


The perception of pedagogical practice by PARFOR's mathematical discovery

A percepção da prática pedagógica pelo discente de matemática do PARFOR

Percepción de la práctica pedagógica por el discípulo de matemática del PARFOR

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Abstract: It is a research done in one of the States of the Amazon Region from 2010 to 2013 during the period of teacher training in Mathematics Degree where Parfor was implemented and fundamentally aimed to understand the perception of the subjects in relation to the pedagogical practice, based on their experiences and experiences as students of the said Program. It was concluded that, in relation to the elements of the pedagogical practice identified by the research, the student teachers demonstrated a certain level of criticism, while trying to recognize in their experience as students, realities that correlated with the context where their professional practice is developed in basic education.

Keywords: Teacher Training Program. Perception of Pedagogical Practice. Profile of Student Teacher.

Resumo: Esta pesquisa foi feita no Pará, estado da Região Amazônica, de 2010 a 2013, durante o período de realização da formação de professores em Licenciatura em Matemática no âmbito do Programa de Formação de Professores da Educação Básica (Parfor). O objetivo é compreender a percepção dos sujeitos em relação à prática pedagógica a partir de suas experiências e vivências como estudantes do Programa. Concluiu-se que, em relação aos elementos da prática pedagógica, os professores-estudantes demonstraram certo nível de criticidade, ao mesmo tempo em que procuravam reconhecer em sua experiência como discentes as realidades que apresentavam correlação com o contexto no qual sua prática profissional é desenvolvida na educação básica.

Palavras-chave: Programa de Formação de Professor. Percepção da Prática Pedagógica. Perfil do Professor-Estudante.

Resumen: Esta investigación fue realizada en Pará, estado de la región Amazónica, de 2010 a 2013 durante el período de formación del profesor en Licenciatura en Matemática donde se implantó el Parfor y se objetivó, fundamentalmente, comprender la percepción de los sujetos, práctica pedagógica, a partir de sus experiencias y vivencias como estudiantes del mencionado Programa. Se concluyó que, en relación a los elementos de la práctica pedagógica, identificados por la investigación, los profesores-estudiantes demostraron cierto nivel de criticidad, al mismo tiempo que buscaban reconocer, en su experiencia como discentes, realidades que presentaban correlación con el contexto donde su la práctica profesional se desarrolla en la educación básica.

Palabras clave: Programa de Formación de Profesor. Percepción de la práctica pedagógica. Perfil del Profesor-Estudante.

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Introduction

The present research was focused at Pará, one of the States of the Amazon region, where it was implemented the Continuous Formation Program for the service to the expressive demand of initial formation. The temporal cut is made of from 2010 to 2013, corresponding to the period of duration of the formation of professors of Mathematics License under the program. From an academic stand point, the significance of this time frame resides in allowing the students to comprehend the development of this formation policy in Amazon's scenario, since it is configured as the unique opportunity of effectiveness of the right to education for these workers. It is emphasized that the data collected and presented in this essay does not have as a goal to characterize reality itself, but to present a sample that allows analysis and reflection about the teacher training as a human right and its repercussion in the pedagogical field.

Therefore, the chosen target audience of student-professors enrolled at the aforementioned Course, during the first semester of 2010, in one of the formation poles of the Federal University of Pará¹. At the Poles, researchers had the opportunity of being a part of this organizational dynamic for a longer period, being able to perform as teacher-trainers, which prompted them to undertake the present investigation.

In this perspective, they adopted a practical-reflexive approach that was closer to the proposal formulated by Maroy (2009), which allows the teacher to adapt to teaching situations, by analyzing their practices and results. Thus, when questioning their own pedagogical conceptions and practices, they were motivated to involve the students of the Training Program in their critical-reflexive behavior, allowing the expansion of their horizon of analysis on the investigated reality, considering mainly the fact that they were before a class of teacher-students in whose the formation of teaching activity would have important repercussions.

For this, it was established as a problem question the following: how do the teachers-students of mathematics evaluate the pedagogical practice of the Training Program? In this way, the objective was fundamentally to comprehend the perception of the subjects in relation to the pedagogical practice from their experiences and experiences as students of the Basic Education Teacher Training Program (Parfor).

In order to reveal the investigated phenomena, based on the research object, a qualitative research was undertaken and the data collection was done through: a) the application of semi-structured interviews with three teacher-students of the mentioned course; and b) with questionnaires involving all subjects enrolled and regularly attending the Program, since its implementation at the Pole.

The treatment of qualitative data was done through the analysis of content, starting from the premise that “behind the seemingly symbolic and polysemic discourse it is concealed a meaning that should be unveiled” (BARDIN, 1977, p. 14). In this sense, we sought to understand the aspects underlying the discourses in the interviews with the

interlocutors and by the application of the questionnaires. Under such circumstances, the subjects were able to express their main impressions about pedagogical practice, starting with the experience lived in the Parfor context, through their insertion as teacher-students.

Suppressing the lack of teachers in the country and Pará's emergency program

Created by the Ministry of Education, Parfor defines itself as an emergency program of on-site modality, instituted to cater to article 11, subsection three, from Decree no. 6.755, of January 29, 2009 (BRASIL, 2009).

The implementation of this Program has been carried out in collaboration between Coordination for the Improvement of Higher Education Personnel (Capes), states, municipalities, the Federal District and Higher Education Institutions (IES), with the definition of the responsibilities of each of the federated entities and institutions/agencies involved. This initiative is aimed at offering undergraduate and pedagogical training courses. In general terms, it states that its main challenge is: “To induce and foster initial and continued teacher training, with a view to enhancing the teaching career and seeking the quality of education in Brazil [...]” (BRASIL, 2012, p. 208).

The operation of the Courses offered by Parfor takes place through the disclosure of a specific calendar, which includes its main activities. It is, therefore, an interinstitutional organization, involving the various federated entities.

To compete for annually offered vacancies, teacher-students must meet the following basic requirements: a) registration and previous enrollment in the Freire Platform; b) enrollment at Educacenso as a Teacher or Translator Interpreter of ASL in the public basic education network; and c) previous registration validated by the Education Department or equivalent body to which they are linked.

Results indicate that the value added to teacher training by Parfor is considered significant, since the number of students attended until 2016 is significant, with 36,871 teachers attending undergraduate courses and 34,549 graduates, according to data provided by the National Institute of Studies and Research Educational Institutions Anísio Teixeira (INEP). In spite of this, the available databases do not show the deficit presented at the beginning of the Program and continue to persist today, even with the expansion of educational networks throughout the country and especially in Amazonian territories.

The peculiarities of Parfor at Amazon: the licensee mathematics course at the state of Pará

The precarious formation of teachers is a common problem in all the federal units, presenting itself as chronic one when we analyze the Brazilian education policy, because it constitutes in a persistent and historical situation. Before this context, the reality is even more

challenging in the Amazon region, mainly at the State of Pará – in 2011, for example, when the national average of teacher with tertiary education was of 68.9%. this average in Pará was only of 46%, according to data from INEP.

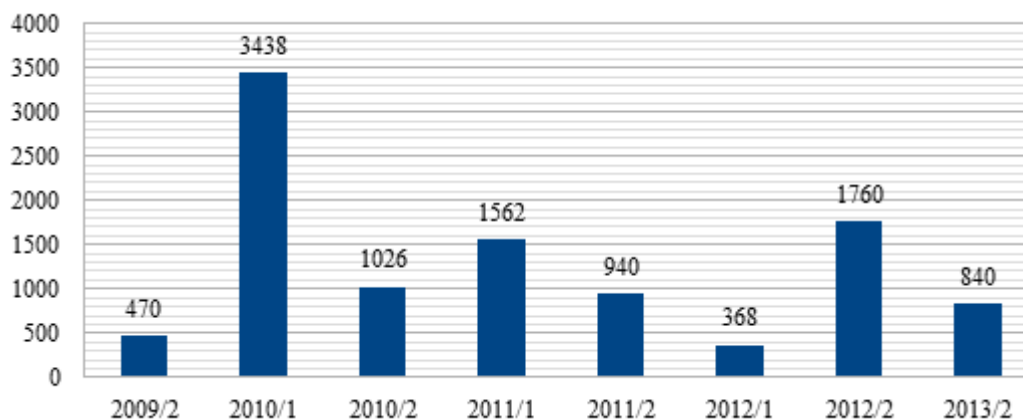
Thus, according to the Ten Year Teacher Training Plan of the State of Pará, there were more than 60,000 teachers without adequate qualification, “and of these, almost 40,000 do not have a university degree, while only 12,300 have a degree appropriate to their function” (PARÁ, 2009).

In 2009, the evaluation carried out by the State Forum for Training of Teachers of Basic Education of Pará (Forprof) about this situation concluded that the precarious training of teachers would have interfered directly in the Basic Education Development Index (IDEB), which motivated the provision of undergraduate courses in different areas of the curriculum as mean to improve teachers’ qualifications.

In this context, it is worth mentioning the expressive demand of professors licensed in Mathematics, an area considered strategic to leverage IDEB results, especially in the Public Education Network of Pará, where indicators are still considered insignificant – explained, for example, due to high rates of dropout and failure in basic education. However, the implementation of Parfor groups in Pará did not directly consider this factor, especially when analyzing specifically the performance of municipalities, since other variables were interposed in this process of defining the headquarters or poles where the classes would be, which are: adequate infrastructure for the functioning of the classes, which is the result of agreements signed with the municipalities; adherence to the Program, through the prior registration of teacher-students, among others (PARÁ, 2009).

Thus, when considering the number of classes attended and the total number of students in training, the data shows that, from 2009 to the first half of 2010, there was a significant increase in different areas of knowledge, representing an increase of approximately 750%. However, the growth curve began to decline as of the second half of 2010, due to the meeting of the demand informed in the Platform by the state of Pará, thus maintaining an average of around 1300 students per semester.

Grafic 1. Evolution of enrollments in PARFOR/UFPA in stages from 2009 to 2013



Source: Parfor UFPA/2013.

In the given context, the main purpose of the present research is to demonstrate more directly the actual attendance in relation to the Degree in Mathematics, according to Table 1, given that the proposal of this essay considered the teacher-students of one of the Parfor groups, from the Degree in Mathematics, offered by the Federal University of Pará (UFPA), from the second year of implementation of the Program - therefore, the first semester of 2010.

Regarding the offer of the Mathematics Degree in the entire state of Pará the following numbers can be verified (Table 1) – which does not mean that there was an overcoming of teacher shortage in this area, since they represent around 13%, considering the average attendance of the last four analyzed years, as shown previously.

Table 1. Comparative Parfor Service in the State of Pará from 2009 to 2012

Year	Other Courses		Math	
	No of Classes	No of Students	No of Classes	No of Students
2009	14	470	03	103
2010	125	4.464	24	888
2011	68	2.501	04	112
2012	26	840	06	223
Total	287	10.403	37	1326

Source: Elaborate by the authors.

Although there are numbers that show Parfor's performance in Pará, during this four-year period, there are remaining questionings about the quality of the training processes developed with the teacher-students who attended the classes demonstrated through Table 1.

It is understood, therefore, that said Program performs a compensatory policy of formation, meant to repair a historical debt of the Brazilian Educational System in relation to the formation of teachers who would already have to be properly qualified to carry out their roles in basic education.

Regarding Parfor's results, it must be understood that it takes place in a socioeconomic context based on neoliberal policies, of which the fundamental focus is efficient result production, to make basic education more competitive and closer to international standardsⁱⁱ considered minimum for the country's economic development. The goal, therefore, would be to invest in teacher training to correct the problem of school influx, which places Brazil among the worst nations in the world, with unsatisfactory results in terms of educational investments.

No matter how necessary and urgent this formation perspective might be, the above figures show that such formation is not enough to solve the aggravation of social problems; it is evidenced as such by the precarious conditions of the Brazilian Educational System and the contexts in which the student teachers are inserted. It is argued that the training programs

would need to be accompanied by other social policies, which would allow the teacher-student more suitable conditions of continuity to the initial training offered by Parfor.

The data analyzed in the following section show the conditions in which student-professors gather to perform their everyday role at schools that are situated in economically disadvantaged regions of Pará in political and social terms. Their pedagogical practice is developed in this context and reflects the contradictions that characterize the model of capitalist production, characterized by Peroni and Caetano (2015) by the precariousness of teaching, lack of stability and career plan, besides receiving scholarship instead of a salary.

Between the speech and practice of student-teachers: what the data revealed

The Profile of Student-Teachers

The research focused on the universe of 34 teacher-students enrolled in the Mathematics Parfor offered by one of the Poles of the Federal University of Pará covering the same period of the respective course: 2010-2013.

The data revealed that 76.47% of the respondents reported being male and 23.52% reported being female. This fact leads us to understand that in addition to the male presence being larger it still persists in the ideological discourse that “women still do not have affinity with numbers” (Interviewee 2), according to one of the interviewees. The “masculinization”ⁱⁱⁱ of the courses related to this field can also mean the hegemony of a sexist discourse, linked to the supposed superiority of gender – which is a misunderstanding, since the achievements of women in all areas prove the exact opposite of what has been proclaimed by this ideology that has its origins in the principles of patriarchal society (MOORE JUNIOR, 1957).

The data collected through the questionnaires regarding the age group show the occurrence of: 52.94% were 20 to 30 years old; and 41.17% were between 31 and 40 years old. Thus, the research findings confirm that the majority of this public is already outside the desirable age range to attend higher education, something configured for reasons that constitute a social and educational problem, such as the shortage of places in public institutions of higher education, which can be proven by the statement of one of the interviewees:

Lack of opportunity to enter higher education and marital commitments in early youth made the dream of conquering college education to be postponed (INTERVIEWEE 1).

When attempting to understand the behavior of the interviewees in relation to the marital situation, it was found that 41.17% reported being married, while 47.05% were single. Even though it was not planned to analyze this, the scope was also intended to learn salient features of the teacher-students' profile and it showed an apparent balance between unmarried and married individuals. However, when related to the previous statement of this research's

interlocutor this variable can be considered as supportive of the understanding that an expressive number of individuals pursued marital commitment before acquiring a college degree.

In relation to the education level of teacher-students, the number of years in which the interviewees were away from the classroom (since high school) was also raised. Thus, it was verified that a significant contingent was within the range of 10 to 20 years, representing 70.58% of respondents. However, a no less significant percentage of 23.52% showed that it would only have been able to complete the segment mentioned above for less than 5 years, because they sought to enter the market even earlier, according to one of the respondents that stated the following: “As soon as I finished middle school, I had no other choice, I started working so I could help with the family bills [...]” (INTERVIEWEE 2).

Another aspect of the research concerns the type of training that teacher-students would have access to before choosing the Parfor/Mathematics course, with the majority stating that they attended the teaching course – normal modality (88.23%), which diverges from a more conventional profile of course students of extensive mathematics. This may mean that teaching in this area would have occurred to meet a demand considered to be an emergency in the communities where the interviewees developed their activities, since the teaching course is usually attended by a female audience that traditionally pursues courses in the area of Human Sciences (BRUSCHINI, 1978; VIANNA, 2002).

In fact, when the research evidenced the “masculinization” of the course, it corroborated the understanding that the presented modality became an area mostly occupied by men, contrary to the historical trend verified until then, a fact that became intriguing in the context of the research^{iv}.

Regarding offspring, the collected data showed that a considerable number of teacher-students reported having only 2 children, which represents 41.17% of the universe surveyed, while the other groups ranged from 3 to more than 3. This data proves that the younger generations reduced the number of children, which can be explained by the socioeconomic conditions of Brazilian society, with its impact on the behavior of populations in the Amazon region.

This aspect can be complemented in analytical terms with the income factor – since the majority (76.47%) of reported incomes that reach a maximum of 3 minimum wages, meaning that the target audience of the research is considered of low income. It is worth mentioning that one of the factors that came to be considered significant in this context concerns the fact that some interviewees inform that they need to conciliate teaching with activities related to the informal market:

I often need to seek to supplement my income by selling products that are of greater interest to women. I cannot depend on the salary I receive from City Hall (INTERVIEWEE 3).

The research also sought to understand if the interviewees are from the state of Pará. The data revealed that an expressive contingent comes from other states that border Pará territory. When questioned about the place of birth, most of the interviewees reported that

their parents migrated to this region of the country looking for better conditions of survival with the arrival of Amazon's great development projects^v. In this context, Interviewee 4's speech can be considered revealing: "I remember that when I was very young I and my brothers needed to accompany our parents while they looked for work, because the place where they lived no longer offered adequate conditions".

In terms of political militancy in the field of teaching, a significant number of interviewees pointed out that they had no interest in the issues surrounding their profession. Thus, they did not participate in any union representing interests of their category (52.94%); while almost half of respondents indicated the opposite (47.05%). This aspect of apparent balance in numbers suggests, on the one hand, that political abstinence can also be explained by the fragility of those entities that still cannot reach a more adequate level of mobilization of the category. On the other hand, the number of union membership can be an important indication that this class consciousness is in the process of ascension due to the budding awareness of teacher-students of the working conditions of the category that interfere in their pedagogical practice. In this sense, the following statements are now illustrative of such situations:

I'm not interested in politics. I loathe it. I heard that the Union works on a lot of these issues but get nothing out of them since the government does whatever it wants (INTERVIEWEE 2).

We can only overcome the difficulties that we have been facing by organizing our category. That is why I am very interested in the themes that the Union presents to us, especially when it comes to the salary campaign (INTERVIEWEE 1).

When it was questioned if they were affiliated to any political parties most of the respondents stated they did not have ties (64.70%) to any party. Although the numbers are not yet so expressive, a percentage considered representative had already sought this adhesion (35.29%), indicating that this tendency begins to grow with the class of teacher-students. This data also corroborates the previous findings of the research, when it was verified the inexpressiveness of the subjects' adherence to "political" questions that can have repercussions in their pedagogical practice.

The perception of teacher-students relating pedagogical practices

The pedagogical practice of teacher-students from their experience with Parfor/Mathematics is one of the main research dimensions of the present research, considering that the official conception of curriculum of teacher training courses is being considered:

[...] as a set of values conducive to the production and socialization of meanings in the social space and that contributes to the construction of the socio-cultural identity of the learner, the rights and duties of the citizen, of respect for the common good and democracy, formal and non-formal educational practices and the orientation of the work (BRASIL, 2015).

In fact, pedagogical practice constitutes as the form of materialization of the curricular proposal of the teaching institution, through which teaching is conceived as an intentional and methodical educational action. In this sense, it is argued that the concrete reality of the subjects gives life to the curriculum and the institutions of education, understood in its multiple aspects and in which the pedagogical processes are developed.

For this, it was assumed that through the repertoires of knowledge derived from their experiences and experiences, including in the field of teaching, teacher-students can contribute to the re-signification of the curricular practices carried out in these spaces of formation, since they present problems and singularities that need to be considered and faced through a reflexive praxis in which the subjects involved become protagonists.

In order to do so, some axes were established to allow reflection, characterizing and analyzing the reflexes of this training perspective for the teaching practice of the teacher-students who graduated from these courses, namely: which methodologies were used; infrastructure and teaching-learning conditions offered by Parfor; and the adopted evaluation system.

The perception of these teacher-students can also become possibilities of intervention in their reality when they return to the classroom as teachers, because they have undergone an initial formation process with adequate characteristics, resulting in the accomplishment of a curricular training policy that presents contradictions when it is proposed to reflect on pedagogical practice.

On the one hand, Parfor offers possibilities for a differentiated professional performance through the acquisition of new knowledge and practices – aspects that can be understood as decisive for the constitution of another teaching area, as a dynamic and unfinished process. On the other hand, it may reinforce the idea of insufficient training to give quality to the teaching work, since Parfor/Mathematics is a Program with a training model that can be considered “lightened” and thus unable to offer the deepening of knowledge and necessary practices that can be reflected in the work developed with students of basic education; an aspect that could contribute to the elevation of the quality of the teaching-learning process.

In this perspective, when the teacher-students were questioned about the methodologies used by the Program, the subjects presented divergent positions; 30% of the interviewees considered the strategies used by the teachers contribute to the construction of new knowledge due to the articulation theory and practice. However, a significant contingent (70%) showed that the forms of intervention used during the course do not directly contribute to the acquisition of new knowledge and practices, justifying that the classes are taught with focus on the contents, thus not offering the possibility of deepening in themes that are considered relevant to their training.

The data reveals that this phenomenon was configured this way because of the conditions in which the teachers’ work was developed during the course; however, other variables would need to be considered, which was not an object of the present research. Indeed, the apparent divergence shown by the numbers can be explained by subjective

factors, although it is possible to understand that the percentage of approximately 70% - which is symptomatic in this context—indicating the inadequacy of the methodologies used in the teaching-learning process, at the same time, it ceases to contribute to the formation of a teacher who is able to reflect on his practice in order to feel responsible for the “history of the construction of the intellectual field of education and the profession”, as stated by Arroyo (2000, p. 199).

It is argued that the infrastructure and teaching-learning conditions offered by the Program, which are more specific objects of analysis, are directly linked to the methodologies constituting the determining factors for the success and failure of the teaching strategies adopted. However, the research also sought to identify the perception of the subjects in relation to these aspects in order to understand their critical reading on the management of school space and its reflections on the pedagogical practice of Parfor/Mathematics teachers.

The interviewed teachers presented arguments that showcase the level of criticism about the conditions offered by Parfor, highlighting problems related to logistic and infrastructure. Pointing out that by functioning in the Pole's municipal public schools, classes did not offer effective possibilities of learning due to the physical-environmental conditions. They argued that:

The climatic conditions of the classes interfere with our learning. There are times when I cannot concentrate, especially when the lecture is too monotonous or has too many calculations (INTERVIEWEE 3).

It is very difficult for me to attend classes in these rooms. Sometimes I feel the same way my elementary school students must do. I face the same “difficulty” [sic] to accompany the work of teachers (INTERVIEWEE 1).

The organization of the work here in the Pole is sometimes left to be desired because not all of the information that interests us arrive. With this, we are often obliged to try to solve problems related to the functioning of the classes (INTERVIEWEE 2).

The aspects identified in the subjects' reports may mean, on the one hand, that a Training Program needs to take care of a set of defining dimensions of the pedagogical practice so that it is successful, necessarily going through logistics and infrastructure.

On the other hand, it can also demonstrate problems in relation to management, showing that the collaboration regime between federated entities requires a more in-depth dialogue in an interinstitutional perspective in order to guarantee the implementation of this public policy. In that way, the articulation and partnerships were reflected in the quality of service provided by the subjects contemplated by Parfor actions.

Regarding the evaluation system adopted, the student teachers presented aspects that range from the relationship with the objectives of the subjects taught in the course to the relationship with the management of the Program at the local level. This broad perspective can mean that the subjects surpass a level of evaluation that is restricted to the attribution of a note and/or concept. It is important to note that some of the interviewees were thus positioned:

I understand that assessment in Parfor/Mathematics is very important for pedagogical practice because through it we can see how things are going around here. That it is possible for people to analyze the work of teachers and also of those who participate in Program activities (INTERVIEWEE 2).

Others, however, understand the evaluation system as a mere tool for gauging the knowledge acquired in the classroom, albeit inaccurate. In this regard, one of the interviewees argued in the following terms: “The evaluation here only serves to evaluate us, although the behavior of teachers varies greatly” (INTERVIEWEE 1).

The aspects pointed out in this section serve as a parameter that one can reflect about the pedagogical practice that articulates methodological aspects to infrastructure conditions. They therefore comprise constitutive and constituent elements of the school curriculum, which is designed in a broad and dynamic perspective, which informs a certain perspective of educational management.

Final comments

This research sought to demonstrate how mathematics teacher-students evaluate pedagogical practice in the context of the Basic Education Teacher Training Program. The investigated subjects identified the problems, challenges and possibilities that allow us to rethink and even re-signify initial training policies in the Amazonian settings due to their peculiarities and diversities.

Therefore, the perception of the subjects in relation to the pedagogical practice fundamentally reflects, their experiences as students of Parfor. It is a perspective of understanding and social representation *sui generis* of the teaching-learning relationship in the context of Parfor. This reading of the pedagogical practice is introduced when teachers return to the classroom as students, who are no longer exclusively recognized as “specialists of learning” (MAROY, 2009), to develop the notion that they have become learners of the act of teaching – an aspect that they came to admit as necessary, even in the possibility of valuing and re-signification of their professional identity.

It is understood, therefore, that the experiences that grounded the reflexive posture are impregnated by the sense that the teachers-students informed about the historical-cultural context in which the pedagogical practices were developed. In fact, the profile outlined by the research demonstrated important peculiarities that characterize the subjects who were in the students’ condition – although they recognized themselves at the same time as teachers since they developed their professionalization in their communities of origin. Being one of the paradoxes of teaching, this aspect needs to be considered in the initial training programs, which is understood as a community dilemma.

Finally, in relation to the elements of pedagogical practice identified by the research, the student-teachers demonstrated a certain level of criticism while trying to recognize in their experience as students how the realities presented correlation with the context of development of their professional practice in basic education, emphasizing the problems of

the daily constituents of their pedagogical doing among them.

References

ARROYO, Miguel. **Ofício de mestre: imagens e auto-imagens**. Petrópolis: Vozes, 2000.

BARDIN, Laurence. **Análise de conteúdo**. Lisboa: Edições 70, 1977.

BRASIL. Resolução n.º 2, de 1º de julho de 2015. **Ministério da Educação**, [on-line], 2015. Disponível em: <https://goo.gl/GgjT2B>. Acesso em: 02 fev. 2018.

BRASIL. Decreto n.º 6.755, de 29 de janeiro de 2009: Institui a Política Nacional de Formação de Profissionais do Magistério da Educação Básica. **Capes**, [on-line], 2009. Disponível em: <https://goo.gl/m5VmF2>. Acesso em: 09 set. 2017.

BRASIL. **Diretoria de Formação de Professores da Educação Básica - DEB**: relatório de gestão 2009-2012. Brasília: DEB/Capes, 2012. Disponível em: <https://goo.gl/MpRP9z>. Acesso em: 08 ago. 2017.

BRUSCHINI, Cristina. Mulher e trabalho: engenheiras, enfermeiras e professoras. **Cadernos de Pesquisa**, São Paulo, v. 27, p. 5-17, dez. 1978.

MARROY, Christian. Réforme de l'inspection et montée de la régulation par les résultats en Belgique. Incidences des institutions, des intérêts et des idées. *In*: PELLETIER, Guy (dir.). **La gouvernance en éducation Régulation encadrement dans les politiques éducatives**. Bruxelles: DeBoeck, 2009. p. 53-71.

MOORE JUNIOR, Barrington. **As origens sociais da Ditadura e da Democracia**. Lisboa: Edições Cosmos, 1957.

PARÁ. **Plano Decenal de Formação Docente do Estado do Pará**. Belém: SEDUC, 2009. Disponível em: <https://goo.gl/tD4jWv>. Acesso em: 28 ago. 2017.

PERONI, Vera Maria Vidal; CAETANO, Maria Raquel. O público e o privado na educação - Projetos em disputa? **Revista Retratos da Escola**, Brasília, v. 9, n. 17, p. 337-352, jul./dez. 2015.

VIANNA, Cláudia Pereira. O sexo e o gênero da docência. **Cadernos Pagu**, Campinas, n. 17-18, p. 81-103, 2002.

Notes

ⁱ Goianésia do Pará, is a municipality located in the southwest of Pará, 292 kilometers from Belém, where one of the Poles of the Federal University of Pará was set up for the operation of PARFOR classes since 2009.

ⁱⁱ The Programme for International Student Assessment (PISA) – International Student Assessment Program - which set benchmarks for developing countries.

ⁱⁱⁱ Masculinization is used by the researcher to demonstrate that the male presence is still dominant in relation to the course studied.

^{iv} It should be noted that the collection of data from the School Census of Basic Education, made in 2007, made it possible to know in detail the universe of Basic Education teachers in Brazil, consisting of 1,882,961 professionals, consisting of 340,036 males and 1,542,925 females, which represents a little more than 80% of the total observed. In the State of Pará, 65,028 are recorded, of which 16,679 are male and 48,349 are female, thus demonstrating that the number of women corresponds to approximately 75%, an aspect that corroborates the understanding of female dominance in the field of Basic Education teaching of all knowledge areas.

^v The State of Pará, located in the Amazon region, became known for its energy and mineral potential, which aroused the greed of international capital, contributing to the installation of large economic projects destined to the production of inputs for industries located in other regions of the country.

