Training and professional development: constitution of teaching knowledge in higher education

Renata Rosa Russo Pinheiro Costa Ribeiro
Universidade Estadual do Ceará, Fortaleza, CE, Brasil

Abstract
His article aims to analyze the formation and constitution of teaching knowledge in higher education. The teaching knowledge is constituted along the professional trajectory mediated by the resignification of a socio, cultural, political and education nature. This is an exploratory and interpretive research, qualitative approach. As theoretical contributions studies by Tardif (2010), Anastasiou (2002), Gauthier et al. (2015), Almeida (2012), Roldão (2007). The research subjects are course professors from a public higher education institution. For data collection and analysis, the documentar research was carried out in the time frame from 2014 a 2018. The results indicate that teacher training is considered as a continuous, progressive action, materialized in the teaching practice. It is concluded that the constitution of teaching knowledge in higher education is articulated with professional development understood as a permanent attitude that integrates different experiences with meanings and meanings for teaching practice.

Keywords: Training. Knowledge. Higher education.

Formação e desenvolvimento profissional: constituição do conhecimento docente no ensino superior

Abstrato
O seu artigo ame a analisar a formação e constituição do ensino do conhecimento no ensino superior. O conhecimento docente é constituído ao longo da trajectória profissional mediada pela ressignificação de uma natureza sócio-cultural, política e educativa. Trata-se de uma investigação exploratória e interpretativa, abordagem qualitativa. Como contribuições teóricas estudos de Tardif (2010), Anastasiou (2002), Gauthier et al. (2015), Almeida (2012), Roldão (2007). Os temas de investigação são professores de cursos de uma instituição pública de ensino superior. Para recolha e análise de dados, a investigação documentar foi realizada no período de 2014 a 2018. Os resultados indicam que a formação de professores é considerada como uma acção contínua e progressiva, materializada na prática do ensino. É co-cluído que a constituição do saber pedagógico no ensino superior é articulada com o desenvolvimento pré-profissional entendido como uma atitude permanente que integra experiências diferentes com significados e significados para a prática pedagógica.

1 Introduction

The training and the knowledge of teachers to work in higher education have been a concern of scholars in the area in recent decades. The themes related to university teaching are materialized in epistemological discussions about knowing how to teach, teacher education, and teacher professionalization. The debate about this issue focuses on the constitution of teachers' pedagogical knowledge mobilized in the initial and continuing education that takes place in teachers' professional development, according to the studies of Tardif (2010), Anastasiou (2002), Ghauther et al. (2015), and Almeida (2012).

The teaching knowledge or pedagogical knowledge comes from the teaching work, in the subjective and collective dimension, and from a situated action, with meaning and significance for their teaching practice and of professional, personal, cultural, political, educational nature and in the various activities carried out in the educational institution that materialize in actions for the understanding of what it is to be a teacher.

In studies on university teaching and teacher training, Pimenta and Almeida (2011); Nono (2011); Farias, Silva and Cardoso (2021) have pointed out the importance of professionalization that involves initial training carried out in the privileged field that recognizes teaching as a field of specific knowledge, during the course of their personal and professional development.

Teacher training is an integral part of their professional development as teachers. According to Zabalza (2004), the teacher seeks answers that correspond to the field of his or her professional performance. In this way, pedagogical training aims at the improvement of practices in the exercise of their profession, bringing them closer to the real condition of their teaching work, in the relationship between theory and practice, and enabling moments of reflection on the practice as a way to make a systematic evaluation of the profession.

Thus, we start from the premise that for a teacher to teach, it is necessary to gather a corpus of knowledge valid for professional practice, especially that which will
teach how to teach, the constitution of teaching knowledge during his personal, cultural, educational, and professional trajectory. However, studies such as Morosini's (2000), Pimenta and Anastasiou's (2002), state that little attention is given to the formation and preparation of university teachers for the exercise of teaching, linked to teachers' professional development. They also point out that most university professors do not have a specific training for teaching. The essence of the teacher's own professional identity is the ability and possibility of learning to teach, assuming the assumption of the epistemology of practice which means a rethinking of teaching.

In this sense, the professional development of teachers is characterized in the pedagogical and political dimension capable of providing the development of professional and intellectual skills, aiming at personal fulfillment and university teaching. (FREITAS, et al., 2021).

Based on this problematization, the text presents the following guiding question: how does the formation and the constitution of knowledge for the professional development of teachers happen in the undergraduate courses of the State University of Ceará (UECE)?

The object of study is the formation of teachers and the knowledge of teachers. The general objective of the text is to analyze the formation, the professional development and the constitution of teachers' knowledge in Higher Education.

The text is justified by the possible theoretical-practical contributions it may bring to higher education training courses, considering a repertoire of knowledge for teaching that is constituted during the course of professional development.

The article is organized in the following sections. The first Introduction covers the general aspects of the text, followed by the Methodology, describing the trajectory of the research. Next, Results and Discussion, with a brief contextualization of the Pedagogy Course; about the formation and knowledge of teachers in undergraduate courses. Afterwards, the final considerations and references.

2 Methodology
The methodology is exploratory and interpretative in nature, based on the qualitative approach that understands the relevance of the description and understanding of the object of study. According to Cervo, Bervian and da Silva (2007), exploratory research elucidates the phenomena presented in a detailed and specific study. In the interpretation of Oliveira (2016), the qualitative approach can be considered as a process of reflection and analysis of reality using methods and techniques to understand the object of study in its historical context.

For collection and analysis, a bibliographic and documentary research was conducted. As main theoretical supports we cited Tardif (2010), Anastasiou (2002), Ghauther et al. (2015), Almeida (2012). The documentary research was conducted in the Pedagogical Project (PP) of the Pedagogy Course of the Education Center (CED) of UECE and in the Lattes curriculum available on the Platform of the National Council for Scientific and Technological Development (CNPq) where the titles of the investigated subjects were identified from the categories: graduate, specialist, master, doctor. As a temporal framework, we used the period from 2014 to 2018, as a criterion the flow in force the referred Course.

Next, we present a brief historical contextualization of the Pedagogy Course and then a section entitled "Pedagogical Training and the knowledge of teachers in the Undergraduate Courses".

3 Results and Discussion

PEDAGOGY COURSE (CED/UECE)

The Pedagogy Course at UECE began with the Catholic Faculty of Philosophy in 1954. Later, the institution was integrated to FUNCE upon its creation in 1974. In that period, the curricular structure of the Pedagogy course was of three years of bachelor's degree that aimed to form technician in education, but the students of the course could extend their training for another year, which in turn studied the subjects of "teaching",
enabling the subjects to teach in high school, in the first and second cycles, mainly, in the normal courses of that time. (UECE, 2011, p 9).

According to the Pedagogical Project, the Degree Course in Pedagogy of the Education Center has the following objectives:

To offer the student the necessary subsidies for the understanding and analysis; critical of the historical, economic, political and cultural context of society and education in Ceará, Brazil and the world; to provide theoretical and methodological subsidies for the organization, experience and evaluation of teaching situations; to contribute to the formation of the teacher/researcher capable of producing pedagogical knowledge as a result of coexistence, analysis and (re)construction. (UECE, 2011, p. 27).

The Pedagogy Course is recognized as a legitimate space and locus of formation located in the campus of Fortaleza. According to Paixão (2012, p.18), "it is known that the greatest intention of the teacher education course and, specifically, of the pedagogue is the solid formation for the development of a work with social quality [...]". The undergraduate courses understand the conceptual legitimacy of pedagogical work, placing teaching as the starting point for the close relationship between theory and practice that highlights the dialogue between knowing and teaching, the ways of learning and the relationships between sociocultural practices and teaching.

In the time frame of this study (2014 to 2018), the data pointed out that the Pedagogy Course of the CED had a total of 62 teachers which corresponds to the percentage of: 100% graduates, 4% specialists, 51% masters and 45% doctors. In view of these results, we interpret that most of the teachers have master's and doctoral degrees. Our hypothesis is that the concern with continuing education is based on the formative need for new scientific and pedagogical possibilities in stricto sensu education. On this premise, Imbernón (2000, p.71) interprets that continuing education refers to: "[...] professional knowledge consolidated through continuing education relies as much on the acquisition of theoretical knowledge and skills and routines as on the development of information processing capabilities [...]".
There is a congruence in the formative path of the investigated teachers with the constitution of the training for the exercise of teaching following the legal determinations for teacher training. The inexistence of teachers who have only the undergraduate degree, with initial training, emphasizing that "[...] the teacher training is, therefore, widely contemplated in the referred legislation, being accompanied by the proposal of redefinition of the profile of the professional of education in the several areas, among which is the Pedagogy and, consequently, the pedagogue". (UECE, 2011).

This finding can also be interpreted, when we observe the article 52 of the Law of Directives and Bases (1998), which establishes that at least one third of the teaching staff must have a master's or doctorate academic title (BRASIL, 1996). Approximating these ideas, Gauthier et al. (2013) state that teachers' knowledge is their own, being a unique construction and associated with other knowledge constituted throughout their personal and professional trajectory, having in common the knowledge of other teachers.

The formative path of teachers in higher education contributes directly to the mobilization of teaching knowledge and pedagogical practice in the classroom. In this study, we understand that undergraduate courses should provide pedagogical knowledge, leading to a reflection on the paths that intertwine the teaching praxis, providing subsidies for teachers' professional development.

PEDAGOGICAL TRAINING AND THE KNOWLEDGE OF UNDERGRADUATE TEACHERS

Teacher education is considered as a continuous and progressive action materialized by the knowledge acquired during their formative journey as a result of professional training and the exercise of teaching which is based on the values and sociocultural dimensions of a given reality.

For Pimenta (2009), teacher training is based on self-training, since they rework their initial knowledge, linking it to their own daily experiences in school training spaces. For Tardif (2010, p. 12), the knowledge of teachers during their formative journey is a
social knowledge "[...] shared by a group of agents whose knowledge legitimation is performed by other social institutions (universities, unions, public authorities)". Nóvoa (2009) states that teacher training falls within the practical component, in the acquisition of a cultural of the teaching profession marked by the premise of social responsibility. In reference to teacher training for university teaching, the Law of Directives and Bases of National Education - LDBEN nº9394/96 in its Article 66 highlights: "The preparation for the exercise of higher teaching will be done at the graduate level, primarily in master's and doctoral programs" (BRASIL, 1996, p. 21).

In this sense, the constitution of pedagogical knowledge is based on the process of mobilization and changes of knowledge for the appropriation of new teaching knowledge with meaning and significance for a re-signification of the practice, that is, a dynamic process of professional development. According to Roldão (2021, p. 5), "the formalization of professional knowledge related to the act of teaching implies the consideration of a constellation of knowledge of various types, subject to various theoretical formalizations - scientific, scientific-didactic, pedagogical ..."

Thus, teacher training in higher education signals a body of solid specific knowledge, skills and pedagogical competencies in the area in which it operates reverberating to the professional development of teachers. In this interpretation, Tardif (2010, p. 14):

In other words, teachers' knowledge is not a set of cognitive contents defined once and for all, but a process under construction throughout a professional career in which the teacher learns progressively to master his or her work environment, while inserting and internalizing it through rules of action that become an integral part of his or her political consciousness.

According to Tardif and Raymond (2000), the teacher needs to mobilize a variety of knowledge and expertise that are, in turn, guided by different objectives (emotional, social, cognitive, collective).

We assume that the main objective of a degree course is to train professionals capable of exercising their profession in a concise and efficient way, contributing to a quality education and presenting the specific teaching knowledge and know-how in their
area of work. The debate about university teaching is located as central in the scope of reflections on the work and teaching professionalization; the teaching knowledge and the implications of teaching practice for the training of teachers in higher education, highlighting that thinking about the formative process in higher education means taking into account the environment of their performance. (ALMEIDA, 2012).

Thus, the professional teacher development considered as a process, characterized in a personal and collective dimension corresponds to the pedagogical practice that meets the needs of the path of initial and continuing education. Teaching knowledge is recognized as the knowledge of pedagogical action, mobilized from various elements of teacher professional development and exist when they are articulated to the various backgrounds of teachers, the different forms of knowledge that implies the quality of teacher professionalization.

4 Concluding remarks

The study demonstrated the need to think about the constitution of teaching knowledge, especially considering the formation and professional development of teachers.

The data showed that the formative path of university teachers involves establishing a relationship with the specific knowledge acquired in the initial training and associated with the repertoire of knowledge from continuing education consolidated during their teaching career.

The constitution of the teacher in higher education takes place through a web of relationships that are established according to his conceptions and personal choices throughout his professional career, the situated teaching action and mediated by the redefinition of the teaching work, enabling the dialogue of professional, cultural, political and social nature.

Understanding that higher education in its essence the scientific knowledge and the undergraduate courses have as the center of the discussion that the role of the
teacher is an articulator of the teaching and learning process, characterized in the teaching activity and in the constitution of pedagogical knowledge.

We consider that the professional development of teachers mobilizes a set of knowledge, knowledge, competencies, professional skills, and pedagogical practice situations within a social dimension that enables, throughout their trajectory, the constitution of knowledge and the improvement of the teaching action.

We conclude that this study gains social and academic relevance to the extent that it causes the expansion of readings to the constitution of knowledge in the formative journey of teachers in undergraduate courses in HEIs, combining pedagogical elements for a reflective and investigative practice as a possibility to qualify the professional development of teachers..

References
ALMEIDA, Maria Isabel. Formação do professor no ensino superior: desafios e políticas educacionais. 2012.


PRÁTICAS EDUCATIVAS, MEMÓRIAS E ORALIDADES
Rev.Pemo – Revista do PEMO


GAUTHIER, Clermont; MARTINEAU, Stéfane; DESBIENS, Jean-François; MALO, Annie; SIMARD, Denis. Por uma teoria da pedagogia: pesquisas contemporâneas sobre o saber docente. 3. ed. Ijuí: Unijui, 2015.


TARDIF, Maurice e RAYMOND, Danielle. Saberes, tempo e aprendizagem do trabalho


**UNIVERSIDADE ESTADUAL DO CEARÁ.** Centro de Educação. **Projeto Pedagógico do Curso de Licenciatura em Pedagogia.** Vol 1. Fortaleza, Ceará, 2011.


---

**Renata Rosa Russo Pinheiro Costa Ribeiro.** ORCID [https://orcid.org/0000-0002-1882-808X](https://orcid.org/0000-0002-1882-808X)


E-mail: renata.russo@uece.br

**Responsible Publisher:** Cristine Brandenburg

**Ad-hoc expert:** Maria Lilia Imbiriba Sousa Colares

**How to cite this article (ABNT):**