

# **Mathematics recent graduates who are no longer teachers: reflections on teaching condition and profession**

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## **Abstract**

This article presents the results of a study about Mathematics recent graduates from the Federal University of São João del-Rei, Minas Gerais, Brazil. The investigation sought to identify and analyze the difficulties experienced by these professionals while they were teachers in basic education. In the cases when they were no longer teaching, I sought to identify and analyze also the reasons why those undergraduates made such a decision. The instrument for data collection was a questionnaire with open and multiple-choice questions that was emailed to 114 teachers from the mentioned university until July of 2012. Out of the total questionnaires sent, 89 responded. There was a significant amount of undergraduates with a license to teach (53%) who were not practicing or who were not willing to practice the teaching profession. The resulting data may help understand the disturbing deficit of teachers to work in the public basic education in Brazil. Results have shown that the greatest difficulties found by the practicing teachers participating in this study are associated with students and their families, and are the consequence of lack of interest and indiscipline expressed by pupils. The major cause for abandoning the teaching profession, among those herein researched, is due to the feeling of professionally undervalued as well as to the working conditions in the schools. Based on the results, reflections are made about the challenges faced by beginning teachers about the education, profession and teaching conditions in Brazil.

## **Keywords**

Degree courses – Teaching career – Teaching conditions – Teacher education.

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# **Egressos da licenciatura em matemática abandonam o magistério: reflexões sobre profissão e condição docente**

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## **Resumo**

*Neste artigo apresentam-se os resultados de um estudo realizado com todos os egressos da licenciatura em matemática da Universidade Federal de São João del-Rei, Minas Gerais. Na investigação, buscou-se identificar e analisar as dificuldades encontradas por esses profissionais no exercício da docência na escola básica. Nos casos de abandono do magistério, buscou-se identificar e analisar também os motivos que levaram os egressos a essa decisão. Como instrumento de coleta de dados, utilizou-se um questionário, com questões abertas e fechadas, que foi enviado aos 114 professores egressos do curso até julho de 2012. Desses questionários, 89 retornaram. Verificou-se que um contingente expressivo de licenciados (53%) não está exercendo ou não pretende continuar a exercer a profissão docente. Os dados levantados podem auxiliar na compreensão do preocupante déficit de professores para atuarem na educação básica pública no Brasil. Os resultados mostraram que as maiores dificuldades encontradas na docência pelos professores pesquisados estão relacionadas aos alunos e suas famílias e são decorrentes de manifestações de desinteresse e indisciplina dos alunos. A maior causa de abandono do magistério, entre os investigados, se deve ao sentimento de desvalorização profissional e às más condições de trabalho nas escolas. Com base nos resultados, apresentam-se algumas reflexões sobre os desafios enfrentados pelos professores iniciantes, sobre a formação, a profissão e a condição docente no Brasil.*

## **Palavras-chave**

*Licenciatura – Carreira docente – Condição docente – Formação para a docência.*

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## Introduction

This article presents the results of a study of the difficulties found in the practicing of teaching and of abandoning teaching by Mathematics recent graduates from the Federal University of São João del-Rei/UFSJ, Minas Gerais, Brazil. Such study was conducted within a research program concerned with the attractiveness of the teaching career among undergraduates and recent graduates of such degree<sup>1</sup>, from 2008 through 2012.

My first step in 2009 was to outline a profile of undergraduates and obtain information about the reasons that led them to choose a degree in mathematics and about their intent to follow the teaching career upon graduation. I found that out of the 94 students enrolled at that time, only 50 had chosen the degree because they wanted to be a teacher and only 25 said they intended to work in such profession in the future. My studies showed that there already was, from the start, a high rate of teachers giving up their profession, something that tended to increase in the coming years (NOGUEIRA; SOUTO; TEIXEIRA, 2010). Aware of this situation, I investigated the practice of teaching among students who had graduated up to 2011. I identified those who were actually teaching; those who dropped the profession without having worked as a teacher; and those who gave up teaching after a few years being a teacher. At that time, I realized that 46.3 percent of the graduated investigated had not chosen to be a teacher in basic education: they had already abandoned the profession, they were willing to abandon it or they wanted to be exclusively a professor in higher education (PAIVA; SOUTO, 2013).

In my last step of the research, I focused on the difficulties faced by graduates while practitioners of basic education teaching and

the reasons they mentioned to give up the profession, if that was the case. I investigated graduates who had finished their degree until the first half of 2012. In this paper, I present the results of this last moment in the study.

For the degree in mathematics at UFSJ, I have seen that the number of applicants for the admission process has gone down every year<sup>2</sup>. The average ratio candidate/opening, which between 2002 and 2005 was 5.3, dropped to 1.9 from 2010 through 2013<sup>3</sup>. The low demand for a teaching degree may be seen in other courses provided by UFSJ and also in most universities. The deficit of elementary/high school teachers, largely due to the low number of graduates from teaching degrees, is aggravated by the scarce interest of young people in pursuing a career as a teacher, by the profession being abandoned and by the fact that undergraduates gave up being a teacher in the senior years of their degree. By investigating the degree in mathematics, I hope to provide empirical ground, even though on a local basis, that will enable to enhance my understanding of the issues associated with the difficulties faced by teachers in the beginning of their careers and the little attractiveness of the teaching career, in order to bring a contribution to the debate about the teaching condition and teacher education in Brazil.

## Methodological procedures

The study reported in this article was based on a qualitative approach. It is a case study of mathematics graduates from UFSJ. The individuals investigated were 114 graduates who obtained their degree up to July 2012. To collect data, I utilized a questionnaire with twelve questions, out of which two were open and ten were closed. The questionnaire turned to be adequate due to the number of

**2-** Up to the first half of 2013, admission to this degree occurred mainly through "vestibular", which in Brazil is a general multiple-choice exam which classifies the candidates according to their score.

**3-** Data made available by the Permanent "Vestibular" Commission (see note 3).

**1-** This research program has been financially supported by FAPEMIG, CNPq and UFSJ, in the sphere of the Scientific Initiation Scholarship Program; and by CAPES, in the sphere of the Teaching Initiation Scholarship Program.

individuals being researched and the difficulty of a direct contact with the researcher, and it was also useful to characterize and describe the individuals.

Initially, I made contact through a telephone call to all graduates in order to explain the objectives of the research and request their cooperation. Questionnaires were emailed to all 114 graduates, out of which, 89 (78 percent) were responded and emailed back.

The analysis of the closed questions enabled me to make a profile of the graduates and obtain information about their professional experience. The outcome of the analysis was disclosed in Paiva and Souto (2013).

In the study now in question, the two open questions were analyzed, as they dealt with the difficulties found by the recent graduates in their practice of teaching in basic schooling, and by those who had given up teaching, about the reasons why they had made such decision. The analysis was an attempt of successive moves to interpret the answers, through which the meaning of the texts is gradually constructed, in a process that includes comprehension and explanation. I started by reading all the answers given to the questions in one single questionnaire, sorting them out. Thus, I reached an overview of each questionnaire. Next, looking at the answers to the open questions only, we searched for possible interactions between the corresponding answers in all questionnaires. This process, guided by the investigative question, led to multiple readings of the material in search for units of meanings – words or phrases that seemed to be more revealing in the researcher's eyes. Then, I looked for relationships of convergence, , divergence and individualities among the several answers. From the movement of analysis/interpretation of data, categories of meanings emerged which, as I perceive it, translate the essence of the answers given by the teachers to the questions raised by the study.

To reach the results presented herein, my conceptions and personal experiences were

articulated with the literature I consulted about the topic, which enabled me to make inferences and draw conclusions that, as I see it, respond to the interrogations I made when I started the research. As in any qualitative analysis, the results obtained convey a great deal of subjectivity and the data, available, can yield new interpretations.

## **Analysis and discussion of results**

Out of the 89 respondents, 34 are not teaching (38 percent). Over half of the group has never served as a teacher (20 percent of the total), and 20 said they had abandoned the profession, which corresponds to 22.5 percent of the recent graduates investigated. In the set of 34 teachers, there are 14 who, although they do not say they gave up teaching, showed clues that they were not willing to practice teaching in basic education or to make it a secondary job. This group includes those who are graduate students and intend to be a college professor, those who chose to take another degree not related to the teaching field, and those who are working in other areas. Fifty-five teachers, among those who were consulted, are working as a teacher, 27 are in a public school and 13 said they did not intend to remain in the profession. The latter number may take up to 53 percent the amount of teachers in this study who do not practice teaching and up to 37 percent the rate of abandonment of teaching among the recent graduates. These figures help us understand the deficit of teacher in the public basic education and lead us to think over the waste of efforts and funds employed by the public sector in the basic education of such teachers.

Among the 89 recent graduates taking part in the study, there were 35 teachers whose teaching experience was not longer than three years (39 percent). The consulted literature about the professional life cycle is based mainly on Huberman (2000) to classify as beginning teachers those who are in this stage of the teaching career. In the case under

study, the significant percentage of teachers experiencing the early years of teaching provided, through data analysis, important elements about the teaching condition in the beginning of their careers and led us to reflect about the difficulties indicated in practicing the profession both by beginning and by experienced teachers.

The following questions were asked to the recent graduates: 1) “In your opinion, what are the greatest difficulties found in the

teaching of mathematics?”; and 2) “In case you abandoned the profession, indicate the major reasons who motivated your decision”.

The initial units of meaning found in the teachers’ answers were transcribed to the researcher’s language, as exemplified in Charts 1 and 2<sup>4</sup>. The column “frequency” indicates now many time each answer appeared in the questionnaires. Next, I separately present the analyses of each question and reflect about the results in the end.

**Chart 1** – Some answers to Question 1

Units of meaning transcribed from the questionnaires	Transcription to the researcher’s language	Frequency
Students are not interested / lack of motivation / lack of stimulus / students are not committed to study	Students are not interested	37
Low salary of teachers/ lack of financial stimuli /financial depreciation	Low salaries	33
Undervalue of teachers or education professionals, professionals are not respected / professional is undervalued / little social recognition / teachers are disrespected by public policies and the community / teaching career is not properly valued / contempt of education professionals	Professional devaluation	16
Students lack discipline / rudeness /lack of respect / lack of focus / students do not show respect nor human values / ethics	Students’ indiscipline	16
Students have great difficulty with mathematics / it is hard for students to learn mathematics / students are blocked against mathematics / aversion to mathematics / fear of mathematics	Students’ difficulties to learn mathematics	16
Families do not support and assist professionals who work at school / parents are not interested in participating in the school life of their children / weak school-family integration / students lack experience with their families / parents do not check upon their children / weak family structure	Families do not support the work done in the school	11

Source: research data

**Chart 2** – Some answers to question 2

Units of meaning transcribed from the questionnaires	Transcription into the researcher’s language	Frequency
Low salary	Low salary	14
To take a graduate course	To take a graduate course	6
To work in a different field	To work on a different field	5
Students are not interested	Students are not interested	2
Indiscipline	Students’ indiscipline	2
I did not relate to the profession	Did not relate to the profession	2
Government policy of automatic promotion	System makes teacher pass a student even though he/she does not master the curriculum	1

Source: research data

**4-** Due to the excessive initial units of meaning, I present on Charts 1 and 2 just some of them in order to exemplify the procedure utilized. On Charts 3 and 4, later on, there appear all the different units identified in the teachers’ answers.

Upon identifying and transcribing the first units of meaning, I proceeded with a reduction and I grouped units based on their common elements. In a cycle of explanations/comprehensions, I noticed convergences between

the new units of meaning and I went on with successive reductions. By the end, I reached three categories that I deem cannot be reduced. I show as follows, on Charts 3 and 4, the final groupings and the subsequent emerging categories.

**Chart 3 – Difficulties found in practicing the teaching of mathematics**

Groups of meaning	Final categories
Students are not interested; Difficulties students have to learn mathematics; Students' indiscipline.	Difficulties associated with students and their families
Low salaries; Professional devaluation; Professionals are not motivated; Bad working conditions. Lack of material resources in the schools; Lack of infrastructure in the schools; Excessive students in the classroom; Profession causes illnesses; Lack of investment; Heterogeneous classrooms; Teacher's role is distorted.	Difficulties associated with professional devaluation and bad working conditions
Insufficient class time; Lack of support to beginners in the school; Increased professional demands; Failures in the school organization and management; Schools do not support innovative teaching activities; Distance between early education at the university and the school reality; Difficulties to teach contents in the early career; Students are not motivated because curriculum is inadequate; System prioritizes approval rates rather than the quality of teaching; Authorities do not support the schools; Obligation to pass students even when they do not master the curriculum; Scarce opportunities to join the profession; Need for professional improvement; Lack of encouragement for continued training.	Difficulties associated with the school system, teacher education and public educational policies

**Chart 4 – Reasons to abandon the profession**

Groups of meaning	Final categories
Low salaries; To take a graduate course; Professional devaluation; No job stability; No expectancies of professional development; To work in a different field.	Professional devaluation and bad working conditions
Students are not interested; Students' indiscipline.	Indiscipline and students are not interested
System makes teacher pass students even when they do not master the curriculum; No relation with the profession; Teachers do not make up a strong political force.	Other

Based on the results presented above, one can realize that for the teachers participating in this study, the greatest difficulties found in the teaching of mathematics are associated with the students and their families. This appears 95 times in the questionnaires. Such difficulties are also pointed, though in a lesser scale, as reasons to give up teaching – they appear only four times in the responses. Highlighted in the teachers' answers are the persistent mention of the issue of indiscipline and lack of interest on the part of students, and they remarkably overlap the other problems mentioned. I will discuss the matter taking into account the fact that students do not take an interest in what is going on in the school because this is one of many forms of indiscipline.

Currently, there is considerable academic production discussing the impacts on everyday school life and on the teachers' work resulting from several manifestations by the students which are generally interpreted, as indiscipline (ESTRELA, 1992; DOMINGUES, 1995; AQUINO, 1996; VASCONCELLOS, 1997; SCHILLING, 2007; SILVA, 2004). In a study by UNESCO, in which teachers were asked about situations they consider to be a problem when performing their professional activities, "keeping discipline among the students" was one of the most cited – 54.8 percent (UNESCO, 2004). Increasingly, maintaining the order in the classroom and in the school as an institution, deemed a necessary condition for teaching and learning processes, is a considerable part of a teacher's work. The dissatisfaction arising from the problem of indiscipline is a major concern since it can turn out to be a cause of abandoning the career. As Estrela (1992, p. 107) points out,

[...] the time a teacher spends to maintain discipline, the fret caused by working in disrupted order, the tension caused by the defensive attitude, the loss of the sense of effectiveness, and the decreased self-esteem lead to feelings of frustration and discouragement and to the desire of giving up the profession.

Indiscipline, mainly the one expressed by the indifference of students towards the school curriculum and routines, may be associated with the recent process of educational universalization. For Fanfani (2007), there is increasingly less agreement between the contents of the school program, the teacher's knowledge and the students' desire of or interest in learning. Due to the universalization of schooling, the profile of students that go to school has changed, and educators are challenged to change this. Accordingly, Teixeira (2007, p. 438) emphasizes that:

[...] contemporary times have brought and are still bringing new facts and issues which interpellate the school and teachers, putting them under crossfire. Among other reasons, because the new social profiles, cultural registers, individual school histories and family trajectories and the behavior of children, teenagers and youths who go to school are not agreeable to the teachers. [...] a great deal of teachers see themselves forced to work and engage with human and social types that he or she did not choose, with whom he or she does not relate well to, have no empathy or sympathy towards.

Recently, I have studied the meaning assigned by teachers of basic education from public schools to students' behavior allegedly considered indiscipline and their consequences onto learning mathematics. The results clearly showed the lack of meaning for schooling as one of the possible explanations for students' indiscipline (PAIVA; SOUTO, 2010; 2011). According to Schilling (2007), in the context of indiscipline, appear the void of meaning of school due to the break of the institutional promise that used to ensure, if one accepted to play by the rules, that everyone would find a place in the sun, a job and a dignified life. This loss of purpose caused a profound questioning of the school as an institution.

The lack of meaning of schooling may be directly associated with the loss of social prestige by the teaching profession, mentioned in the responses given by recent graduates investigated as “professional devaluation”. Jesus (2004) draws attention to the fact that the school is less and less the main instance of access to knowledge and a path for social and economic ascension, which may explain the devaluation of the schooled knowledge. The increasing transformation taking place in the contemporary societies has positioned the mass media and internet as agents of socialization and education, a function traditionally exerted almost exclusively by the school. The teacher has lost social value and the school is no longer considered as the privileged instance where knowledge is passed on.

The difficulties associated with the devaluation of the profession and the bad working conditions, mentioned 73 times in the questionnaires, appeared in second place among the the major problems of working as mathematics teacher, as perceived by the participants in this study. Such difficulties are the main cause for abandoning the profession among these individuals, and they were mentioned 28 times in the answers given by those who gave up teaching. The other reasons indicated, shown in Charter 4, appear each of them only once in the answers analyzed.

The working conditions teachers have to endure have been considered in the literature the major cause of professional getting ill, leading them to some kind of drop-out syndrome. “Judging by the studies, the working conditions and the narrow professional prospects for teachers has been decisively impelling them to abandon the profession” (SILVA, 2006, p. 96).

A teacher’s work is becoming more and more complex while responsibilities are increasing. In addition to being able to handle the curriculum, a teacher is expected to adequately utilize the new technologies, to assume innovating teaching methodologies and techniques and to deal with the diversity

of students who come to school. In most cases, the fragile school infrastructure forces teacher to rely on their own efforts and resources only to manage challenging situations throughout the teaching and learning processes.

I have noticed that such difficulties, added up to the precarious teaching conditions, low salaries and restrained possibilities of social ascension, contribute for them to drop out the profession and they explain why a great number of youths and their families, and also many teachers, reject to follow this career. I believe that the economic factor is the basis for such process of decayment of the appeal to be a teacher, as Brazilian educators are now deeply impoverished: most of them have a family income that is between two and ten minimum salaries (UNESCO, 2004); the average monthly wage of teachers in basic education in Brazil was R\$ 927.00, but the median was around R\$ 720.00, making it evident that 50 percent of teachers earned less than that amount (UNESCO, 2009). The salary situation of teachers has been a great obstacle to the investments necessary for teaching towards an enhanced professionalization, such as the purchase of books and specialized magazines, access to information and communication technologies, enjoyment of cultural assets, participation in scientific events and refresher training.

Salaries are little attractive and promising horizons are missing in the teaching career and the interfere with the social images of the profession and, as a result, with the professional choices of youths towards teaching. Data produced by the National Institute of Educational Research (School Census, Higher Education Census, and National System of Basic Education Assessment) and by the Brazilian Institute of Geography and Statistics (National Survey based on Household Samples), presented in the document *Estatísticas dos professores no Brasil* (statistics of teachers in Brazil), have shown that the being a teachers has not proved to be attractive in terms of labor market and working conditions. Teaching,

among 19 professions with equivalent education requirements, gets the lowest pay and, in the international scene, Brazil is one of the countries with lowest salary paid to teachers (BRASIL, 2003). This is one of the factors that most adversely affects the interest (or lack thereof) of young people in becoming a teacher as the same document shows together with a number of research results (MOREIRA et al, 2012; GATTI et al, 2009; LEMOS, 2009; NOGUEIRA; SOUTO; TEIXEIRA, 2010). The declining salaries are directly related to the decreased dignity of a professional trade, and is a revealing and decisive aspect of decay of social value of being a teacher.

Finally, the third greatest set of difficulties faced by those who teach mathematics is associated with the school system, with teacher education and with the educational public policies. This category includes the problems affecting the organization and management of the school system and the early teacher education and continued training. As respondents see it, the school system is excessively concerned in accomplishing the programs and performs a model of assessment that has caused what is commonly known as “automatic promotion”. Such problems were mentioned 34 times in the questionnaires. Among recent graduates one can perceive a great trouble caused by the way the school system is organized, teachers recurrently mention the pressure to avoid student failure. As I interpret it, teacher when talking about these difficulties of their profession, touch the fundamental issue of the quality of education provided by the public schools. If along the last years, on the level of basic education, universalization was reached, the quality of the schooling provided is currently a major challenge. It is not enough to ensure the right to access schooled education, it is necessary to effectively guarantee the right to learn. Large-scale assessments such as *Prova Brasil* (Brazil’s Test), *Enem* (high-school national exam) and others conducted on state or local level have demonstrated that we are

far from accomplishing this objective and they have fostered the debate about the quality of education in public schools. Research data to define the National Indicator Functional Illiteracy – INAF, in 2011, reveals that a quarter of the people who pass at least one grade between the fifth and eighth grade may be classified as functional illiterates, that is, they are not capable of Reading and understanding medium-length texts, finding information, reading numbers with 7 figures, solve problems involving a simple sequence of operations and ignore proportionality. Among those who graduate from high-school, only 35 percent are considered as mastering full literacy<sup>5</sup>, and most of them (57 percent) remains in the basic level (BRASIL, 2012). INAF’s data, collected for the period ranging from 2001 till 2011, show that the increased time of permanence in school has not corresponded to any gain in terms of reading, writing, and calculating skills. One observes that:

[...] the effort spent by governments and also by the population to remain longer in the basic schooling and seek higher education does not result in the expected learning achievements. New social strata get to the higher educational stages but most likely they do not have adequate conditions to reach the higher levels of literacy, which were guaranteed when this level of schooling was for the elite. The search for a new quality of schooled education especially in the public systems should occur concomitantly with the effort to expand the span of population served so that the school will effectively ensure the right to learn. (BRASIL, 2012, p. 12).

As the teachers I investigated see it, there is a clear association between bad quality of education and the system of “automatic

<sup>5</sup>- Due to the excessive initial units of meaning, I present on Charts 1 and 2 just some of them in order to exemplify the procedure utilized. On Charts 3 and 4, later on, there appear all the different units identified in the teachers’ answers.

promotion". I believe however that the conclusion allowing to link low quality of education to the "automatic promotion" does not hold water. First, it is important to comprehend what the teachers have in mind when they talk about the obligation imposed to them of not failing the students. This discussion leads us to the issue concerning the possibility, as instituted by the Act of Grounds and Guidelines [of Education] known as *LDB* n. 9.394/96, of organizing the school system in cycles. It is important to recall that, according to that Act, the cycles are not mandatory and are merely an alternative among others that should be adopted "whenever it is recommended in the interest of the learning process" (BRASIL, 1996).

The adoption of a system based on cycles of continued progression took place first in the state of São Paulo, in 1998, through a deliberation of the State Council of Education, implemented by the State of São Paulo Education Authority (SÃO PAULO/CEE, 1997). The initiative started in the state of São Paulo was followed by other school networks from other states. In the official documents, the system of continued progression cycles sets forth a new way of school organization that establishes a new concept of evaluation: "If before a student passed/fail at the end of each grade, now it is expected that the school finds different manners of teaching that will ensure the student's learning and his/her progress within the cycles and from a cycle to the next one" (BERTAGNA, 2003, p. 79). The cycle model requires an effort to rethink the curriculum, the evaluation methods, and the monitoring of students in order to avoid difficulties and deficiencies in learning that might persist along the academic itinerary. By fulfilling the pedagogical aspect, the continued progression cycle system goes much further than a simple administrative rule that sets forth the automatic promotion, which allegedly disregards the student's learning process. The grounds for such proposal is the belief that, given the appropriate resources and conditions, everyone can learn.

However, as it usually happens in Brazil, the misinterpretation of pedagogical concepts or the implementation thereof in an unplanned fashion results that some theories are distorted when they get to the school floor, cause teachers to be unwilling about it, and yield undesirable results. One must also consider that the teachers' defensive and distrustful attitude may lead to an automatic refusal of any innovation which, according to Fanfani (2005), may be explained by the distance between the traditional way of teaching and the demands resulting from the current technological, social and political circumstances. However, in agreement with the above author, I believe that this attitude by the teachers should not always be interpreted as a simple opposition to the contents of the reforms, but rather to its context and the way of implementing them.

According to Bertagna (2008), the studies of the implementation of the continued progression system in the state of São Paulo show that there was rupture in the way school times and spaces are organized, but rather an accommodation of the grades into cycles, without discussing this type of school organization and its purpose. Although the system adopted in the state of São Paulo has been followed by other cities in other states, most schools persist in the graded system, where failure is a possibility. Data from the 2009 School Census, tabled by the movement *Todos pela Educação* (all in support of education), show that only 25 percent of the schools in the nation are organized with the use of cycles. Faced with facts such as these, the continued progression cycle system cannot be blamed for the poor performance of students and the deficiencies of the school system.

Freitas (2005) proposes the notion of "delayed exclusion" to explain the new forms of exclusion resulting from redesigning the school organization by means of cycles and continued progression. For the author, what is really happening is the creation of trails, within the system, aimed at keeping the poor students

in it but with not actual learning though. Thus, the new modes, as options to the graded system, would be perpetuating within new apparel, the historical functions of the school, namely, the exclusion and subordination of the student.

I think that the argument about the cycle systems and continued progression requires to deal with other issues that are equally complex and are beyond the scope of this article, including: the universalization of teaching and the right to learn; evaluation and the control of students; the social accountability of teachers and the pedagogical school staff; the re-organization of school times and spaces, etc. As a consequence, I will just expose here a few ideas aroused by what the teachers participating in this study declared.

Another issue arising from the data analysis concerns teacher education. Although the problems of basic and continued training and the difficulties faced by teaching when starting their careers are not explicit in the speeches of most individuals being investigated, discussing the research results takes us inevitably to those aspects.

It is remarkable that the problems mentioned by the most critical recent graduates in their work as teachers are not related to stage of their careers they find themselves in. However, as this study is about a great deal of beginning teachers, the difficulties they face in their teaching and the reasons given to give up the profession makes one think about the way the beginning teachers are integrated into this professional activity.

Studies of transition to work as a teacher have covered different aspects from the difficulties found to the relationship between theory and practice, with a highlight to how teachers develop their knowledge and how they deal with difficulties and challenges in the beginning of their careers (GUARNIERI, 1996, 2000; GAMA, 2001, 2007, VIEIRA, 2002, FIORENTINI; CASTRO, 2003; ROCHA, 2005; LIMA, 2006; ROCHA; FIORENTINI, 2009; PERIN, 2009; GABARDO; HOBOLD, 2011). During this period, young teachers must acquire knowledge

that can only be obtained through practice. Because they are supposed to teach, they are also required to learn how to teach so from students they become teachers. "It is a time of tensions and intensive learning, in contexts generally unknown", and the first year is therefore for "survival, discovery, adjustment, learning, and transition" (MARCELO, 2009, p. 127).

Huberman (2000) speaks of the feeling of survival, also known as "confronting reality" (VEENMAN apud ROCHA; FIORENTINI, 2009), which takes place when the beginning teacher comes across new and complex situations, facing difficulties in handling the students, the principal and the parents, or difficulties in conveying knowledge. The term "confronting reality" has been utilized to express the distance between the theory learned in the basic training and the practices implemented within the school culture. Such difficulties were experienced by the teachers participating in this study, and were deemed as a challenge to remain in the career. Gama (2007) reveals some difficulties especially faced by Brazilian beginners, such as: difficulty to manage and rule the class, feelings of loneliness and isolation, getting the "most troubled classrooms, the most complicated class hours and in schools far away or marked by school violence" (GAMA, 2007, p. 153) which, according to the author, potentiate even more the confront with reality. Considering the early stage of teaching as strategic for the adherence to the profession and for professional development of teachers, Gama emphasizes the need for public policies aimed at "teacher training, integration and/or socialization, in order to minimize the hostile climate when welcoming these beginners" and to foster studies that "point out and/or systematize options of support so that the transition to teaching will be less traumatic" (GAMA, 2009, p. 120).

Rocha and Fiorentini (2009) stress the importance of reflecting about, investigating and cooperating to tackle the problems and challenges of teaching practice in schools, and the authors come up with two suggestions that

seem to be promising: rethink basic training in a perspective of continued training in a context of collaborative and investigative practices jointly developed with experienced teachers; appreciate ongoing training programs to provide personal and institutional support to beginners facing their dilemmas and difficulties.

It was noticeable among the researched teachers a dissatisfaction with the knowledge and skills they had acquired in basic training, which has been leaving much to be desired, mainly concerning the articulation of theory and practice. The National Curriculum Guidelines for the Basic Training of Elementary/High-school Teachers (BRASIL, 2001) moves forward in this direction by setting forth a higher number of hours supervised internship and the practice of teaching, whereas these are instances where theory and practice are articulated within basic training. In addition, the mentioned National Guidelines have defined that the practice of teaching must take place since the beginning of the training among the other disciplines. However, Gama (2009) finds that, despite the actions to adapt the universities to the new National Guidelines, the most recent studies seem to indicate a persistence of the distance between theory and practice. Fiorentini and Castro advocate the need to set a dialectical unity between theory and practice in basic training programs. For these authors, “although they occur at the same time, theory and practice may as merely juxtaposed, no effective dialectical relationship being established between them” (FIORENTINI; CASTRO, 2003, p. 153). Particularly at the Federal University of São João Del-Rei, prevailing are the practices that enhance the dichotomies in the relation between theory and practice. Leão (2011), in her analysis of the influence of the recommendations set forth in the National Guidelines onto the pedagogical syllabus of teacher education degrees at UFSJ, finds that the practice of teaching, most of the times, is an isolated activity that is not linked to other elements of the syllabus. The same

author concludes that, in the teacher training degrees, the supervised internship is not taken as a moment to share experiences but rather an instance that “lacks prestige partly because it is an activity strictly related to “what teachers do” in a structure where the focus is a training based on the reference contents” (LEÃO, 2011, p. 128). Rocha and Fiorentitni, in a research on the perceptions and reflections of mathematics teachers in their early career about their academic training and professional development, say that these teachers “have questioned the fact that mathematical knowledge favored by degree courses do not meet the conceptual needs of teaching in basic education” (FIORENTINI; CASTRO, 2009, p. 131). It is therefore necessary to discuss, in the sphere of basic training, the school practices as to re-signify the relations between the university and the school, theory and practice, as well as the pedagogical and the specific contents.

### **Closing remarks**

Results very similar to those I have obtained were found in a study by Lemos (2009) of a group of teachers who had given up teaching in the state education network of São Paulo. Both in my study and in hers, the major problems listed by the teacher in doing their job, which are also the main causes of abandoning the profession, were professional devaluation, indiscipline, the students’ lack of interest, and the continued progression system.

Although the findings about the difficulties to be a teacher and the reasons to give up the career among recent graduates I have talked to cannot be generalized, it is remarkable that the situation shown by my study is also present in other contexts. In an important work by Fanfani (2005), previously mentioned in this paper, through which the author provides empirical ground to discuss the teaching condition in Latin American countries (Brazil, Peru, Argentina, and Uruguay), one can realize that the situations seen as problematic

by teachers from these four countries are not very different from those described here. Such situations were classified as: strictly related to the trade of teaching; “relational” (toward parents, students, co-workers, principals, etc.); associated with working conditions and context. The author emphasizes that the most frequent problematic situations involve this latter set of situations.

There is international concern in turning teaching into an attractive profession and in keeping the best teachers in the classroom, as demonstrated in OCDE (2005). Such concern comes from acknowledging the key role played by the teacher in the knowledge society. In contrast, over the last years one can see, not only in Brazil and not only in the less developed countries, the deterioration of the teachers’ working conditions and the unequivocal devaluation resulting from low salaries, if compared to other occupational categories with the same level of academic training, with undeniable impacts onto the quality of educations provided by the schools.

One of the contributions offered by that work, I believe, lies in providing empirical grounds to serve as an aid to think over the links between teacher condition and teacher education. The way the teachers studied criticize the bad working conditions and the devaluation of their profession as being the

major cause to give up teaching demonstrates, in my view, that this issue, although frequently mentioned, has not yet been sufficiently dealt with and is far from being resolved.

I believe I have touched in this article the most striking issues associated with the teaching condition and profession. The considerations resulting from my research reported here reinforce my conviction that that redeeming the social worth of the teacher has to do with the challenging issues of teacher education and career. I also felt that, based on this study, we need to think about programs that would monitor teachers in their early years in the profession. Such systematic monitoring, as part of a policy to improve the quality of education and the appreciation of teaching as a job, might be a possible path to overcome the scarce attractiveness of the teaching career in Brazil. I believe, however, that any initiative to appreciate teachers should include which, in the medium run, would rise their salaries to the same level of other occupations requiring the same level of training or which have the same strategic importance for the economic and social development of the country. This is obviously a political matter that certainly demands to increase investments in education and grant funds substantially higher than those historically made in Brazil.

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*Received on December 28, 2014.*

*Approved on September 03, 2015.*

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