



Thesis or degree-by-examination? A Dilemma for Research Training

¿Tesis o examen de grado? Un dilema para la formación investigativa

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Abstract

Nursery Schools in the ecuadorian educational system urges teachers with a solid research training that allows them to have a positive impact on the new educational contexts. One factor linked to this process is the preparation of the degree work or the degree examination that the student must perform prior to graduation. The aim of this study is to determine the extent to which the research training of Nursery School at the Universidad Politécnica Salesiana is affected by the application of the new regulations that include a final test as an alternative to a research in order to obtain an undergraduate degree. For this, the process of graduation of this career in the academic period (2015-2016) is analyzed through some principles of critical pedagogy. The data reveal, on one hand, the increase of efficiency with the application of the exams of degree; and, on the other, the reduction of investigative experiences of the degree work, which is affecting the research training of future nursery teachers. The conclusion reached is that research training must be signified by the career and

within it the research work needs to be repotenced to fulfill its educational goals.

Keywords: Research training, research work, degree examination, graduation, critical pedagogy, accreditation.

Resumen

El nivel inicial del sistema educativo ecuatoriano urge de docentes con una sólida formación investigativa que les permita incidir de manera positiva en los nuevos contextos educativos. Un factor vinculado a este proceso es la elaboración del trabajo de titulación o el examen de grado que el estudiante debe rendir previo a su graduación. El objetivo de este estudio es determinar en qué medida se afecta la formación investigativa de los estudiantes de la Mención Parvularia de la Universidad Politécnica Salesiana con la aplicación de la nueva normativa que incluye el examen de grado como una alternativa al trabajo de titulación. Para ello se analiza el proceso de graduación de esta carrera en el período académico (2015-2016) a partir de algunos principios

de la pedagogía crítica. Los datos revelan, por un lado, el incremento de la eficiencia terminal con la aplicación de los exámenes de grado; y, por otro, la disminución de experiencias de carácter investigativo propias de los trabajos de titulación, con lo cual se ve afectada la formación investigativa de los futuros docentes parvularios. La conclusión a la que se llega es que esta formación

debe ser re-significada por la carrera y dentro de ella, el trabajo de titulación necesita ser repotenciado para que cumpla sus objetivos educativos.

Descriptor: Formación investigativa, trabajo de titulación, examen de grado, graduación, pedagogía crítica, acreditación.

1. Introduction

For decades the Ecuadorian university has demanded, as a requirement for the graduation of the future professionals, the accomplishment of an academic work in which the theoretical and methodological dominion of the disciplinary area of the graduate is evidenced. Several are the names that have been given to this work: thesis, monograph, degree work, titling work, among others. In the case of the Initial Education Mention of the *Universidad Politécnica Salesiana of Ecuador* (UPS), where this study is carried out, from its beginnings in 1994 to 2015, those aspiring to obtain the title of nursery teachers could opt for a thesis, a project or a product, the first presenting the greatest difficulties of a theoretical nature. Projects and products, on the other hand, were more oriented towards methodological proposals. In this context, students' preferences were inclined towards the latter alternatives, the theses being restricted to an ever smaller number of interested parties. This revealed some dysfunction in the process related to the research training of future nursery teachers. This situation lived by the Initial Education Mention, was not the exception, but a sample of a general tendency.

In fact, the low terminal efficiency of students is one of the great debts of the Ecuadorian university, according to Larrea (2016), in 2013 only eleven of every 100 university graduates managed to graduate within the established deadlines. This trend is also replicated in the UPS, whose average graduation rate was 8.39% in the same year (UPS, 2013). Being a delicate and recurrent issue, some years ago, the UPS implemented

some initiatives to improve this indicator, among them are the *graduation courses*, which were designed and implemented in order to graduate the student population that for various reasons could not finish this process. There is also the creation of the *center for the production of degree products*, whose purpose was to guide and orient methodologically either the theses, projects or products that students should prepare for graduation. These experiences, in addition to increasing the graduation rate, allowed us to locate the problem of low terminal efficiency linked not only to administrative processes but also to the research training received by the students. That is to say, efforts should not only concentrate on the final stage of the career, graduation, but, above all, on the teaching-learning process of the knowledge, skills and values linked to the research exercise that must be developed in all levels of vocational training.

This scenario linked to the graduation process of university students that had remained unchanged for a long time was significantly affected in 2015 with the entry of a new academic regulation issued by the Council of Higher Education of Ecuador (CES). In this legal instrument the options for the graduation of the students are extended. Of the three previously named in the case of UPS, the possibilities for the degree work are extended to 15, and if none of them meets the expectations of the student, the student can choose the comprehensive degree exam (CES, 2015). The degree work is considered in this regulation, in its art. 21, numeral 3, as an «innovative proposal containing at least an exploratory and diagnostic research, conceptual



basis, conclusions and sources of consultation» (CES, 2014), whereas for the degree exam it is mentioned that it must be of «Comprehensive character, articulated to the career exit profile, with the same level of complexity, time of preparation and demonstration of learning outcomes or competencies, than that required in the various forms of qualification work» (Idem). The UPS Initial Education Mention chooses, among the 15 options proposed by the CES for the degree work, the case analysis and methodological proposals and, as it can be gathered, also the degree exam (UPS, 2016).

Having noticed the lack of acceptance of a thesis among students of education, it is not surprising that in the new scenario proposed by the recently applied academic regulations, the vast majority of students opt for the degree exam. It seems that this behavior is linked to the perception that future nursery teachers have about the degree exam in relation to the degree work, considering the first as easier, faster and less stressful than the second. This change, which at first glance seems to have no major impact, has some significant implications for research training. The students, when opting for the degree examination, deprive themselves of a unique research experience during their formative process as the realization of a degree work, since, from the perspective of the investigative training, this modality is the one that offers major contributions. The acquisition of the investigative abilities, of course, does not depend only on the degree works, but is a process that occurs throughout the university formation and is present in almost all the academic activities inside or outside the classroom.

What happened in the last period gives an account of a paradoxical situation in the investigation formation of the Initial Education Mention; on the one hand, the graduation rate almost doubled in recent periods and, on the other, the research projects linked to the graduation process are significantly reduced. This concern becomes more relevant when we observe the modest results achieved by the students of this career in terms of learning related to the research axis, as

can be seen in the reports made by the evaluation committee of the UPS (COMEVAL, 2014, 2015). Although it is true that the elaboration of a titling work implies a series of difficulties for the students, such as not knowing which subject to investigate, what research design to take, how to elaborate the theoretical framework, the lack of time because many students started in the labor market, etc., and that these circumstances determine to a large extent the low terminal efficiency index in the universities of the region, as evidenced by the work of several authors (Guevara and Viera, 2009, Gascón, 2008, Ferrer and Malaver, 2000, Abreu, 2015, Larrea, 2014), it is also true that, when these processes are well under way, they become powerful spaces for the investigative exercise of future professionals in education. In the elaboration of a thesis, a project or a product, knowledge, abilities and values linked to the investigative work are imbued (García, 2010, Paulo and Chirino, 2012, Chirino, 2002, Medina & Salvador, 2009 and Guzmán, 2003). In this context, the purpose of this paper is to analyze the impacts that the implementation of the new regulation regarding graduation processes is generating in the research training of students of the Initial Education Mention of the UPS.

2. Methodology

This study is based on a broader work that the author has been developing since 2013 with the purpose of understanding the conceptions and practices related to the research training of future teachers who graduate in the UPS. From what happened in the 2015-2016 academic period with the students of two cohorts of the Initial Education Mention, some empirical data are presented to dimension the problem and short theoretical clues are proposed, from critical pedagogy approach, for its understanding.



3. The transition process of the higher education system in Ecuador

The problem described in the preceding paragraphs should be understood in the transition context that the Ecuadorian university is experiencing (Ponce, 2016, Fabara, 2013), which follows a global and homogenizing trend in higher education (UNESCO, 1998, 2007; Tuning, 2007). For the Ecuadorian case, this process has involved a new legal framework and the implementation of evaluations, accreditations and categorizations of higher education institutions that results, in the first phase, the closing of 14 universities for not meeting the expected requirements for their operation; the universities are categorized and those in the last places must draw up their respective improvement plans; it regulates the entrance of students to the university through the meritocracy; standards for institutional assessments and accreditations are raised; three public universities are created that pretend to become a model for the others; It is required the redesign of the curricular projects for each major, starting with education (Ponce, 2016). These and other elements linked to the search for quality in higher education imprinted a new dynamic in the Ecuadorian university, marked by a mixture of optimism and uncertainty, because, although these changes were expected and necessary, concerns soon arose by the short deadlines and the mechanisms established for their implementation.

From an earlier educational system, which sought to stimulate self-regulation, it was moved to another where state intervention takes on a new role. This phenomenon is closely linked to the political process that the country has lived over the last 10 years, where the university is considered a key factor for development (SENPLADES, 2013). In the previous scheme, being self-regulation misunderstood and mismanaged, both by the public and private sectors, a series of excesses were committed by some ins-

titutions, giving rise to what were called “garage universities” (CONEA, 2009). At present, the picture has significantly changed, it is the State that assumes the reins of higher education and with it begins a new cycle that is not exempt from certain risks. It is not an exaggeration to say that during several moments of the institutional life the main concern of the directives has been to demonstrate to the control organisms that the management indicators are being fulfilled, which are indispensable requirement for the later accreditation. It is in this context that the *Universidad Politécnica Salesiana* has had to adopt a new style of work characterized by improvement plans, annual operational plans, evaluation reports and their respective evidences that are periodically required by the control bodies such as the Council of Higher Education (CES) and the Council for Evaluation, Accreditation and Quality Assurance of Higher Education (CEAACES), where the indicators and evidence acquire a prominent role. One of these indicators is the terminal efficiency rate.

4. The case of the Initial Education Mention of the UPS

Within the new culture of educational quality that is being implemented in the country, the improvement of indicators has become an institutional priority, among which is the *graduation rate* index, understood as the «number of students graduated in one academic period» (UPS, 2015, p.94). In the current institutional evaluation model of the Council for Evaluation, Accreditation and Quality Assurance of Higher Education, the graduation rate is an indicator of the academic efficiency sub-criteria, with a weight of 0.0250 points in the assessment scale, conformed by 44 indicators (CEAACES, 2015), which determines that special attention is given to this indicator. On the other hand, the Higher Education Council, in order to increase the number of graduates at national level, included in the new regulation of academic regime, in its fifth transitional provision, literal



a), Special Degree work Units (CES, 2014). These Units assumed with great dynamism in their role, achieving a significant reduction in the number of students who finished their studies but could not graduate.

In the 46 period (March-August 2015), the Special Degree work Unit of the Initial Education Mention had to implement the new provisions of the academic regulations, but found that the number of teachers was insufficient to cover the demand of students in the process of graduation. To counter this deficiency, the decision was made to prioritize *case analysis*, since it allowed the same teacher to work with several students at the same time. In order to achieve this, a research project was developed, aiming to know the teaching practices in basic general education in the educational centers of the area. From this project, the students were placed in educational institutions in which they carried out the case analyzes with the guidance of their respective tutor. As a result of this new career initiative, 80% of students opted for case analysis and the remaining 20% were inclined to take the degree exam. The experience was positive and encouraging; however, the lack of teachers in the required numbers and administrative procedures that were not yet fully adjusted to the new requirements, forced the Special Degree Work Unit in the following period (September 2015-February 2016) to give priority to the *degree exams*, so that the data regarding the graduation options are almost reversed in relation to the previous period. In this second experience, 88% of students opted for the exam and only 12% did so for the degree work. As a result of these actions from the 12.50% of the year 2014, the graduation rate increased to 23.48% for the following year (UPS, 2015).

These quantitative figures are quite flattering from the perspective of institutional assessment and accreditation; but this is not the case if one looks closely and in depth from a critical pedagogical perspective. Facing this problematic the question how to improve the rate of graduation without affecting the investi-

gation formation of the students of the Parvularia Mention of the UPS arises. It has gone from one end to the other. In the previous model, there was more investigative work done by students, but few graduates; in the current model, there are more graduates, but there is less research in the career. At neither end can we speak of an adequate investigative training. Is balance possible? Below are some theoretical elements to understand the dimension of this situation.

5. Research training from critical pedagogy

The teaching task has always been traversed by a series of elements that make it complex, and even more so today, characterized by the rapid changes, the globalizing tendencies, the challenges generated by cultural, social and gender differences, etc. It requires a teacher capable of problematizing, investigating, formulating hypotheses, seeking solutions to their daily educational problems; in short, a transforming researcher and teacher is required (Freire, 2001; Schön, 1992; Carr y Kemmis, 1988). In the field of educational research in some sectors still remains the image of the intellectual as in the border of knowledge, with a super-specialized educational knowledge, but with little connection to the everyday world. At the other extreme is the figure of the teacher, the practitioner (1990), who must deal on a daily basis in the classroom with a series of problems for which he does not have the expected solution. In this vision there is a huge chasm between the researcher and the teacher. What this is about is to bet on a new teacher who conjugates in his practice dialectical unity of theory and practice (Carr and Kemmis, 1988; Carr, 2002); a teacher with a solid pedagogical training and with capacities to investigate his teaching practice in relation to the context in which he or she is; a teacher who, through the scientific method, approaches the reality and seeks its transformation because it is convinced that its action is part of a chain of interventions that seek a more harmonious and



balanced society (McLaren, 1994; Ordóñez, 2002; Ramírez, 2008). It is there that the investigative training of future teachers acquires all its meaning. This training must be based on the institutional educational principles that in the UPS' case is stated in its mission: "the challenge of our liberating educational proposal is to form social and political actors with a critical view of reality, socially responsible, with a transforming will directed preferentially to the poor" (UPS, 2009, p.22). Viewed in this way the research training, it is clear that its field of interference and interrelationships surpasses the subjects of the research area and becomes a transversal axis that must be approached by all the subjects and the curricular spaces of the career (UPS, 2016). Research then becomes the axis of articulation of theory with practice.

6. Tendencies in research training

In relation to the formative process of the investigative capacities of the students linked to the education careers, some tendencies have been noticed in the Latin American context. One of them is to locate the research training at the postgraduate levels; another option is to include within the curriculum of the major disciplines or subjects whose purpose is to provide research methodology tools (Rojas & Aguirre, 2015), this is the case of the UPS Initial Education Mention. A third way is the extracurricular work that develops in parallel, for example the experiences of research seedlings in Colombia (Quintero-Corzo, Molina, & Munévar-Quintero, 2008). Obviously there are other alternatives, but these are the most expanded ones, but all seek to strengthen research training and for this we need interventions at all three levels of the curriculum. Research training can not be reduced to just enabling students to successfully develop their degree work through research methodology courses. Rather, it is a continuous process where knowledge, skills and values of scientific activity are developed that enable the educator

to develop a new level of integral development to act in praxis and transform it (García, 2010). Degree work, in this context, becomes the privileged space to integrate these elements, since students and teachers have the time, tools and inputs for it, a situation that hardly occurs in other academic activities such as the Degree exams. Hence the importance of the major regaining this valuable space for research. It is no longer just a requirement for graduation, as many students see it, but the real possibility of bringing to the sphere of practice the body of theoretical knowledge received in the different subjects established in the curriculum. These experiences take a qualitative leap when students are linked to research projects developed by career teachers, as indeed they have already been done in some cases and with extremely encouraging results because, certainly, the best way to learn to investigate is to investigate.

7. The contents of research training

Un aspecto de suma importancia para la formación investigativa es el de los contenidos, tarea nada fácil si no se toman en cuenta criterios de gradualidad, secuenciación, pertinencia e interdisciplinariedad. Medina y Salvador definen las siguientes características para los contenidos: 1). Representan una selección hecha con criterios de racionalidad, eficiencia y funcionalidad de la cultura de una sociedad; 2). Son saberes organizados en disciplinas o asignaturas y adecuados a las características de los alumnos; 3). Su asimilación es esencial para la formación integral de los alumnos; 4). No son un fin en sí mismos, sino un paso más en la consecución de las capacidades y competencias básicas; 5). Esta asimilación implica reconstruir y reelaborar el saber y para ello se requiere ayuda específica (2009, p. 143). Estos mismos autores se refieren a los contenidos como "el conjunto de procedimientos, destrezas y habilidades que permiten a los alumnos construir el conocimiento, y, también, el sistema de actitudes,



valores y normas que regulan la vida en sociedad” (2009, p. 144). Los contenidos no sólo se refieren a los conocimientos o saberes, sino también a lo procedimental y a lo actitudinal (Díaz-Barriga & Hernández, 2010), es decir a las habilidades y valores, con los cuales se pretende alcanzar una formación que integre los saberes con el saber hacer y el saber estar. Lograr el equilibrio entre estos tres tipos de contenidos es un reto continuo para la Mención Parvularia. Por los resultados obtenidos y que han sido analizados por el autor en otros trabajos referidos a esta temática, es evidente que se ha dado mayor énfasis a los contenidos cognitivos, quedando los procedimentales y actitudinales relegados a un segundo plano. Y es este desbalance precisamente el que determina el temor que sienten los estudiantes cuando tienen que emprender un proyecto investigativo, al no sentirse seguros de sus capacidades (Esper, 2008; Carreras et al., 2009). Los contenidos cognitivos se olvidan rápida y fácilmente si no tienen la oportunidad de ser incorporados al modo de actuación cotidiano de los estudiantes. Se vuelve imprescindible, entonces, trabajar en enfoques y metodologías que impulsen también el desarrollo de habilidades y valores vinculados a la investigación.

8. Requirements of Ecuador’s initial education curriculum for investigative training

In the professional practice of the initial education teacher, the requirements of the new curriculum for the initial education of Ecuador in 2014 should be taken into account. In it, some principles of constructivism, good treatment and interculturality are considered as guidelines. As characteristics of this curriculum are the integral formation of the child, flexibility, conception of the child as a unique and unrepeatable being and the involvement of the family. All of the above may well be summarized in the “all children are bio-psycho-social and cultural beings, unique and unrepeatable and that places them as central

actors in the teaching-learning process” (Ministry of Education of Ecuador, 2014, p.16). All these elements oblige the Initial education Mention to overcome the old “instrumentalist” conception of the school teacher and instead bet on a teacher with solid pedagogical knowledge and developed investigative skills who understands the educational spectrum of children in their complex and changing environments.

9. Conclusions

The discourse of educational quality has provoked in Ecuadorian universities the search for mechanisms to substantially improve management indicators, one of them being the terminal efficiency rate, which has increased significantly in the last academic periods. Unfortunately, this laudable effort, in its desire to show verifiable figures and data, leaves out some qualitative elements that for the case of research training are of extreme importance. There is no doubt that universities are morally and legally obliged to comply with the norms regarding higher education in the countries where they are executing their academic projects, but this fulfillment must be analyzed, reasoned and located in their respective context. The ultimate aim of the university is not determined by the indicators raised by the control bodies; on the contrary, these are hardly the starting point for other major goals that the career and the university should pursue according to their institutional ideals. If this is taken into account, the indicators will be assumed in their proper dimension and will cease to become that kind of heavy burden that overwhelms the universities.

The underlying problem that lies behind the experience of the Initial Education Mention seems to be the way the career is facing the subject of the research training of its students. It is evident that the previous scheme used for the graduation process of the students did not respond satisfactorily to their formative needs and that effective solutions deserved to look for, which, at the same



time, enhanced the investigation, and allowed to finish early the professional formation of the students. But it is also clear that degree exams do not solve the problem of lack of research. These modalities correspond to the schemes of the professionalizing university or teaching university (Belletini & Ordóñez, 2013) that still proliferate in the country, but no longer have room in the new model of research university. The change of productive and cognitive matrix that arises in Ecuador becomes a good opportunity for the Initial Education Mention to reorient the research training of its students.

The investigative capacity for the teachers of initial education is not only one of the many components of the curriculum, but in the current scenario, it becomes an identity element of their profession. In this context, investigative training should be strengthened to so it can fulfill its mission, and one of the ways to achieve this is in the so-called degree works where the knowledge, skills and values of the investigative activity can be applied. There are other exercises and academic tasks in the training cycle of the students in which they can also develop these elements; but because of the curriculum model that currently operates in the major, none of them exceeds the degree work, all the more so if these works are linked to larger research projects that are developed by the research centers and directed by experienced teachers.

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