

LEARNING FOR TEACHING IN UNDERGRADUATE COURSES

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Abstract: *This text discusses the teacher education effected in undergraduate courses in teaching learning. The research problem asks: What learning for teaching profession are developed by the students in undergraduate courses? The research was conducted with 85 graduate teachers who work in basic education in Curitiba, Brazil, through interviews. The research is qualitative, considering the description of the participants' testimonies as the primary source. The analyzes follow the systematization of the content based on Bardin (2010) and Flick (2013) using ATLAS TI; as references: Schulman (1986), Fullan and Langworthy (2014), Marcelo (2013), Imbernón (2017). The results indicate the education for the transmission of knowledge to be taught and the learning of the teaching practice reinforces the transmissive teaching. The undergraduate courses value the learning of specific knowledge without emphasis on pedagogical knowledge. The conclusions indicate the need for changes in the learning focus of undergraduate courses: new ways of teaching, incorporating technologies and education for research.*

Keywords: *Teacher education; Learning for teaching; Teaching practice;*

1.Introduction

This text discusses the teacher education effected in undergraduate courses in teaching learning. The research problem asks: What learning for teaching profession are developed by the students in undergraduate courses? It takes as a reference research carried out with teachers who work in basic education and who have completed undergraduate courses. The objective of the research was to examine the learning of teaching in teacher education courses (undergraduate courses) and to examine the propositions of the teacher education guidelines in Brazil.

The undergraduate courses are teacher education courses at university level, whose purpose is to promote the graduate of teachers for basic education. The purpose of these courses is to develop skills and learning for teaching in order to favor the improvement of basic education teaching, promote professional development and the professionalization of teachers. The goals of teacher education are indicated by many researchers such as Schulman (1986), Nóvoa (1992) Marcelo (1999, 2013), Imbernón (2009), Gatti and Barreto (2009), André (2006) and others.

The Law 9. 394/96 defines the requirements of teacher education in Brazil and the National Curricular Guidelines for Higher Education, as indicated in CNE/CP No. 2, of July 1, 2015, guides the organization of courses. This document indicates as nuclei of the formation of the professors: "I - core of studies of general formation; II - core of deepening and diversification of studies of professional areas; III - core of integrative studies for curricular enrichment". (BRAZIL, 2015, p.9-10). The core of studies and general teachers education, deals with the specific knowledge of the area and the more general and

interdisciplinary contents, including didactic-pedagogical knowledge, fundamentals and methodologies. The core of deepening and diversification of studies in the areas of professional activity indicates studies focused on the diversity of professional fields, taking into account the reality of educational institutions and education systems. The core of integrative studies for curricular enrichment includes training in research, initiation to teaching, internships and practical experiences in the field of education.

According to Dourado (2015), the proposed teacher education in the core of the regulations of these guidelines, observe the recommendations of studies and research for teachers' learning in undergraduate courses and result from a long process of discussion among members of the National Council of Education (CNE) and debates in public sessions with teachers and researchers held in many Brazilian cities. Thus components of teacher education are learning knowledge, conducting research, developing reflection and teaching practices. In these Guidelines the teacher education is understood as an ongoing process taking on the concepts proposed by Marcelo (1999, 2013) and Imbernon (2009).

2. Theoretical framework

For the education of teachers Schulman (1986) proposes as pedagogical knowledge the so-called Pedagogical Content Knowledge - PCK. The PCK covers: (i) general pedagogical knowledge, with special reference to the principles and strategies of classroom organization and management; (ii) knowledge of students and their characteristics; (iii) knowledge of educational contexts, ranging from the relationship between groups and in the classroom, the management and financing of school systems and institutions, knowledge of educational purposes, effects and values in historical and philosophical perspective; (iv) knowledge of the content of school subjects and activities; (v) knowledge of the curriculum, involving understanding of materials and programs that serve as "mediation tools" for teachers; (vi) knowledge of the pedagogical content, which relates content and didactics, "what" and "teach". This knowledge, mark the teacher identity as to the professional knowledge, are originated and are articulated with the teachers' practice. (Schulman, 1986)

The learning to carry out research in the education of teachers constitutes a possibility of professionalization of teaching (Ludke & Boing, 2004, André, 2006). For Cochran-Smith and Lytle (1999) there are different conceptions that orient the formation of the teacher who see in the research an ally for their learning, having the practice as the base to be investigated. For researchers, there is a need to adopt a new construct of "inquiry as stance", based on the relationships between research, knowledge and professional practice.

Research development is associated with the development of reflection as indicated by Schön (1983), who proposes the formation of reflexive professionals based on learning in action. This is not enough as Zeichner (1992) indicates, because it alerts to the need to consider contextual issues. The teacher is a professional who acts in social practices and not mere isolated and individual activities.

In relation to the learning of the teaching practice Fullan and Langworthy, (2014) emphasize teaching associated with learning. The proposition of these authors considers learning based on positive relations, to promote the independence, interdependence and self-motivation of the students. The needs, origins, perspectives and interests of students are reflected in the learning programs in order to promote challenges to develop deep levels of thinking and application. This learning connects strongly with the learning communities beyond the classroom in an active and cooperative way.

With the insertion of information and communication technologies in education, the learning of its use in teacher education courses came to be defended by Marcelo (2013), Lawlews and Pellegrino (2007). These authors emphasize that most teachers do not include the use of technologies in their classrooms. It recommends that for a change it would be

necessary to include the learning of technologies as a teaching tool in the processes of teacher education (Marcelo, 2013).

Considering these indicators on knowledge for teaching learning this text contains the results of research with teachers education in undergraduate courses.

3. Methodology

The research is qualitative, considering the description of the participants' testimonies as the primary source. Data were obtained through interviews involving 85 teachers from Curitiba, a city located in the southern region of Brazil. For the interviews, a sample of primary and secondary school teachers was considered. Teachers of both genders and less than ten years of age were included; 65% of respondents were female; 28% from 1 to 3 years of work experience; 32% from 4 to 5 years; 22% from 6 to 7 years; 13% from 8 to 9 years and 5% with two degrees being one of them just completed. The choice of the interview is justified by the possibility of this technique of data collection, according to Szymanski (2002), to reveal the conditions in which it situates the problems of teaching learning. The interview protocol includes questions about learning in undergraduate courses, which lacked learning about teaching in these courses, which authors and theories were learned during the course.

The instruments used in field research were pretested in order to verify the comprehension and relevance of the issues in focus, considering the research objectives. Before starting the research, an exposition of the study objectives to the participants was made.

The analyzes take as indicators the systematization of the contents based on Bardin (2010) and the indications of Flick (2004) for testimonials collected by interviews. The members of the Praxis Group - PUCPR participated in the interviews. In the analysis of the statements of the interviewed teachers, the pre-analysis phases were carried out, the codification defining the registration units (using ATLAS TI), the categorization ending with the inferences (Bardin, 2010). The categories of analysis of registry highlight: (i) learning of knowledge for teaching; (ii) learning for research; (iii) learning of pedagogical foundations; (iii) learning of teaching practices.

The interviews were transcribed and then the data of the teachers' statements were grouped by registration units aiming at categorization. The formation time did not indicate a significant difference in the reliability of the data. Regarding gender, the female group described the learning about pedagogical knowledge a little more detailed, but the highlights are close to the male group.

4. Results

The units of analysis took the theme words by reference to the indicators of the theories underlying the research (Schulman, 1986, Marcelo, 1999, 2010, Gatti and Barreto, 2009, André, 2010, Ludke Boing, 2004; Lytle, 1999).

(i) Learning of knowledge for teaching: teachers emphasized that during the courses of teacher training (undergraduates) they carried out an intense learning of the disciplinary contents. Focus on knowledge of fundamentals of each discipline. Up-to-date disciplinary knowledge was little approached, much less the contents of basic education subjects. So, in general, learning is about concepts. The classes are developed with the explanation of the concepts by the teachers, then exercises and activities are done to assimilate these concepts. The approach is theoretical with little applied knowledge. Authors and theories on content specific knowledge in each area of teacher education, authors of physical education, mathematics, linguistics, history, and fewer authors of pedagogical theories were also indicated.

(ii) The learning to perform research focuses on the composition of basic concepts on research methods and procedures, an instrumental learning. Most teachers indicate that they have done bibliographic research and the completion research. There were no practices of research in schools about the teaching practice.

(iii) The learning about pedagogical knowledge was centered on the fundamental theories of the pedagogical disciplines, with little articulation with the teaching practice. Classes consist of reading texts followed by content discussion, lack of articulation with teaching practice.

In the interviews the teachers pointed out that they had little learning curriculum knowledge, involving understanding of the materials and programs that serve as "mediation tools" for teachers. They felt lack of knowledge learning on how to develop their students' learning. Among the learned theories cite Teria's development of cognition based on Piaget. The most outstanding didactic knowledge is teaching theories, among them Paulo Freire.

(iv) Learning about the teaching practice is carried out during the teaching stages. The internship takes place in three phases: observing the practice of a teacher; participate in some activities such as correcting student exercises and teaching classes. Few teachers indicated that they taught more than one class.

5. Discussion

The research indicated that the learning in the courses of teacher training are partial: there is little learning about the school contents and curriculum such as the researches of Gatti and Barreto (2009) when examining these courses. The authors point out that pedagogical knowledge is "only a superficial veneer of pedagogical training and its foundations with generic propositions that go beyond offering a more solid formation". (Gatti and Barreto, 2009, p.74). Likewise, Marcelo (2013, p.32) indicates that "the quality of teaching no longer depends only on the mastery of didactic knowledge of the content that teachers possess." This knowledge restricted to concepts and reading of text adds little to training for the role of teacher. The fact that the courses focus training on learning theories of development and little on how to promote student learning "It is not only the knowledge of the content, nor the generic domain of teaching methods", because pedagogic learning "includes how to organize the contents, the problems that emerge" Marcelo (2013, p.33).

Imbernom (2009) indicates the learning of teachers' knowledge about teaching have originated in different moments, from the experiences as students, because they learn to teach the teachers who were part of their school trajectory; in exchanges of experience with school peers and in practice. The research indicates that the learning of the practice restricted in the stages realized during the course indicates that in the course are little appreciated the learning from the experiences. Interviewees do not indicate learning by reflecting on themselves, on their learning practices, on their observations in schools. The learning of practice focused on the completion of the stage and not effectiveness of teacher learning. In general, when doing a single practice of class they point to a limited stage.

Fullan and Langworthy (2014) warn a teaching that mobilizes the student to learn as opposed to passive learning and memorization of knowledge. Teaching by linking learning to a new model articulates technology and helps to achieve deep learning objectives involving the creation and use of new knowledge in the real world. Teachers are partners with students in deep learning tasks characterized by exploration, connection, and broader projects Passive teaching with knowledge transmission produces passive learning.

The instrumental learning of the research limits the understanding of what happens in practice "teachers should be reflexive and critical users of knowledge and practices" as Carr and Kemmis (1988, 195) indicate. The research carried out by the teachers contributes to the retrospective understanding of teaching in order to contribute to a prospective action. The

completion of a complete research at the end of the course is insufficient to incorporate this practice (André, 2006).

The didactic action of research learning can occur in several ways such as: the study and discussion of research on teaching practice; participation in research groups; conducting research in study groups; the systematization and analysis of data; observation visits in schools with data records to be reported during class; mapping of publications on a subject of teaching practice.

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