Formative Trajectory for Distance Teaching
Adriana Costa¹, Teresa Pessoa², Rogério Costa³
Universidade de Coimbra, Portugal¹,²
Instituto Politécnico de Leiria, Portugal³

Abstract
In view of the growing number of distance learning courses, it is important to understand whether universities or government entities are properly training teachers, especially those in higher education, to work in this new type of educational programs. The main objective of this work was to analyze the learning trajectory of the teachers that teach distance learning modalities. For this purpose, a quantitative and qualitative study was carried out, developed in 2018, using the case-study methodology. Accordingly, 113 teachers from the Academic Unit for Distance Education of the State University of Bahia, who were teaching for at least two years, were approached. The goal of the study was to (i) understand how the learning trajectory of the teachers that teach distance learning course happens, (ii) the difficulties encountered in the scope of their training and practice, as well as (iii) the teacher’s perceptions of Distance Education (DE). The online questionnaire, previously validated by experts, was developed with the LimeSurvey tool, was available for 2 months and reminders were sent weekly. In addition, based on a review of the literature and on the previous analysis of the results of the questionnaire, a semi-structured interview was built and conducted to 8 teachers who complemented the information about the training course for teaching in DE. From the analysis of the results of this cohort, the authors concluded that the teachers training process at a distance occurred in the absence of public policies promoted by the State, relying solely on the public and private higher education institutions.

Keywords: Teacher training; distance education; e-learning.

1. Introduction
In Brazil, Higher Education Institutions (HEIs) are facing new multiple challenges including the education and professional update of teachers of distance learning courses. This happens because there has been an increased expansion of undergraduate and postgraduate programs in the Distance Education (DE) modality in response to the growing social policies for education in the country, leading to a mismatch between the limited teacher training to act in the distance modality and the increasing need of specialized teachers in the area [1]. Statistics published by the Ministry of Education and Culture of Brazil (MEC) revealed that in only one year, from 2015 to 2016, distance education increased by 7.2% of enrolments, while face-to-face education dropped by 1.2%. The MEC predicts that in five years the DE will account for half of the enrolments in Brazilian higher education. Additionally, the National Student Performance Test (ENADE) of 2017 shows that the distribution of concept 3 (in the scale of 1 to 5) between the face-to-face and the distance modality are equivalent regarding to the courses evaluated in that period. This shows that, within the upper level of education in Brazil, DE outcomes appear to have the same performance as the face-to-face teaching, refuting any hypothesis of a lower quality education. However, in spite of the growth of the DE seen in more than a decade in Brazil, investments in the distance modality are directed to the technological adaptations of its spaces and in the expansion of vacancies for students and very little in the improvement of the faculty [2]. Several studies [2]–[9] warn for the need for the education of teachers who will act in the distance modality taking into account the specificities of the modality, which requires a properly prepared faculty with mastery of several skills and knowledge. Accordingly, this study was designed to understand if this growth was accompanied by the necessary professional development of the faculty including a focus on DE and learning by technology.

2. The competences of the EAD Teacher and his formative process
The new scenarios and ways of teaching provided by Information and Communication Technologies (ICTs) have increasingly required different teaching strategies and methods to ensure learning quality
[3]. However, when it comes to the DE teacher, these requirements are broadened as they demand a very specific range of skills, profile and knowledge for the performance of such roles. 

Mill et al. (2010, p. 75) state that “in the midst of the changes experienced by the formation of teachers of this century, there are teachers of Distance Education; new ways of teaching and learning were generated, and therefore professionals with a new profile are required. " We live in an age where all teachers should have a level of online learning competence and technologies as a way to ensure that all faculty are adequately prepared, motivated and supported to conduct all aspects of academic practice, including those that occur online or the distance. "This is no longer optional, but it is fundamental" [2, p. 275].

[7] states that teaching is changing and that teachers of the 21st century, in all sectors of education, have to cope with a developing cultural and technological environment. Due to the technological evolution, the pedagogical possibilities that promote a radical transformation of the educational practice are growing. Nevertheless, this transformation is only possible through the mastery of diverse skills and knowledge, without which it will be difficult to act in this area. The DE teacher must possess very broad pedagogical, psychological, social and technological knowledge [3]. Some research in the area, reported by [10] at the beginning of sec. XXI, revealed that one of the main obstacles pointed out by teachers to teach in distance learning was the development of effective technological skills and the need for training to develop such activity. Since then, little has changed and teacher training still does not occupy the central place in the context of the DE. Compelling evidence demonstrates that training is needed to enable teachers to adapt to new paradigms and tasks that are necessary in today society [5].

3. Empirical Study

Faced with this situation, we wanted to understand the reality of the teaching training for DE in Brazil, mainly focusing in public universities adhering to the Open University of Brazil system. For that purpose, we carried out a case study at the Academic Unit of Distance Education of the State University of Bahia. Based on the theoretical framework, a questionnaire was designed and applied to the professors of undergraduate and postgraduate courses in DE of this university and a semi-structured interview was conducted to 8 teachers to complement and validate the information collected from the questionnaire.

From a total of 113 teachers who answered the questionnaire, 21% had a doctoral degree, all obtained in the face-to-face modality, and 54% a master’s degree, with only 2 of them obtained in the distance modality, which represents a considerable number of higher academic qualification. As for graduation, 5 of the 113 professors stated that they had obtained the degree in the distance modality while all others attended courses in the face-to-face modality. From the interviews and the survey data, no teacher received initial training to teach at a distance. Most of the training was done later, 72.6% of the cases in the HEI where they taught. There was a considerable percentage of teachers who stated that they did not have any type of support from the institution in their training (21% of respondents). In addition, 14% of teachers stated that they did not attend any training action that enabled them to teach in the distance mode, while 72.6% said they had attended various training actions. Of those who did not participate in any training action, they present the HEI as the main responsible, either for not releasing them from work or for not encouraging the Institution to carry out the training. It is also curious to note that 17% of the formations for teaching qualification for DE were carried out in person and only 15% stated that all actions were taught in the distance modality.

The main motivations that led them to take part in training actions were intrinsic, such as, improvement of their skills for distance learning, improvement with learning ICT and development of self-confidence, and not so much extrinsic, as to improve their salary conditions, for example. Regarding the difficulties encountered, the great majority affirms that they did not have major difficulties in working with the DE and considered that they mastered the technological tools available. However, the greatest difficulty pointed towards the development of their work was the lack of infrastructure of the HEI where they taught. This last point was related to the teachers’ perceptions of DE as a teaching modality that requires a good organizational structure, which seems to be lacking in the IES where they work, constant update and a team of specialized collaborators. Most considered DE a challenging task, but a reliable teaching modality. These teachers also felt that teaching in the DE improved their teaching practice and that in the initial training the teacher should be qualified for this modality.
4. Conclusion

The observations made throughout this research allows considerations to be made regarding the main results. Taking into account that the main goals of this study were to analyse the distance learning process of the teacher, the difficulties encountered in the scope of their training and practice, as well as the teacher's perceptions about DE, it is possible to identify relevant points for a greater understanding of the context studied. In this sense, we have shown that, in spite of all the exponential growth of the DE in Brazil and the investments made by the government in this sector through public policies and regulations, the training of the teacher to act in the distance modality was marginalized. It is important to clarify that these public policies for the expansion of DE privileged the access to higher education of elementary and middle school teachers, since many taught without proper qualification, using the distance modality as the training vehicle for these professionals. This research also revealed that HEIs are the main entities responsible for the training of teachers to act in the distance mode, that these are carried out in service and within the very specific models adopted by each Institution. The teachers interviewed were unanimous in affirming that they did not received initial training to act in the distance modality, which suggests an absence of this curricular component in the teacher training courses in Brazil. It was also identified that, in spite of the high academic formation of the teachers, they felt insecure due to the lack of specific training for the modality when they started teaching in the DE, as well as for the lack of infrastructure of the HEI during the execution of their activity. This becomes even more evident when it is shown that, in order to act in the distance modality, the teachers carried out at least 4 training courses in the area. Our cohort also noticed that, although they teach at a distance, the idea of presence is something very strong, emphasized in the characteristics of construction of the disciplines. Finally, we emphasize the need to seriously think about the training of teachers to work in distance learning, with the risk of neglecting the quality of teaching and distance learning.

References