Internet will not replace the act of thinking, of reflecting, because it is not only having the possibility of quickly accessing billions of information without being able to interpret them and be able to elaborate the creative construction of another idea. Ciol and Beraquet (2003, p. 56) state that "when ICTs change the world, teaching needs to accompany this revolution, especially when access to networks has changed the focus from TEACHING to the focus of LEARNING".

According to Professor Jacques de Lima Ferreira (2014, p. 38) "the action of teaching requires specific training, mastery of theoretical knowledge and the practical reality of the profession". And, on the integration between theory and practice, Professor Lima still resorts to a reflection by Gamboa (2003):

[..] it is not possible to conceive of theory as separate from practice. It is the relationship with practice that inaugurates the existence of a theory; there cannot be a loose theory. It exists as a theory of a practice. Practice exists, logically, as the practice of a given theory. It is the very relationship between them that makes their existence possible (GAMBOA, 2003, p.125 apud FERREIRA, 2014, p. 35).

The previous elements that we present in this study give us subsidies so that we could discuss the possibilities arising from technology applied to teaching and learning and, also, solidify the innovations in continuous teacher training and present the course in Digital Teaching in Network, proposed by Open University of Portugal (UAb-PT) in partnership with the State University of Maranhão (UEMA) and with the participation of the Coordination for the Improvement of Higher Education Personnel (CAPES).

At the current time, specifically, the years 2020 and 2021, from the adverse situation in the field of world health (COVID-19), this fact had a negative impact on all countries, and in Brazil, it was no different, people had to restructure emotionally, for a new pandemic reality, in which not much was known about the evil to be faced. Such adversity spread rapidly, affecting people's lives, due to the imminent proximity of death with no possibility of immediate cure.

Under this condition, this "evil", in addition to affecting all areas, one of them, education, especially in its face-to-face format, was harmed right at the beginning of the contamination cases.

In this new context, educational institutions had to adapt to a new condition to continue to teach classes and provide minimum conditions for teachers so that they could teach their classes, that is, schools had to reorganize their practices and pedagogical projects and, the time became minimal in face of the contingent in health.

Therefore, the possibility of applying the Training Course for Digital Teaching in a Network was opportune, because even teachers who already adopted online environments in their practices, imagined that such a rapid and emergency change would be necessary, in an almost mandatory way, due to the expansion

of COVID 19.

In relation to this training for teaching, digital in network, the course carried out at UEMA, the results evidenced with both Brazilian and Portuguese student-teachers in an excellent degree of satisfaction, which encourages the continuity of training actions on this new concept that emerges, from principles related to the possibilities of expansion and sharing of materials and open educational and resources (OER).

Nowadays, there is no need for advances in teaching and learning processes, that is, the need to share more and more educational products in repositories, media, MOOCs, courses in hybrid formats is irreversible, however, it is essential that discussions in the field to advance in this direction, preserving above all ethics.

#### **REFERENCES**

AFONSO, N. (2006). A Direcção Regional de Educação: um espaço de regulação intermédia. In Barroso, João (Org.), A regulação das políticas públicas de educação: Espaços, dinâmicas e actores (71-97). Lisboa: Educa.

BARROSO, J. & Canário, R. (1999). Centros de Formação das Associações de Escolas, das expectativas às realidades. Lisboa: Instituto de Inovação Educacional.

BARROSO, J. (1997). Formação, projecto e desenvolvimento organizacional. In R. Canário (Org.). Formação e situações de trabalho (pp. 61-78). Porto: Porto Editora.

BRASIL. Constituição da República Federativa do Brasil. Brasília, DF, 5 de outubro de 1988.

CANARIO, R. (1991). Escolas e mudança: Da lógica da reforma à lógica da inovação. Lisboa: II Colloque National AIPELF – Section Portugaise.

CIOL, R.; BERAQUET, V.S. O profissional da informação no paradigma atuação em saúde pública. *Biblios*, v.4, n.16, p.54-64, 2003

DECRETO-LEI nº 207/96, de 2 de novembro – altera o Regime Jurídico da Formação Contínua de Educadores de Infância e dos Professores dos Ensinos Básico e Secundário.

DECRETO -LEI nº 249/92, de 9 de novembro - Regime Jurídico da Formação Contínua do Pessoal Docente.

DECRETO – LEI nº 274/94, de 28 de outubro – **Alteração da constituição do Conselho Coordenador da Formação Contínua de Professores.** 

DECRETO -LEI nº 344/89, de 11 de outubro - Ordenamento Jurídico da Formação dos Educadores de Infância e dos Professores dos Ensinos Básico e Secundário.

DECRETO -LEI nº 43/89 de 3 de fevereiro – **Regime Jurídico da Autonomia e investigación**. El triángulo cautivo. Madrid: Morata, 1992.

DEMO, P. Metodologia científica em ciências sociais. 3. ed. São Paulo: Atlas, 1995.

ESTEVES, Manuela & RODRIGUES, Ângela. A análise de necessidades na formação de professores. Porto: Porto Editora, 1993.

EUROPEAN COMISSION. White Paper on Education and Training - Teaching

FABRE, M. Penser la formation. Paris: PUF, 1995.

FORMOSINHO, João. Formação contínua de professores: Realidades e perspectivas. Aveiro: Universidade de Aveiro, 1991.

GIL, A. C. Métodos e técnicas de pesquisa social. 5. ed. São Paulo: Atlas, 1999.

GIMENO SACRISTÁN, J. Poderes instáveis em educação. Porto Alegre: ARTMED Sul, 1999.

GIMENO SACRISTÁN, José. Poderes Inestables de la educación. Madrid: Morata, 1998.

LEI nº 46/86, de 14 de outubro – Lei de Bases do Sistema Educativo.

Lei de Bases, Lei nº 46/86, In Diário da República I Série, N.º 237 de 27 de Maio.

LEVY, P. Cibercultura. São Paulo. Editora 34, 1999.

LIMA, E.F. Formação de professores: passado, presente e futuro: o curso de pedagogia. In: MACIEL, L.S.B.; SHIGUNOV NETO, A (Orgs.). Formação de professores: passado, presente futuro. São Paulo: Cortez, 2004. p. 15-34.

MACHADO, C. P., (2017). Práticas de gestão do conhecimento de processos organizacionais no contexto escolar: proposta de um modelo teórico-conceitual. Dissertação (Dissertação de Mestrado). Centro Universitário de Maringá, Maringá, PR, Brasil.

MOREIRA, J.A; HENRIQUES, S; BARROS D.; SOLEDADE, A.F: Qualidade Em Educação Digital em Rede: Inovação e Formação de Professores. Dossiê Qualidade e Inovação da/na Educação: Concepções, possibilidade e desafio. Revelli. Goiânia (UEG). Vol 13, p. 1-19, 2021

NOVOA, A. (1991). **Conceções e práticas de formação contínua de professores**. Formação Contínua de Professores: Realidades e perspetivas, 15-38.

PORTUGAL. Assembleia da República. Lei nº 46/86, de 14 de outubro de 1986. Diário da República, nº 237/1986, Série I de 1986/10/14. Guimarães (Portugal), 14 de outubro de 1986. Disponível em: https://dre.pt/pesquisa/-/search/222418/details/maximized?print\_preview=print-preview. Acesso em: 10 fev. 2021.

SANTOS FILHO, J. C.; GAMBOA, S. S. Pesquisa educacional: quantidade-qualidade. São Paulo: Cortez, 2003.

SANTOS, S. M. (2009). Percursos da formação contínua de professores: Um olhar analítico e prospectivo. Braga: Conselho Científico-Pedagógico da Formação Contínua.