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University Teaching: Training Percuses for Bachelor Teachers in the Veterinary Medicine Course¹

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ABSTRACT

University teaching is part of the discussions that run through the paths and life trajectories of teacher education. This study aimed to understand the constitution of the teacher training pathways of professors with bachelor's degrees in Veterinary Medicine. This research has a qualitative approach with a single case study, the research subjects were bachelor teachers and course coordinator. The main theoretical references were the studies by García, Tardif and Lessard, and Schön. Based on the results and with the current literature, we identified the necessary discussion on pedagogical training, the re-signification of the practices of bachelor teachers, as well as the need for an institutional investment that dialogues with university teaching.

KEYWORDS

University education. Teacher training. Bachelor degree.

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Docência Universitária: Percursos de Formação de Professores Bacharéis no Curso de Medicina Veterinária

RESUMO

A docência universitária caminha nas discussões que perpassam os percursos e trajetórias de vida da formação dos professores. Este estudo objetivou compreender a constituição dos percursos de formação docente dos professores bacharéis do curso de Medicina Veterinária. Esta pesquisa é de abordagem qualitativa com estudo de caso único, os sujeitos da pesquisa foram professores bacharéis e coordenador do curso. Tivemos como principais referenciais teórico os estudos de García, Tardif e Lessard, e Schön. A partir dos resultados e com a literatura vigente identificamos a necessária discussão sobre a formação pedagógica, a ressignificação das práticas dos docentes bacharéis, como também a necessidade de um investimento institucional que dialogue com a docência universitária.

PALAVRAS-CHAVE

Ensino Superior. Formação de professores. Bacharelado.

Docencia Universitaria: Cursos de Formación para Profesores de Licenciatura en el Curso de Medicina Veterinaria

RESUMEN

La enseñanza universitaria es parte de las discusiones que recorren los caminos y las trayectorias de vida de la formación docente. Este estudio tuvo como objetivo comprender la constitución de las vías de formación docente de profesores con títulos de licenciatura en Medicina Veterinaria. Esta investigación tiene un enfoque cualitativo con un solo estudio de caso, los sujetos de investigación fueron profesores de licenciatura y coordinador del curso. Las principales referencias teóricas fueron los estudios de García, Tardif y Lessard y Schön. Con base en los resultados y con la literatura actual, identificamos la discusión necesaria sobre la formación pedagógica, la nueva significación de las prácticas de los profesores de licenciatura, así como la necesidad de una inversión institucional que dialogue con la enseñanza universitaria.

PALABRAS CLAVE

Enseñanza superior. Formación de profesores. Licenciatura.

Introduction

Teacher education highlights paths and possibilities of studies about the teaching profession. Thus, a research on the paths of teaching presupposes and makes it possible to reveal the paths taken, dialogues, and perspectives on teachers' knowledge and practices.

The formation of bachelor teachers in Higher Education comes from the construction of knowledge experienced in several environments of the profession, such as the classroom and the interaction with their peers. In this research, our central problem was to discuss the university teaching of baccalaureate professors who work in the Veterinary Medicine course at a Higher Education Institution (HEI), to understand the constitution of university teaching of baccalaureate professors, the relations with the professional development of professors constituted by their professional and personal life trajectories. Thus, the study aimed to understand the constitution of the teaching formation paths of bachelor professors of the Veterinary Medicine course at Ceará State University.

We sought to examine how the teachers who did not have training in undergraduate courses were constituted as Higher Education teachers, taking into consideration that to exercise teaching it is necessary to possess a repertoire of specific knowledge coming from disciplines such as: Didactics, History of Education, Supervised Internship, Psychology of Education, among others.

To this end, we built a theoretical referential in search of perspectives on teacher training. We adopted from Tardif and Lessard (2011) the notion that training, teaching knowledge and teaching practices should be thought beyond knowledge or social relations since they adopt an intersubjective measure when collectivized through daily experiences and experienced with other subjects of the school/academic community.

The sections of this article are organized to indicate, first, the methodological paths of this study, and then, the historical path of training for teaching in the courses of Veterinary Medicine, as well as the narratives described by the subjects of this study about the constitution of teacher training in Higher Education.

Methodology

The proposition for conducting this study was to develop a qualitative approach, in the interpretive paradigm. The interpretive paradigm distends interpretations of social life and the world from a historical-cultural perspective (ESTEBAN, 2010).

To present the methodological dimensions of this study, we scrutinized the process of scientific work in qualitative research grounded by Minayo (2015), which is divided into three stages: 1) exploratory phase, 2) fieldwork and 3) analysis and treatment of empirical and documentary material.

We chose to conduct a single case study, considering that the case study is an in-depth analysis of a unit of study, which meets the purpose of the research. According to Yin (2001), a single case requires intensive data collection in the same location.

According to Moroz and Gianfaldoni (2002), the collection of information is not done randomly but aims to achieve specific research purposes, i.e., it is done to capture the answer to the existing questioning. To this end, this study used semi-structured interviews and document analysis as data collection techniques, whose results focused on the teachers' understanding of their knowledge and practices, seeking to understand the relationship between them.

According to Manzini (1991), the semi-structured interview is based on a theme on which a guideline with pre-established questions is elaborated, which may be complemented by other questions inherent to the circumstances of the moment of the interview. According to the author, this type of interview can make the information obtained from the establishment of a more fluid dialog.

In the documentary analysis, we sought data to understand the course and the practices of the subjects inserted in that place. For this, we analyzed the proposals described in the Pedagogical Project of the Course (PPC) of the HEI in question, as well as those required in the National Curricular Guidelines (DCNs) of the courses of Veterinary Medicine. According to Lakatos and Marconi (2001), documental research is the search for elements in primary sources, belonging to public or private law archives, institutions or individuals, besides statistical sources.

Data collection was divided into two moments: in the first, we performed a survey about the teaching background of the 61 professors of the Veterinary Medicine course, using the data registered in their Lattes résumés. In the second moment, we carried out the semi-structured interviews with nine of these professors, having as selection criteria: working 40h/DE², having taught subjects in the course in the years 2017 and 2018, teaching subjects exclusively in the course of Veterinary Medicine at UECE and having entered as a professor in the first fifteen years of the founding of the course; besides the Course Coordinator of the management. With these criteria, we tried to select professors who had a long trajectory of experiences as professors at UECE and in the program being studied.

In order to safeguard the real identities of the participating teachers, these were named by the following pseudonyms Professor A, Professor B, Professor C, Professor D, Professor E, Professor F, Professor G, Professor H, Professor I and Course Coordinator.

The organization of the data for analysis was composed of the description of the procedures, organization of the data collected and notes in the field diary, in which the notes pertinent to the development of the research were recorded, including aspects of the situation experienced, verbal and non-verbal communications, compilation scheme, flexibility and comparison of results based on the theoretical contributions³.

² 40h/DE - 40 hours of exclusive dedication to the Higher Education Institution.

³ Regarding the ethical procedures, the research has the approval of the Ethics and Research Committee of the UECE, with opinion number 2.932.611.

Teacher Education and the Bachelor's University Professor

Tardif and Lessard (2011) say that teachers' knowledge is constituted throughout their trajectories, therefore, resulting from the learning experienced in different areas: personal, family, social and professional; in short, in the different branches of the individual's life. To discuss this topic, we bring Nóvoa (1991), García (1999), Veiga (2014), Benachio (2011) and Shön (1997).

In this research, we have as locus the bachelor's degree courses in Veterinary Medicine. Article 4 of the DCNs for the course of Veterinary Medicine defines the formation of the Veterinarian as having the objective of "endowing the professional with the knowledge to develop actions and results directed to the area of Agricultural Sciences regarding Animal Production, Food Production, Animal Health and Environmental Protection" (BRASIL, 2003, p. 1). For this, the teacher must have a repertoire of knowledge about the specificity of the profession, as well as the eminent discussions of the teaching-learning processes as exposed by Pimenta and Anastasiou (2014, p. 25):

In the current national and international panorama, there is concern about the growing number of professionals who are not qualified for university teaching, which would

Thinking about teachers' professional knowledge - that is, what is the knowledge they use in their work to carry out their activities and educational goals - is important to understand how they are formed. Tardif (2012, p. 245-246) raises a question that led him to think about the specificities of teacher training: "how and in what way is this professional knowledge different from the university knowledge elaborated by researchers in the field of educational sciences?"

The epistemology of professional practice is at the heart of the professionalization movement since what differentiates occupations from professions is precisely the nature of the knowledge at stake (TARDIF, 2012). Teachers are recognized as professionals precisely because they need to master specific knowledge, techniques, and methods to ensure that the teaching-learning process occurs.

Therefore, when a bachelor professional enters as a teacher, at any level of education, he may lack specific didactic and pedagogical knowledge to exercise the teaching profession. Regarding the higher education teacher, Veiga (2014) says that he or she needs to be a plural professional to be able to perform well the three pillars that guide this level of education, which are: teaching, extension, and research.

To meet the training needs of teachers, bachelors, or graduates who have already been through the initial training process for some time, there are courses called continuing education that aim to support the teacher concerning issues, methods and techniques to assist in professional practice.

Teacher training begins before their academic training and continues throughout their professional life. The knowledge about teaching, the role of the teacher, and how to teach comes from the teachers' own life trajectory and, above all, from their schooling. Teachers adopt attitudes towards teaching that come from the training they received during the time they were students (TARDIF, 2012).

Professional knowledge is also temporal in the sense that it is developed in the environment of a career, a process of professional life of long duration which includes dimensions of identity and dimensions of professional socialization, as well as phases and changes. Knowing how to adapt to school and the school environment is as important as teaching well in the classroom (TARDIF, 2012). In this, the experience as a student of Basic Education and Higher Education, the teaching model prevalent in the university system and the students' positions play a relevant role.

García (1999) writes that despite the various paradigms on the initial training of teachers, there is a shallow theoretical development in relation to continuing education or professional development of teachers. According to Benachio (2011, p. 15): "[...] continuing in-service training requires, therefore, also availability from the teacher, because it is an invitation to enter into a process of reviewing oneself, of taking distance and looking through the mirror." Thus, we understand that the teacher, the subject of this research, should be understood through his/her history and actions in the different areas of life.

If we consider the current educational scenario, the formation of the teaching professional plays a preponderant role in terms of the quality of education. Demo (2002, p. 72) points out that "the quality of education depends, first of all, on the quality of the teacher. Zabalza (2004) also corroborates the discussion by stating that the scientific and pedagogical qualification of teachers is one of the essential factors of the quality of teaching at the university. In this direction, we identify in a passage in the work of Pimenta and Anastasiou (2014, p. 39), that "the degree of qualification is a key factor in fostering quality in any profession, especially in education, which experiences constant change." In this sense, the study by Martins (2003) helped in understanding that ensuring the quality of education depends on several factors, the important one being the competence of teaching professionals.

Introducing the Investigative Locus: The Ceará State University and the Veterinary Medicine Course

According to consultation conducted on the UECE's website, its history begins with Law No. 9753 of October 18, 1973, authorizing the Executive Power to establish the Educational Foundation of the State of Ceará (FUNEDUCE), which had as its first president Professor Antonieta Cals de Oliveira. Created by Decree no. 11.233 of March 10, 1975, the UECE is currently a Higher Education Institution constituted as a Foundation with Legal Personality of Public Law (UECE, 2021).

At the UECE's Veterinary School 30 vacancies are offered each semester for the Veterinary Medicine Course, through a vestibular contest. Besides these vacancies, another 15 are destined to contemplate students from optional external transference and graduate entries. Since its creation, the course has one of the highest candidate/vacancy ratios in the state.

Table 1. Enrollees and Graduates in the Capital

Unit/Course	Enrolled 2017.1	Enrolled 2017.2	Graduates 2017.1	Graduates 2017.2
School of Veterinary Medicine/Veterinary Medicine	360	362	30	31

Source: Uece in Numbers 2017

With a duration of 10 periods, or semesters, the Veterinary Medicine Course is integral, i.e., it has classes both in the morning and in the afternoon, and the last period is dedicated to the mandatory supervised internship and course conclusion work in the form of a monograph presented to the examining board.

According to the PPC of this course, the course curriculum is structured in two cycles. In the first, which is basic, the fundamental contents for the formation of the veterinary doctor are studied. In the second, called professional cycle, the areas of knowledge include medical and surgical clinic, imaging diagnostics, physiopathology of reproduction, inspection of products of animal origin, among others (UECE, 2007).

The Legal Documents for the Veterinary Medicine Course: Formative Proposals

After the Law of Directives and Bases for Education (LDB 9.394/1996), the educational institutions had to build a project to support their actions. According to Anastasiou (2006), this project is aimed at Brazilian citizens and has as its core value the construction of citizenship, which will have repercussions in the choices, in the decision-making regarding the curricular organization, from which will unfold objectives, contents, methodologies, and evaluations.

Article 9 of the DCNs for undergraduate courses in Veterinary Medicine deals specifically with how the PPC should be elaborated, stating that it must be built collectively, centered on the student as the subject of learning and supported by the teacher as a facilitator and mediator of the teaching-learning process.

Article 12 of the DCNs, on the other hand, seeks to guarantee that the courses of Veterinary Medicine will carry out the articulation among the pillars of teaching, research and extension; a vision of educating for citizenship; use of methodologies that help the student to reflect on the reality in which he is inserted using strategies that articulate knowing, knowing how to do and knowing how to live together, aiming at learning how to learn.

In this way, for the development of such a pedagogical project, the integral and adequate formation of the student must be sought through an articulation between teaching, research, and extension. In this context, according to Anastasiou (2006), the PPC aims to guide the university to act as a social institution, from the development of actions aimed at social practice. Therefore, it aims at the formation, creation, reflection, and critique of the student's autonomy of knowledge.

The guidelines point out principles that have enabled institutions to use freedom to organize curricula and modify them concerning various aspects: composition of workload; specification of study units enabling an update of the contents and processes; an indication of topics or fields of study related to new teaching and learning experiences, pointing out care with the high rates of theoretical workload, often disconnected from practice. According to Anastasiou (2006), the articulation between theory and practice is a focus of the curricular guidelines, highlighting research as a form of learning.

The PPC for the Undergraduate course in Veterinary Medicine at UECE was elaborated following the guidelines described in Resolution CNE/CES 1, of February 18, 2003, which establishes the DCNs for the course. This document defines the principles, foundations, conditions and procedures for the formation of veterinary doctors, established by the Chamber of Higher Education of the National Education Council, for national application in the organization, development and evaluation of the pedagogical projects of the Graduate Courses in Veterinary Medicine of the Institutions of the Higher Education System (UECE, 2007).

The PPC of this course was reformulated in 2007 and approved by the Teaching, Research and Extension Council (CEPE) of the State University of Ceará on December 11, 2001 (CEPE Resolution 2400). This document aims to point out the guiding principles, the objectives, the professional profile and the areas of action of the professional graduated by the course. It also seeks to emphasize aspects involving the teaching staff, the strategies used in the teaching/learning process and the flexible curricular structure offered to the students, as well as the survey of human resources and materials available in the formation of professionals in Veterinary Medicine (UECE, 2007).

Seeking to get to know the reality of the course beyond the documents, we decided to contact the course coordinator to deal with the existing relationship between the DCN, the PPC and the teaching action:

So this year more specifically we will make this adjustment of the pedagogical project for the 2019 guidelines and probably in 2020 we will have a new pedagogical project to be submitted for the appreciation of the faculty council, education council and the implementation of this new pedagogical project. In this new project, we have a much greater insertion of faculty action on the issue of teaching and student learning, especially in interdisciplinarity (COORDINATOR OF COURSE).

In the PPC, the curriculum seeks to contemplate all areas of Veterinary Medicine, without forgetting the regional vocation. It also seeks to contribute to the continuous evaluation of its practical-theoretical activities so that, through appropriate critical discussion, flexibility is exercised, validating or re-evaluating its curricular proposal.

The coordinator took the opportunity to talk about the Tutorial Education Program, which counts with the participation of 16 students, whose main objective is the improvement of teaching in the Veterinary Medicine course: "[...] so what kind of learning would be better or what kind of technique... so they try to bring a person, do an activity, they have been working on this a lot" (COORDINATOR OF THE COURSE).

Speaking about how the coordination helps in the teacher-student relationship, the coordinator stated that they created a room for student support, similar to the teachers' room, which is located next to the administrative and pedagogical departments to integrate the teachers and students, stating that this action has brought good results.

In regards to the conception of qualification and teacher training, the PPC of FAVET/UECE deals with the problem of the lack of specific qualifications for teaching, which many teachers lack. The document states that the preparation of teachers for the exercise of teaching in Higher Education, "[...] although it is not a priority strictly established in the context of educational policies in recent years, it becomes increasingly required because the teacher needs to account for the complex historical constitution of their area of knowledge" (PPC, 2007, p. 58).

The PPC of the course reports that the teacher training policy has not met the needs of the institution, because it is hardly accompanied by institutional planning, producing a policy of individual training, turning into little effective effects in terms of institutional objectives. In this way, the course of Veterinary Medicine is currently facing a problem regarding the formation of its board of professors with respect to teaching, research and extension: "such crisis does not reside in the scarcity of critical mass, but, above all, in the fulfillment of the requirement of qualification, titulation, and pedagogical formation necessary for the exercise of teaching" (PPC, 2007, p. 59).

When questioned about whether or how the continuous formation of teachers at FAVET occurs, the coordinator explains that the formation takes place periodically, with the most important element being the Veterinarian Pedagogical Week, which is held every beginning of the semester, where a set of lectures is offered that involve not only education related to pedagogy itself, but also psychological and social issues.

When talking about the evaluation of the results obtained in these trainings, the coordinator says that the teachers are unanimous in saying that it was satisfactory, but a small percentage actually makes changes in their practices. Because of this, we believe that it is necessary that continued education should be more focused on everyday teaching situations, with an exchange of experiences among peers, case studies, themes arising from the teachers' needs, and moments that contribute to the constitution of teaching in Higher Education.

Thus, although FAVET has a highly professionally qualified faculty, it is necessary to overcome the old dichotomy between technical and pedagogical training, especially for those who are on probation, intensifying "existing pedagogical monitoring programs" (PPC, 2007, p. 59).

When asked about the challenges faced in the course coordination regarding teacher training, the coordinator concludes by saying that the first challenge is in providing interaction among teachers; and the second, in stimulating these teachers to seek pedagogical training.

In the next section, we will present data about the teaching staff and their training paths based on the analysis of their Lattes curricula and their training through undergraduate, graduate, master's, doctorate, and several other courses. Then, the teachers' narratives about the constitution of university teaching in the Course of Veterinary Medicine.

Faculty and Their Educational Paths

After performing the indications and specifications for university teaching described in the DCNs and in the PPC of the course of Veterinary Medicine at UECE, we stopped in the search for data regarding the training of teachers in the Lattes curricula of each teacher of the course.

From the research, we verified that the course has a total of 61 professors. Of these, 2 (3.3%) teachers work 20h per week, 17 (27.9%) work 40h, and 42 (68.9%) work 40h/DE. As for the institutional affiliation, 10 (16.4%) are substitute teachers, 44 (72.1%) are permanent, and 7 (11.5%) are visiting professors.

Based on the information about the workload and the institutional relationship, we found data on the initial academic education of the group of teachers of the course (Chart 2). 86.9% (53) of the teachers have a bachelor's degree, 6.6% (4) have a bachelor's degree and a graduate in Special Pedagogical Training Program, and Full Degree for Graduation of Teachers), as well as 6.6% (4) failed to inform the type of graduation in the curriculum.

Table 2. Initial training of the faculty members of the Veterinary Medicine course at UECE, year 2019.

GRADUATION TYPE	QTY	%
Not Informed	4	6,6%
Graduate	0	0,0%
Bachelor's Degree	53	86,9%
Graduate and Bachelor's Degree	4	6,6%

Source: Elaborated by the authors from the analysis of the Lattes Curricula.

In view of the findings, we found that the bachelor's degree prevails as the predominant type of initial training in the group of teachers investigated, paying attention to the absence of compulsory training in the bachelor's degree to exercise teaching in Higher Education, unlike teachers of Basic Education who have a bachelor's degree as a legal requirement for the exercise of the profession, as stated in Article 62 of LDB 9.394/1996.

The continuing education of teachers in this course fulfilled the requirements of Article 66 of LDB 9.394/1996, which deals with the training of teachers to work in higher education, which must have a faculty made up of masters and doctors (BRASIL, 1996). We understand that the *stricto sensu* graduate courses are relevant and necessary for the quality and permanence in Higher Education, but do not guarantee the specificities of the training for teaching and the constitution of knowledge for teaching, since these courses focus on research, the training of the researcher and not necessarily teaching, even those programs that have Education as their area of concentration.

A relevant data is also described in the 6.6% who have a double major in Bachelor's and Bachelor's courses. These teachers provide theoretical subsidies relevant to teaching in their educational path. Even though some of these degrees are currently in accordance with the extinct guidelines and norms in effect, such as: Special Program for Pedagogical Training and Full Degree for Teacher Training. This contributes even more to the need for continued education that meets the demands of "teaching" required of teachers in Higher Education.

On the subject, Pimenta and Anastasiou (2014, p. 79), highlight that:

Teachers, when they enter the teaching profession at university, bring with them many and varied experiences of what it is to be a teacher. Experiences they have acquired as students of different teachers throughout their school lives. Experience that enables them to say which ones were good teachers, which ones were good in content, but not in didactics, that is, they didn't know how to teach. They have formed "positive" and "negative" models, in which they mirror themselves to reproduce or deny. Which teachers were significant in their lives, that is, who contributed to their personal and professional development.

Undergraduate teaching is understood as a consequence of the other activities that the teacher needs to perform within the university, assuming a naturalized form of exercise. The naturalization of teaching means that the teacher teaches from his experience as a student, inspired by his former teachers (COSTA, 2007). This information that teachers teach based on their student experience is in opposition to the thought of Gauthier *et al.* (2013) by highlighting that teaching, under no circumstances, can be evidenced as a craft without knowledge or a knowledge without craft, showing that the teaching profession is a craft composed of knowledge: disciplinary, curricular, Science of Education, pedagogical tradition, experience, and pedagogical action. Thus, for the exercise of teaching, it is necessary to develop several types of knowledge, in addition to the experiential ones.

Subsequently, we analyzed the continuing education, *lato* and *stricto sensu*. We observed that 50 (82%) of the teachers hold a doctoral degree, and 23 (37.7%) of these are post-doctors. It is possible to infer that the course faculty is trained for research, which can be

reflected in the training of students for professional performance, as well as for initiatives regarding research in the course. On the other hand, we found that two professors (3.2%) do not have post-graduate training, working with the initial academic training (Chart 3).

Table 3. Continuing education in graduate studies for professors of the Veterinary Medicine course, maximum title per professor

HIGHEST QUALIFICATION	QTY	%
Graduation	2	3,2%
Specialization	-	-
Master's Degree	9	14,8%
PhD	50	82%

Source: Elaborated by the authors from the analysis of the Lattes Curricula.

Adding information to the table, it is worth mentioning that among the teachers surveyed, one presents two specializations in the area of Education, being: "Specialization in Evaluation of Distance Education" (420h), from the University of Brasilia and "Specialization in Higher Education Methodology" (420h), from the State University of Ceará.

We also carried out a survey about the complementary education of the teachers, trying to identify courses related to education/teaching. We defined as complementary courses those of short duration, offered or not by the UECE. Of the 61 Curricula Lattes surveyed, only those of 13 teachers include courses related to the area of education/teaching. Of these, 9 teachers have taken only one course each; two teachers have taken three courses each; and three teachers have taken two courses each. These courses ranged from 12 to 120 hours (Chart 4).

Table 4. Continued training directed to the education/teaching of the professors of the Veterinary Medicine course of UECE, year 2019.

QTY	COURSES	H	INSTITUTION
3	Introduction to teaching animal welfare	24	World Animal Protection Brazil
1	New Skills in Education and Methodological Research	12	UNESP
1	Didactic Process in the Classroom: theory and practice	40	UECE
1	Evaluator Training Course	40	Centro de Educação Continuada
1	Teaching Process: theory and practice (Didactics)	50	UECE
1	DT Teacher Training Course	80	UECE
1	Didactics of Higher Education	60	UECE
1	The Teaching Process Theory and Practice	80	UECE
1	Training Course: Teaching in Higher Education in the Technological Area	15	UNIFOR
1	Training Course: Teaching in Higher Education in the Technological Area	40	UECE
1	Distance Education Training Course	120	UECE
1	Professional and Technological Education - New Challenges	14	SECITEC
2	Moodle: virtual learning environment	90	UECE
1	Didactics in Higher Education	40	UECE
1	Support for the implementation of the Environmental Education and Family Farming Program	120	Ministério do Meio Ambiente
1	DE training for tutors and teacher trainers	30	UECE
1	1 Environmental Education and the PROPACC Methodology 20 UFC	20	UFC

Source: Elaborated by the authors from the analysis of the Lattes Curricula.

We observe that, when we look at the specific pedagogical training courses for teaching, this group of teachers has a shallow and deficient training, because, out of a total of 61 teachers, only 20 courses were taken, totaling 0.3 courses per teacher. We can also see that only 11 courses were taken at the UECE and nine at external institutions.

As stated earlier in this text, the PPC reports that the teacher training policy has not been sufficient to meet the needs of the course, with regard to the training of teachers, since it does not follow an institutional plan, resulting in a policy of individual training, resulting in unsatisfactory results in terms of institutional objectives. From this perspective, the technical training of teachers should be articulated with pedagogical training, which currently is not yet a priority institutional investment, given the insufficiency or non-existence of courses and programs aimed at permanent teacher training.

Next, the paths followed in the teaching process with the professors of the Veterinary Medicine course will be presented.

Paths Taken in Teaching: Narratives of Baccalaureate Teachers

About the "becoming a teacher" and the relationship established between their initial and continuing education, it was possible to observe several elements that composed the construction of their identities. In this section of narratives about teacher training, it is possible to identify indications of how each veterinary doctor participating in the study became a teacher.

The teachers' narratives express, at first, how they became teachers. In their speeches, the predominant report was that the motivation to become a teacher started before and during graduation: in short courses, internships and monitoring. Some interviewees started teaching in the Veterinary Medicine course before they finished their master's and doctoral degrees.

Professor H reported that he got closer to teaching when he became a monitor during his undergraduate studies: "I started in veterinary medicine first as a student in 1980. During the time I was a student, I became a monitor for three years of the discipline genetics and veterinary histology. So I was having a formation in this sense".

When the opportunity arose to apply to become an effective professor, some of the interviewees had already been teaching as Temporary Professor for some time. About the contributions of the *lato* and *stricto sensu* post-graduation courses to teaching, the data showed divergent opinions: for some teachers, the courses contributed a lot to their training as teachers, with emphasis on the master's degree; for others, the post-graduation courses had an important role in their training as researchers.

Professor F expressed that he always wanted to be a teacher and to do research, that is why he had the desire to do post-graduation and continue studying after finishing the Veterinary Medicine course.

According to Professor G, before becoming a teacher, he became a Veterinarian. And it was in training as a Veterinarian, residency, Master's and Ph.D. that he started to become a teacher. When asked about how he went from being a Veterinarian to becoming a teacher after taking the exam, the teacher says that what he took to the classroom for pedagogical preparation was what he learned during his residency, presenting seminars and observing other teachers.

Professor I begins his speech by reporting that he graduated in Veterinary Medicine in another state and that, after finishing the course, for professional and private reasons he came to live in the state of Ceará. However, until that time, she did not have the perspective of becoming a teacher. Once she was in this state, she started to work in a veterinary clinic and to take a specialization course in the veterinary area at the UECE.

About the exercise of teaching, Professor I said: "I ended up having to break through horizons to put a more favorable structure in place to develop teaching in surgery. Here I received no support from the institution to qualify me in this area of teaching". She goes on to say that the only experience she had as a teacher was teaching adult literacy when she was still a child. The interviewee mentioned that despite having many teachers in her family, she did not want to follow this profession, but ended up not being able to "escape".

In the narratives about initial training, teachers highlighted the opportunity to participate in activities such as internships and monitoring, both in teaching and research, which contributed to the awakening of the teaching career. The seminars and group work

during undergraduate and graduate studies were also remembered in this process of approaching the teaching profession. During the academic training period, it was noticed, through the narratives, that they were able to have contact with situations aimed at the search for know-how when approaching more experienced teachers, either through the experience of internships and/or monitoring.

Thus, as Nóvoa (2017) analyzes, teacher education requires proximity to the school context. It is essential that students acquire autonomy in becoming teachers, through activities such as seminars that stimulate them to research, structure, and present content, preferably autonomously.

The challenges imposed on higher education are many, and the training of its teachers is one of them. To deal with these issues, we tried to evaluate what still presents itself as one of the problems: the formation of bachelor teachers, specifically those from the Veterinary Medicine course, and their condition to develop a quality education, starting from the assumption that they do not have initial formation directed towards the exercise of teaching.

In relation to continuing education, the narratives showed that there are periods in the course in which the teachers consider the training offered by the university to be deficient, as can be read in the reports of Professor A, Professor B and Professor D:

If there were periods that were lacking, currently they are always an opportunity to recycle, to improve, to participate in some way (TEACHER A).

The veterinary school has already done this training by PROGRAD several times and always has positive results; although we are technicians who are teaching, we are not essentially a teacher. There are some teachers who, because they have master's degrees, doctorates, post-doctorates, they are reluctant to participate in this kind of training (TEACHER B).

As far as the pedagogical training proposed by the UECE is concerned, there have been some attempts, but not yet institutionalized, but through course initiatives. In the case of FAVET, a Course on Teaching Process: theory and practice was promoted for teachers of the Veterinary Medicine Course in partnership with the Regional Council of Veterinary Medicine of Ceará [...] (PROFESSOR D).

Professor C points out the difficulty that teachers had some years ago to have access to pedagogical continuing education through the UECE. He emphasizes that there was little in the way of courses offered. Professor E reports that he has never taken a course directed to pedagogical training, but attended some lectures and participated in meetings promoted by FAVET's coordination. However, the teacher points out that the courses were rarely offered and those that were offered arose during the semester, making participation impossible. Professor F says that if he has or had very little training, the isolation inside the laboratories is also a factor that hinders participation in training.

So, in parallel, there was the struggle to get the place, to build, reform... animals, material, projects, and it ends up taking a lot of time... and pedagogical training was put aside, even because every week we have to be inside the classroom, and it ends up, as they say, "learning by rote". Trying to do at least some self-criticism to see what can be improved from one semester to the next (TEACHER F).

Professor G says that the pedagogical preparation he had when he joined the UECE as a teacher was to be told where his classroom was and nothing else. The teacher also reports that the fragility of the pedagogical training remains until today. Regarding participation in pedagogical continuing education courses inside and outside the UECE, Professor H responded:

There were some courses promoted by the veterinarian, right? Some courses that [...] There was even a time like that, it was about 3 days, that was promoted, but I do not remember the name of the course, but about 8 years ago I attended a course like that [...] Outside the UECE I attended a course at UFC, but it was at the beginning, just when I joined here as a teacher, part of pedagogy, it is a course that they gave there of several hours, I do not even remember how many hours too [...] (TEACHER H).

Professor H's speech is striking and makes clear the fragility of the pedagogical training offered to teachers by the UECE. The teacher mentions a course that was offered by the UECE eight years ago, which he does not remember the name of, nor specifically what it was about, and that lasted, according to him, "about three days," as if this were a large amount of time.

When we questioned the teachers about the search for training by their means, the narratives showed that the teachers have sought it on some occasions, but without a defined training objective, prioritizing the participation in training and events linked to the technical area of Veterinary Medicine. According to Pimenta and Anastasiou (2014), the professional development of teachers is the object of studies that recognize teacher training no longer based on technical rationality, but in a perspective that recognizes their ability to decide.

On this point Teacher I adds that she did not seek any pedagogical training by her own means due to lack of time and accommodation. We emphasize then that teacher training must be understood as a permanent process that encompasses the identity and professional valorization of teachers (PIMENTA; ANASTASIOU, 2014). The continuing education of teachers should be institutionalized within the university, offered to teachers with a well-defined plan and clear objectives to be achieved. Therefore, participating in continued pedagogical training is a right and a duty of teachers, and this participation should be a requirement of the university.

Montonavi and Canan (2015) note that Brazilian legislation is silent when it comes to pedagogical training for teachers with bachelor's degrees. By placing on universities and graduate programs the responsibility for the pedagogical training of teachers without determining a minimum curriculum for this, an omission is noted. This failure allows what is observed in practice: professionals focused more on research than on teaching (MONTONAVI; CANAN, 2015).

Related to this, the Ministry of Education sets as a minimum requirement for teaching in higher education the title of specialist, leading an increasing number of bachelor professionals to work without adequate pedagogical preparation.

It is worth pointing out that LDB 9.394/1996, in its Article 65, states that "teacher training, except for higher education, shall include teaching practice of at least three hundred hours". Thus, there are several hours as a prerequisite for entry as a teacher in Basic Education, but not for entry as a teacher in Higher Education. It is impossible for this not to sound strange to those who read or hear this information. In view of this, the task of training the teachers who will work in HEI ends up being transferred to them, in the form of continued education in service. As a consequence, there is currently a gap in the pedagogical training of these professionals, because the teachers who work in HEIs, especially in bachelor courses, have not received the appropriate training.

Management support, collaboration among peers and training activities promoted by the university are essential for teachers to change their conceptions, in order to understand teaching as a possibility for students to develop and transform their own ideas about knowledge and the professional field.

According to Morosini (2000), the training of teachers to work in Higher Education has been negligent, because the legislation does not clarify how this training should take place. For the author, it is evident the indifference in the Brazilian legislation about the pedagogical formation of the university teacher.

In Masetto's (2001) opinion, this lack of concern with the pedagogical training of teachers leads them to continue repeating old methods, characterizing themselves as simple transmitters of information, not preparing students to think for themselves, to face challenges, or to solve problems critically.

Although the interviewed teachers have years of study in their specific areas, a precarious scientific knowledge of the teaching-learning process predominates. The lack of institutional support for teacher training can be perceived in the speeches of the teachers participating in this study.

Final Considerations

Although some progress has been made in terms of the offer of formative actions within the university, much remains to be done regarding the quality and institutionalization of these actions for changes in teachers' practices. Thus, it seems pertinent and urgent to study the actions and public policies directed to teachers in Brazil, especially those referring to training.

The results of the research allowed an approximation with the reality experienced by the veterinary medical teachers. The previous knowledge about the institution and about those who work there was significantly amplified during the research, allowing the problematization, analysis and interpretation of different situations.

From the research, it was possible to identify a series of challenges to be faced by UECE and FAVET, such as: lack of interaction and training among peers, deficient continuing education offered by the university, teachers' lack of interest in seeking pedagogical training by their own means, and pedagogical practices based only on experience.

An institutional investment is needed to increase the quality of in-service continuing education for teachers within the university and, consequently, of the teaching offered to the students. Reflective and meaningful training is needed to avoid mere non-innovative training. The actions taken institutionally must move towards collective and shared action in the development of pedagogical work within the courses and the university.

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