



Teacher training and mathematical pedagogical practices in Sobral Youth and Adult Education

Formação de professores e práticas pedagógicas matemáticas na EJA de Sobral

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Abstract

Teaching and learning in Mathematics has still been a challenge for EJA teachers and students. This article aims to discuss the influences that studies of teacher training moments have on the construction of the pedagogical practices of two teachers who teach Mathematics at EJA in the rural area of Sobral. Semi-structured interviews were used as instruments for preparing data, which were analyzed in the light of Discursive Textual Analysis. The results indicate that during teacher training, they propose a standardization of teachers' pedagogical practices, in the sense that they are focused on school content. However, the teachers say they implement teaching strategies considering the students' realities and that, to a certain extent, distance themselves from the proposed standardization. It is therefore concluded that there are tensions between the meanings of pedagogical practices proposed to teachers and those constructed by them in the classroom.

Keywords: Youth and adult education; Mathematics teaching; Pedagogical practice; Teacher training.

Resumo

O ensino e a aprendizagem em Matemática ainda têm sido um desafio para os professores e estudantes da EJA. Neste artigo objetiva-se discutir as influências que os estudos dos momentos de Formação de professores exercem sobre a construção das práticas pedagógicas de duas professoras que lecionam Matemática na EJA da zona rural de Sobral. Utilizou-se entrevistas semiestruturadas como instrumentos de elaboração de dados, que foram analisados à luz da Análise Textual Discursiva. Os resultados apontam que nos momentos de Formações de professores propõem uma padronização das práticas pedagógicas das docentes, no sentido de estarem centradas nos conteúdos escolares. Contudo, as docentes dizem executar estratégias didáticas considerando as realidades dos estudantes e que, em certa medida, distanciam-se da padronização proposta. Conclui-se assim, haver tensões entre os sentidos de práticas pedagógicas propostas às professoras e as que são por elas construídas em sala de aula.

Palavras-chave: Educação de jovens e adultos; Ensino de Matemática; Prática pedagógica; Formação de professores.

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Introduction

Youth, Adult and Elderly Education (EJA) is a Basic Education teaching modality that serves a significant number of students, young people, adults and elderly people, with very peculiar characteristics. Among these characteristics, we highlight the possible experiences that some of these subjects had as students at the school that we call regular, while others have their first contact with the teaching space at EJA.

We understand that the different experiences of students in the same class should allow EJA teachers to deal positively with a variety of knowledge, allowing them to construct different teaching strategies. However, from reading some works that guided our study (Ferro, 2015; Santos, 2018), we realized that these experiences, added to other factors that go beyond the autonomy of schools and teachers, are still seen as a challenge to teaching of young people, adults and the elderly. Some official documents in the Education area point out that the deficiencies in the academic training of teachers and the “misinterpretations of pedagogical conceptions” (*Proposta Curricular para a EJA*, 2002, p. 13) on their part are some of the reasons that contribute to this challenge, reflecting, among others consequences of poor student performance in school subjects.

Regarding Mathematics, Fonseca (2012) points out that discourses about students' poor performance say more about teachers' practices than their fears regarding this school subject. As a suggestion, this author points out that the teacher who intends to teach or teaches the aforementioned subject at EJA, in addition to mastering school content, needs to develop a sensitivity to attentive listening to the knowledge that students present from their experiences. We also highlight that it is necessary for the Mathematics teacher to understand learning as a process that must be linked to the students' daily experiences, considering the knowledge and practices of their cultures.

From this perspective, we recognize that, in an analysis of the knowledge taught at school, it is not up to us to measure or assess student performance in categories based on the 'good' or 'bad' duality, or only on the grades obtained in tests by these students. It is therefore up to us to understand the nuances of how the learning of this knowledge was constructed and how students participated in their journey.

In this article, we present an excerpt of the results of our Master's in Education research, completed in 2019, in which we discussed the pedagogical practices constructed by teachers who teach Mathematics in EJA classes at a municipal public school in the rural area of Sobral, in Ceará. With it, we aim to present the influences and contributions of teacher training moments for teaching Mathematics in the EJA of this rural school. We highlight that these moments are offered monthly by the Municipal Department of Education (SEDUC-Sobral), through the School of Permanent Training for Teaching and Educational Management (ESFAPEGE) to teachers who teach in schools in the municipality. In the research, we addressed discussions involving teacher training carried out between 2017 and 2018

To prepare the research data, two teachers were interviewed. They were chosen because the students in their classes had the highest attendance in classes in the 2017 and 2018 academic years, among the five EJA classes at the rural school. We emphasize that these classes are of the multigrade type and are located in different locations, far from the rural district of which they are part. Based on the narratives of these two teachers, we discuss the meaning of pedagogical practice directed at teacher training sessions, which they attended in the aforementioned academic years, and how the teachers express the construction of their practices in Mathematics classes at EJA.

The article is organized into three sections. In the first section we discuss the meaning of pedagogical practice adopted in our study and presentation of the space where the research took place. In the second section we follow the paths taken to construct the research. We close the article with the third section, where we bring our discussions about the meanings of pedagogical practices in teacher training and the meanings of pedagogical practices that are constructed by teachers in the classroom.

Pedagogical practice

One of the themes covered in our Master's in Education research was pedagogical practice (Xavier, 2019). We highlight that the motivation that led us to study this topic came from our intention to understand how EJA teachers build their classes and teach Mathematics to young people, adults and the elderly. From reading the works that formed the research literature review, we verified the researchers' understanding of the necessary elaboration, by the teachers who teach at EJA, of specific pedagogical practices aimed at their audience.

When we entered the field of study, we identified that the EJA teachers at the researched school developed the role of multipurpose and their classes were of the multigrade type. This required them to develop, create, and articulate different ways of dealing with students' difficulties and abilities. Hence why we also refer to pedagogical practices in the plural.

We understand that such practices are found in the educational space environment and have this as their main field of action, competing for attention, for example, with the internet, social networks, which are consolidated today as forms of educational practices at school, as Franco considers (2015). However, this same author points out that, to be classified as pedagogical, an educational practice needs to be in the field of school education, as it has in the didactics and curriculum the guidelines to be based as “social practices exercised with the purpose of implementing pedagogical processes ” (Franco, 2012, p. 152). Such processes occur in the school space, involving everything from the physical structure to the interpersonal relationships that interpenetrate it, acting in collective administrative and pedagogical decision-making, influencing student learning. Pedagogical practices also need to be organized “intentionally to meet certain educational expectations required by a given social community” (Franco, 2012, p. 154).

We understand that learning, inherent to the teaching process, flows more easily and

can have satisfactory results when a teacher, knowing the potentialities and difficulties of students, prepares his classes with a view to the objectives that will be developed in them. As an education professional, what is expected is that he or she is interested in the training process and the constant evolution of student learning. It is essential that he also shows concern about his practice, establishing reflections and seeking to learn about it. Franco (2012) points out that it is necessary for the teacher to be in constant ‘critical vigilance’, ‘testing and reflecting’ on their pedagogical work.

According to Franco (2016), the constant movement of thinking about intentionality in the action of practice in the classroom and the movement of reflection on this practice are inseparable from the teachers' know-how, and this is what allows us to interpret it as practices woven pedagogically for a purpose in the students' learning process. In order for the processes of developing classes, thinking about practices that facilitate student learning, monitoring and evaluating, both practices and students, to take place in a coherent and positive way, the teacher needs to count on the support of other agents involved in the school community, as pedagogical practices also “function as a space for dialogue” between inside and outside the school (Franco, 2012, p. 162).

Understanding that dialogue is the essence of the relationship between the subjects of learning and, therefore, of pedagogical practices, we enter our study seeking to understand how EJA teachers construct their Mathematics classes, articulating them as their actions in the classroom. This Space has been consolidating itself as part of the reality of young people, adults and the elderly, who assert themselves in school as participatory subjects, enabling the emergence of other pedagogies (Arroyo, 2014). We understand these other pedagogies as new ways of thinking and building pedagogical practices that recognize students as the main subjects of the act of teaching. That permeate the understanding of practice in EJA as a compensatory or infantilized action, and of teaching as content-based, displaced from the students' realities and that does not reduce them to simplistic views of being subjects who are merely recipients of knowledge. It is expected that they will be practices developed from the understanding and recognition of the sociocultural identities of young, adult and elderly subjects.

With regard to the specificities of mathematical pedagogical practices in EJA, Fonseca (2012) informs us that it is necessary for teachers to have sensitivity and an attentive and generous listening attitude to deal with subjects of experiences and “experiences that escape them not only because of their sociocultural meanings, but also from the point of view of human trajectory and development” (Fonseca, 2012, p. 63). This sensitivity goes beyond the teacher's understanding of students as subjects who were previously denied their right to education, that the education given to them is of lower quality or that they see as inferior to those without school experience. Therefore, sensitivity is not reduced to an attitudinal issue.

We corroborate with the aforementioned author that, more than the preparation to recognize the “differential complexity of this modality” proposed in Opinion nº 11/2000 (*Parecer nº 11*, 2000, p. 56), EJA teachers need to be guided “regarding the selection and / or

production of instruments and criteria to carry out diagnoses of the public they serve, whether formal and directed, or informal and procedural” (Fonseca, 2012, p. 60). Thus, teachers, in possession of these diagnoses and, based on their readings, can develop ways to monitor their actions, classroom practices, make interpretations and reflect on them. In this way, Fonseca (2012) highlights three supportive dimensions for those who work or intend to work at EJA: their intimacy with Mathematics; their sensitivity to the specificities of adult life; and his political consciousness.

The first dimension considers that, once the teacher has mastered Mathematics content, he will be able to recognize that the students' knowledge, even though they are not school-based, is “knowledge that explains intentions, cultural marks, power relations, by recognizing human production and historical” (Fonseca, 2012, p. 57). The second dimension, part of the recognition that is guided by the teacher's sensitivity in having careful monitoring “regarding the issues that are established in the classroom, with the positions assumed by the subjects, with the recurrence and unusualness of situations” (Fonseca, 2012, p. 61). It refers to the records that teachers need to create and that, from these, there can be better monitoring of the evolution of the learning of students and the teacher himself.

The third dimension has as its starting point the recognition of EJA as a subjective right of students. Therefore, it cannot be the target of “logistical, financial or ideological obstacles to the realization” of this right (Fonseca, 2012, p. 64). As the teacher and other education professionals who make up the school are aware of this, they must all seek ways to offer quality education.

We understand, therefore, that it is not enough for a teacher to have knowledge of the content to develop his teaching role. But, add to these, the sensitivity in monitoring students' learning and recognizing them as subjects who are enjoying their subjective right to have an education. Above all, it is not up to you to be silent or exempt yourself from the fight for the quality of education and the realization of this right.

That said, we bring these dimensions as fundamental elements and guiding assumptions to our understandings about the mathematical pedagogical practices of EJA teachers. Such understandings have as their axis of analysis the meanings of teachers' points of view about their classes.

We reaffirm that in the research as a whole, as well as in this article, we understand pedagogical practices as actions designed with the intention of enabling students to learn and as being in constant construction. This construction goes beyond the actions of a teacher in the classroom, which are often the target of imposition of some practices, whether through changes in the school's pedagogical proposal or even in the education system. We therefore understand that pedagogical practices emerge from the multidimensionality that surrounds the educational act and result from “decisions, principles, ideologies, strategies” (Franco, 2016, p. 156), their structuring ingredients, and can only be perceived from the perspective of totality in which school, teaching and education are found.

The searched space

Our research locus was a municipal public school located in a district, located in the rural area of Sobral. According to its School Regulations (*Regimento Escolar*, 2014), it covers the Early Childhood Education and Elementary Education stages in the day shifts and EJA, in the night shift.

From reading its Pedagogical Political Project (*Projeto Político Pedagógico*, 2014), we see that the aforementioned school includes the EJA modality, with multigrade classes, in the First Segment, with EJA I and EJA II levels, and in the Second Segment, with EJA III and EJA IV. Therefore, we consider it possible for students from EJA I (1st, 2nd and 3rd years), EJA II (4th and 5th years), EJA III (6th and 7th years) and EJA IV (8th and 9th years) to exist in the same classroom, forming a group.

This school is nucleated, has attached buildings in rural locations further away from the District headquarters, where the EJA multigrade classrooms operate. Municipal Law No. 492, of January 6, 2004, in its Article 4, makes the naming of these buildings that house multigrade classes in core schools optional. This name does not exempt the host school from the support it must provide to these classes and, rather, aims to reinforce them as “integral and inseparable parts of the autonomous school unit” to which they are linked (*Lei nº 492*, 2004, p. 4).

Reading the aforementioned Article 4 allows us to understand the existence of 4 buildings attached to the accompanied rural school. Of these, our research included monitoring two groups: EJA “A”, which works in the annex building that we will call “Extension A” and EJA “B”, which works in the annex building that we will call “Extension B”. EJA “A” is approximately 1 km away from the main school, being the only class in that area. In 2018, it was made up of 24 students: 17 men and 7 women. The majority of men were between 46 and 60 years old, and most of them were completing the EJA Second Segment series. The majority of women were between 31 and 45 years old, and most of them were completing the First Segment of EJA. The EJA “B” class is approximately 7 km away from the host school. It was formed, in 2018, by a total of 28 students: 14 men and 14 women. The men were between 26 and 60 years old and the majority were completing the series of the First Segment of EJA. The women were between 46 and 60 years old and were, for the most part, completing the EJA Second Segment series.

In addition to these characteristics of the EJA “A” and EJA “B” classes, we emphasize that they were also composed of teenagers between 15 and 17 years of age, coming from the school's own day shifts, as well as elderly people over 60 years of age. We highlight that a peculiarity of these classes is the presence of different generations of the same family as students in the same classroom, and the constant presence of women during classes.

The profile of the teachers

Valuing the identity of the subjects interviewed, we chose to call them “Teacher A” and “Teacher B”. The first taught, in 2017 and 2018, in the EJA “A” class. The second teacher, in previous years, taught in the various EJA classes, however, between 2017 and 2018, she was in charge of the EJA “B” class.

Teacher A is 25 years old, considers herself white, is single and lives in the district where the researched school is located. His studies in Basic Education took place in public schools. He has a degree in Biological Sciences and is studying a *lato sensu* postgraduate course, aimed at teaching Biology. He has been teaching for 3 years and is currently teaching Biology at a state high school in the city, in the morning and afternoon shifts and, in the evening shift, he teaches in a multi-grade EJA class. She has a temporary contract with SEDUC-Sobral. He stated that he did not have any courses aimed at EJA, participating only in the study sessions in Teacher Training, offered by ESFAPEGE.

Teacher B is 48 years old, considers herself white, is married, lives in the district where the researched school is located. His studies in Basic Education took place in public schools. She even studied Normal High School and studied Pedagogy at a private college. He does not have any course in the EJA area, but he has experience in education classes for young people, adults and the elderly, having also taught in the Solidarity Literacy Program (AlfaSol). She has been teaching for 20 years, being a teacher hired by SEDUC-Sobral, also having experience in Early Childhood Education and Elementary Education. She currently teaches Early Childhood Education, in the morning, and in the evening shift, at EJA, both at the same school.

We emphasize that, in general, EJA classes in schools located in the rural area of Sobral are of the multigrade type. Thus, the professors who teach in them develop the role of multipurpose, regardless of whether their academic training is in specific degree courses. This is the case of “Teacher A”, the subject of our research.

The meanings of pedagogical practice in Teacher Training

Teacher training is a period of study offered monthly to teachers who teach in municipal public schools in Sobral, which are organized by ESFAPEGE and carried out by trainers linked to it. According to reports from the teachers interviewed, the training of teachers who teach at EJA took place in the format of classes, organized in moments, with an estimated time of 45 minutes, for each curricular area: Science, History/Geography, Portuguese and Mathematics.

The teachers were grouped in separate rooms as follows: those who taught in Literacy level classes, those in serial classes in the final years of Elementary School and those who taught in multi-grade classes (Multi EJA). According to the teachers interviewed, there was a

rotation of trainers in each curricular area to cover all groups of teachers. This organization is understood in Teacher A's answer to the question: How did Teacher Training happen?

The training teachers for each discipline were divided and from there they worked on the themes, because it was Multi EJA, and there were many activities that came from each Segment. They divided the time correctly and tried to convey it as we should to the students, but of course only we knew about the experience and the reality.

When Teacher A says 'they – trainers – divided the time correctly and tried to pass it on as we should pass it on to the students', we understand that Teacher Training intended to be another space in which teachers would 'learn' how to teach young people, adults and the elderly, rather than moments of construction and discussion about their pedagogical practices. It is possible that this will result in the organization being organized into 45-minute periods, with the intention of representing class times in EJA classes. This representation can also be understood by the 'many activities' that teachers received to work in each curricular area.

At another point in the interview, Teacher A informed us that she 'adapted' the activities she received in teacher training to the students' context. This allowed us to understand that, when she said 'but of course only we knew about the experience and the reality', she refers to this adaptation and, at the same time, presents teaching strategies and her own ways of dealing with the specificities of her class.

We asked the question: How did Teacher Training happen? to Professor B, who gave us the following answer:

I think it's very well crafted. With each passing year they are improving a lot. But for my practice, I think the level is very high, because they follow the books exactly, the dynamics are very well designed. What I take advantage of are the dynamics, but at a different level, because students don't follow exactly what is in the Portuguese and Mathematics book. They can't.

We found similarities between the teachers' responses, in the sense that, for Teacher A, the trainers followed the timing of the study moments 'straight' and, now, with Teacher B, we realized that they also followed 'straight' what they proposed the textbooks. We understand that the action of 'following the book' is related to the 'time' determined for the moments of each curricular area. We reiterate, therefore, that the trainers, in each teacher training, and within the estimated time in their areas of study, sought to represent how and based on what parameters EJA teachers should teach in their classes.

When she tells us that teacher training takes advantage of the 'dynamics, but at a different level', we understand that Teacher B is referring to the 'very high' level proposed during study times. This signals that in practice, the teacher also adapts to the specificities of the students, which is proposed in teacher training. Our perception is reflected in the speech of the aforementioned teacher when she says: 'the students don't follow it the way it is in the Portuguese and Mathematics book'.

The teachers' responses lead to a first understanding that teacher training aimed at EJA teachers in Sobral seeks to standardize their pedagogical practices within a class period to be followed and which strategies they should work with students. The sense of standardization can be understood in the EJA Strategic Plan document (PEEJA), which guides teacher training and the teaching of young people, adults and the elderly in the municipality, in which we read in its topic 14, about the "Human Training Proposal and technical training of the municipality of Sobral" (*Plano Estratégico da Educação de Jovens e Adultos*, 2005, p. 25):

[...] What we aim for with the human training and technical training of EJA teachers is the practical and theoretical preparation to interact with this group of students, establish the exercise of dialogue and avoid the tragic phenomenon of relapse and evasion.

From the quote above, we highlight the terms 'technical training' and 'practical and theoretical preparation', and bring them closer to what Teacher A said, referring that in teacher training, the trainers taught how they, teachers, should 'transfer to the students' themes. This is repeated in Teacher B's speech, referring to the dynamics of each curricular area. The understandings of 'training' and 'qualification' are explained in the same municipal document as follows:

[...] The first (training): train the teacher's emotions and understanding, so that he or she can always relate to his or her students in the biology of love (mutual respect) and interact with them without censor your way of being. The second (training) aims to create a space of reflective knowledge and action capabilities in the teacher, so that they can guide their students in the continuous expansion of reflective knowledge and action capacity, only by correcting their actions and not your being. (*Plano Estratégico da Educação de Jovens e Adultos*, 2005, p. 26).

Bringing the statements of Teachers A and B closer to the quote above, we notice a gap between what is proposed in PEEJA (*Plano Estratégico da Educação de Jovens e Adultos*, 2005) and what is put into practice by ESFAPEGE trainers. We understand, from the teachers' statements, that the trainers are more about indicating pedagogical paths on how to teach at EJA, rather than providing them with a 'space for reflective knowledge'.

We analyzed that this type of teacher training, presented to teachers at EJA in Sobral, is characterized as a top-down type. According to Maia and Fiorentini (2023), this is a model that little considers teaching knowledge as structuring elements of their training processes and as knowledge that can be enhanced in practice. These top-down trainings, in general, take place "from the top (university) to the bottom (school practice) and presuppose learning of knowledge for practice" (Maia & Fiorentini, 2023, p. 188), as we see in the ideas of the teachers' interviews, when they signal that the trainers intended to teach them how they should teach students.

Despite this intention, as the teachers highlight, they have their own ways of constructing their classes, as they are the ones who know the realities of the classes. Thus, the directions of how teachers follow their practices in the classroom are perceived in their answers to the question: How do you prepare your classes for EJA classes? Teacher A answered us:

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I do the following: when I plan, I start with EJA I. As EJA I students are just starting to know the letters and everything, I try to find a different activity. Sometimes I can do the same activity, for example, if it's Science. Not EJA I, because they are still starting to read, but from EJA II onwards I try to take the same theme and apply it to everyone, but each one has their own difficulty. Some content can be adapted, worked on as a whole, but dividing the class, each according to their needs; No other content, so I work in another way, which would be to bring different activities.

We understand that the 'differentiated activities' proposed by Teacher A are possibly designed in an attempt to address the 'difficulties' of each student. She also refers to them as their 'needs'. This leads us to understand that the aforementioned teacher develops "a special sensitivity to working with diversity" (*Proposta Curricular para a EJA*, 2002, p. 33) at EJA, since in her class she comes across students with different cultural backgrounds and school experiences.

To the same question, Teacher B answered us:

I make my weekly plan. I have the annual one and I do the weekly one. I use the book, for example, Portuguese, and select the texts, the grammatical part. I don't use the whole book and I bring a lot of texts. I work like this, with their book, not all of it, and, in parallel, complementary activities. It is different from EJA I to EJA IV, for example. They are different contents, but when it comes to reading, interpretation, I unify the students.

Teacher B's statement when she said 'when it comes to reading, interpretation, I unify the students', allows us to perceive an approximation with Teacher A's practice, in the sense that both tell us that they work by grouping students of different levels in certain activities. Teacher B explains that she uses the textbook, 'not all of it', and also uses the pedagogical strategy of working on 'complementary activities'. This teacher tells us to select some parts of the textbook, which allows us to understand that this selection refers to the choice of what she understands as being in accordance with the students' level of knowledge.

In the speeches of the two teachers we noticed that, in relation to the selection of what would be worked on in their classes, they take into consideration the 'contents' of each subject: 'Some contents could be adapted, worked on as a whole, but dividing the class, each according to your needs', Teacher A tells us. Teacher B says that 'these are different contents', but, even so, she organizes the students in a unified way when working on reading with them. In these responses, we understand that teachers are concerned about following school content proposed in teacher training.

We understand that this action by teachers is desirable, adapting and selecting students' activities according to the content and learning levels of each student, in an attempt to complement the material guided by Teacher Training. However, we emphasize that care must be taken in this adaptation, so that, as teachers, we do not fall into truisms that any type of activity contributes to student learning. It is up to us to be aware that working directly with the public of young people, adults and elderly people, who are in EJA classes, requires the teacher to be

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[...] prepared to interact empathetically with this group of students and to establish the exercise of dialogue. Never a lighthearted teacher or one motivated only by good will or idealistic volunteerism, but rather a teacher who is nourished by the general and also by the specificities that qualification as a systematic training requires (*Parecer n° 11*, 2000, p. 56).

From these perspectives, our analyzes lead to an understanding that the training of EJA teachers in municipal public schools in Sobral seeks to standardize the pedagogical practices of teachers, as actions that must be developed within class time, carried out through dynamic and guided by school content. Some approximations perceived between the responses of Teachers A and B, allow us to understand that there is a direction in their classes within this standardized practice. However, there are also distances, when teachers tell us to think about 'differentiated activities' according to the 'experiences' of each student.

Teachers' mathematical pedagogical practices

In this section we present how Teachers A and B build their Mathematics classes at EJA, also discussing the influences of Teacher Training on their pedagogical practices. Our first analyzes focus on Teacher A's answer to the question: How do you prepare EJA's Mathematics classes?

So, based on the material we received in teacher training and the book we had, we started to think, to work on that content in the classroom. Generally, I would find a lot of activities on the internet, print them out and take them with me; for example, the question of the set, the quantity of things there, multiplication. My EJA II took the same multiplication as the EJA IV, they took the simple calculations. So I was able to work on Mathematics in general like this.

In Teacher A's speech, we realized that the elaboration of her Mathematics classes was based on the material received in Teacher Training, in addition to the textbook. As we pointed out in the previous section, school content is at the center of teachers' pedagogical practices, as is the strategy of bringing students together, when it comes to a common theme or content to be studied. In the aforementioned speech, 'simple calculations', which we understand to be the basic operations of Mathematics ('the same multiplication'), are content common to all students.

When finishing her response by saying: 'So I could work Mathematics in general like this', after explaining different teaching strategies on how she builds her class, we understand that Teacher A seeks to emphasize that she is in agreement with the general proposal of Teacher Training, namely, standardization. At the same time, the answer above reiterates our understanding that teachers are not limited to what is 'taught' to them in Teacher Training, thus constructing their classes with their own characteristics.

Complementing the answer to the question about how she prepares her Mathematics classes at EJA, Teacher A tells us that one of her challenges in Mathematics was 'when she would solve problems' with the students, and continues telling us:

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There was a student who didn't know how to read, but he could count like no one else. When I went to work on problems, they didn't know how to read the problem, I read the problem to them: Guys, how are we going to set this up here? Here's the problem, who comes first? What are we going to put first? The amount of what? Then they were already formed. They didn't know how to read, but they already formed the problem, only when I started talking did it enter their heads. This came from Teacher Training, because we see reports, in our EJA Training, that help a lot.

Teacher A's response allows us to understand that, in addition to the materials distributed, the reports and experiences in teacher training contribute to her building her Mathematics class. This fact indicates that, despite the intention of standardizing the teachers' actions, in these moments of training, they socialized pedagogical ideas among themselves, which happened in their classes, helping them to learn about the successful practices of their colleagues. In our reading, teachers produce curriculum with their own meanings and linked to their experiences in the classroom, meanings that question the idea of standardization (Goodson, 2019) imposed by Sobral's municipal educational policy.

It is possible to understand that Teacher A's challenge in teaching Mathematics occurs because, in her class, there are students with varying levels of knowledge, including those who are in the literacy phase, those 'who didn't know how to read'. However, the fact that she thought that some students 'didn't know how to read the problem' led her to adopt a specific approach towards them, that is, to read the statement of the Mathematics questions.

In turn, the reading strategy for students was also oriented in Teacher Training, as she informs us: 'this came from Teacher Training, because we see reports, in our EJA Training, that help quite'. We believe that with this strategy, Teacher A makes them become dependent on her explanations, in addition to being another 'help' action for them to solve the mathematical problems. We therefore understand that the aforementioned teacher is possibly reducing the students' possibilities of understanding mathematical reading.

This reading followed by some explanations, adopted by Teacher A, allows us to interpret her pedagogical practice as an action that aims to facilitate and help students reach the final result, in solving the problem, rather than understanding the problem from her reading and interpretation to arrive at a solution. In the sense of Fonseca (2012), it would be a practice doomed in attitudinal matters to help the student, instead of seeking to understand what and how they proceed in their mathematical activities. From Franco's (2015) perspective, it would be a practice, even if pedagogical, technologically elaborated to reach a final answer, with the resolution of the activity.

Regarding mathematical pedagogical practice, Teacher B also answered the question: How do you prepare EJA Mathematics classes?

When I teach Mathematics, I take things from the students' lives, like examples, to be more practical. I took and take activities, addition and subtraction calculations. From multiplication, still just double and triple, to see what they will do, because, depending on my assessment of how each class is going, I will prepare my next classes.

By saying that she took examples from the students' lives, we understand that Teacher B seeks to contextualize Mathematics activities. However, the expression 'more practical' intrigues us, allowing us at least two understandings: one that would be linked to student learning, in the sense that they would learn more quickly what she proposed in class; and another, which would be more linked to its methodology, or the practicality of explaining certain mathematical content. Both understandings converge to the common understanding of reduced learning when learning to do mathematics. In this speech by Teacher B, when she tells us: 'depending on my assessment of how each class is going, I will prepare my next classes', we see that there is a concern about monitoring the development of her class and students. This allows us to understand that the teacher is constantly reflecting on her pedagogical work (Franco, 2012).

We understand that, although they are teachers who teach in different EJA classes at the same school, their statements point to the understanding that there are influences from their studies on teacher training, on the ways in which they develop their practices in the classroom. Among the influences, we highlight the centralization of school content and the pedagogical strategies of using 'complementary' or 'differentiated' activities which, according to them, would be closer to the students' specificities.

The interpretations of the teachers' narratives allow us to understand that, although Teachers A and B seek to contextualize their Mathematics classes, taking 'things from the students' lives', as Teacher B suggests, we still understand that their actions in the classes of this discipline, focus on a conception of pedagogical practice that would be linked to the transmission of mathematical content and ways of solving accounts or 'problems', as pointed out by Professor A. This practice, even though it is pedagogical, as teachers have intentionalities towards their actions in the classroom with students, is characterized, according to Franco (2016), as designed for the sole purpose of transmitting school content. However, we realize that 'content' is one of the ways that teachers use to select activities and students within classes.

We consider teacher training moments to be important, in the sense that the materials distributed and experiences with other teachers enable EJA teachers to build their practices in the classroom. However, the analyzes carried out here point us to the reflection that, in teaching aimed at the EJA audience of young people, adults and elderly people, when looking for standardization, whether in pedagogical practices, curricular proposals or even content, there will be tensions regarding to the specificities of the students.

Final considerations

In this article we discuss the influences that studies of teacher training moments have on the construction of pedagogical practices of EJA teachers. As data preparation instruments, we used semi-structured interviews, which were carried out with two teachers who teach Mathematics in EJA classes, at a municipal school, located in the rural area of Sobral.

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Based on some responses from teachers, we analyzed that teacher training proposes a standardization of their pedagogical practices, in the sense that they are organized in a given class time, they must be carried out based on dynamics, which are also proposed in those moments of study and , in addition, they must consider school content.

It is a training structure that is characterized as top-down, whose central ideas are guided by the interests of curricular enrichment by Sobral's municipal educational policy. In this way, ESFAPEGE trainers are responsible for “proposing training tasks to teachers so that they develop specific or specialized knowledge to teach, especially pedagogical content knowledge” (Maia & Fiorentini, 2023, p. 188).

The readings and analysis of the responses indicate that the teachers, even though they teach in different EJA classes, in the same school, build their classes, to a certain extent, considering the school contents, but, above all, considering the specificities that mark their classes and the rural sociocultural reality of the community in which they teach. Furthermore, when reporting on their actions in the classroom, we understand that teachers execute teaching strategies also considering the differences of students which, in part, distance themselves from the proposed standardization. In this way, we analyze whether there are tensions between the meanings of pedagogical practices proposed to teachers during teacher training and those constructed by them in the classroom.

We forward our considerations to the understanding that, even if we seek any types of standardization in the teaching of young people, adults and elderly people who attend EJA, there will be counterpoints, when considering the specificities of each school and students. We understand these counterpoints as positive, as they reinforce the power of the presence of diversities in EJA, in which teachers and students act directly in the construction of curriculum meanings.

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