Fedathi sequence: a methodological proposal for fundamental and high school in Guinea-Bissau

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ABSTRACT. Basic Education in Guinea-Bissau is still a concern for the Guinean society and, particularly, for specialists in the field of education. Given this scenario, it becomes necessary to think of a teaching performance as an alternative to reflect the teaching practice of the country treated here. In this perspective, the Fedathi Sequence, as a teaching methodology, becomes one of the proposals to reflect the Guinean teaching practice. Thus, the main objective of this article is to present the Fedathi Sequence as a methodological proposal capable of improving the teaching-learning process in Elementary and High School in Guinea-Bissau. In this perspective, the article made use of a methodology of analytical base, whose sources used were the bibliographical and documentary research. This production stands out as important for the reflection on Guinean basic education, being directed to the Guinean authorities, the professionals and researchers of education, and the readers, in general.

Keywords: Guinea-Bissau; fedathi sequence; teaching practice.

Sequência Fedathi: uma proposta metodológica para o ensino fundamental e médio na Guiné-Bissau

RESUMO. A Educação Básica na Guiné-Bissau ainda é uma preocupação para a sociedade guineense e, em especial, para especialistas da área da educação. Diante deste cenário, torna-se necessário pensar numa atuação docente como alternativa para refletir a prática docente do país aqui tratado. Nessa perspectiva, a Sequência Fedathi, como uma metodologia de ensino, torna-se uma das propostas para refletir a prática de ensino guineense. Assim, o principal objetivo deste artigo é apresentar a Sequência Fedathi como uma proposta metodológica capaz de melhorar o processo de ensino-aprendizagem no Ensino Fundamental e Médio na Guiné-Bissau. Nessa perspectiva, o artigo fez uso de uma metodologia de base analítica, cujas fontes utilizadas foram a pesquisa bibliográfica e documental. Essa produção ressalta-se como importante para a reflexão sobre a educação básica guineense, direcionando-se às autoridades guineenses, aos profissionais e pesquisadores da educação, e aos leitores, de modo geral.

Palavras-chave: Guiné-Bissau; sequência fedathi; prática de ensino.

Secuencia Fedathi: una propuesta metodológica para la escuela fundamental y secundaria en Guinea-Bissau

RESUMEN. La educación básica en Guinea-Bissau sigue siendo una preocupación para la sociedad guineana y, en particular, para los especialistas en el campo de la educación. En vista de este escenario, se hace necesario pensar en la enseñanza como una alternativa para reflejar la práctica docente del país tratado aquí. En esta perspectiva, la secuencia Fedathi, como metodología de enseñanza, se convierte en una de las propuestas para reflejar la práctica docente guineana. Por lo tanto, el objetivo principal de este artículo es presentar la secuencia Fedathi como una propuesta metodológica capaz de mejorar el proceso de enseñanza-aprendizaje en la educación primaria y secundaria en Guinea-Bissau. En esta perspectiva, el artículo utilizó una metodología analítica basada, cuyas fuentes utilizadas fueron la investigación bibliográfica y documental. Esta producción se destaca como importante para reflexionar sobre la educación básica guineana, dirigida a las autoridades guineanas, profesionales de la educación e investigadores, y lectores en general.

Palabras clave: Guinea-Bissau; cuerda de fedathi; práctica docente.

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Introduction

The teaching-learning process in Guinean schools still presents several factors that are not encouraging to scholars in the field of education. In this perspective, it becomes necessary to reflect on the problems pointed out in previous studies that refer to the theme of Guinean education, such as: the content addressed in classroom, the teacher training, the methodology used in teaching of contents, the curriculum, etc.

Guinean education currently presents itself with a deficient quality, stemming from the little investment in this area and also from the lack of teaching updates in terms of teaching methodologies and the continued training of the professionals in office. The referential consulted points to the lack of an up-to-date teaching methodology that can improve the teaching practice, as we will clarify later. Given this situation, it is necessary to think of a teaching model with a clear methodological proposal to mediate knowledge, for which we present the Fedathi Sequence, which, in our experience, achieves good results in teaching and learning, and can be applied as a methodology in several areas of knowledge. We emphasize that the methodology does not solve all the problems, but we consider that anything that helps to think about teaching practice is welcome.

There is no miracle methodology that will solve all the problems of teaching-learning, because this process involves other aspects, such as the mastery of the content covered, the teacher's attitude, the dynamics used in pedagogical activities, the environment where the classes take place, etc. However, we believe that, if not solved, the problems related to teaching methodology can worsen the teaching-learning situation, contributing to the high school failure and school dropout rates. We understand that, despite the many problems previously mentioned regarding Guinean basic education, the focus of this paper is on the methodologies used by teachers in Elementary and High School in Guinea-Bissau.

In this perspective, the choice of the theme came, initially, from the subjectivity of one of the authors of this text, who is Guinean, having, therefore, a place of speech to talk about Guinean education, based on her experience; Then, by joining research groups in Brazil, she sharpened her perspective based on the reflections made in the studies of other authors who pointed out several problems in Guinea-Bissau's education, among which she observed that the problem that stood out the most was the one related to teachers' methodologies, coming to the conclusion that this is one of the major problems of education in Guinea-Bissau.

In the elaboration of this article, we chose to dialogue with the following theorists: Pereira (1976); Valente and Almeida (1997); Cá, (2009, 2015); Freire and Guimarães (2011); Torres (2014); Borges Neto (2018); Menezes (2018a and 2018b), among others. Thus, for a better presentation of our analysis, we divided the article into three parts: in the first part we briefly present the education process in Guinea-Bissau; in the second part, we discuss the Fedathi Sequence as a methodological proposal to be applied in teaching in Guinea-Bissau and, finally, we discuss the continuing education and its importance in the teaching-learning process.

Brief presentation on the educational system in Guinea-Bissau

Until the early 1970s, Guinea-Bissau was still under the rule of the Portuguese colonizers and only became officially independent on September 24, 1974. From that period on, it faced many difficulties in organizing its education system due to the lack of professionals.

At the beginning of independence, the area of education had 1,900 teachers who worked in primary institutions (Elementary I), only 102 had initial training - graduates - and, in Secondary Education, equivalent to Elementary II in Brazil, most of the teachers only had the Lyceum general course, equivalent to High School in Brazil. Given the scenario established by independence, one noticed a shortage of professionals in the field of education (Cá, 2015). Thus, education in Guinea-Bissau became one of the main concerns of the Guinean state. And it was in this perspective that the country's government received help from several other countries, including Brazil, Cuba, Portugal, Russia, Germany, France, and others who sent professionals to teach in elementary and high school. In the meantime, the teacher training centers prepared the young people who finished high school to get their initial training and fill the vacancies held till then by the foreign professionals.

The works consulted in our research reveal that from the colonial period to the current phase the issue of teaching methodologies has drawn the attention of scholars in the field of education in Guinea-Bissau. According to Freire and Guimarães (2011), the teaching method was considered rigid in comparison with the current structure. In the colonial period there was no dialogue between students and teachers. The teacher was considered the holder of knowledge, who knew everything and taught everything. The students, on the other hand, only had to learn, because if they didn't, they would be punished with a ferule. This logic leads us to reflect that there was a very high hierarchy in the teacher-student relationship, in which the teacher was

the center of knowledge, that is, the one who knows everything and who was limited to transmitting the program content. Therefore, the students are treated as a clean slate (the one who knows nothing). They are limited to listening without being able to question, or even give an opinion.

Freire and Guimarães (2011) emphasize that the schools of the colonial period were not very democratic, because the spirit of give and take was almost nonexistent. Teaching methods were very rigid. Teachers forced students to memorize the subjects, as Paulo Freire (2011, p. 173) said, "[...] to eat, to chew this knowledge, which had little of inspiring, little of participatory". With the independence of Guinea-Bissau, the situation of education was being improved in several aspects. As Freire (1978) points out, the Commissioner of Education (Minister of Education) Mário Cabral said at the time that the real objective of the new system

[...] is to eliminate what remains of the colonial system so that we can achieve the goals set by the African Party for the Independence of Guinea and Cape Verde (PAIGC) to create a new man, a worker aware of his historical responsibilities and his effective and creative participation in social transformations (Freire, 1978, p. 49).

When analyzing the above quote, one realizes that the beginning of independence was not easy for the representatives of Guinea-Bissau. Despite intense effort in organizing the country's education in 1976, the results were not immediately positive, due to the lack of conditions to change the entire program of the country's education system from one year to another. For this reason, they decided to close many schools to later start again from new bases. On the other hand, the State Commissariat of Education and Culture opted to maintain some of the education policies that existed by gradually introducing the reforms they considered indispensable. Besides the schools scattered throughout the territory, the country had 10 boarding schools, according to Cá (2015), bringing in her research the listing of seven of them:

Jardim Escola Josina Machel (Bolama); Internato Titina Silá (EBE – Bissalanca); Internato Areolino Lopes da Cruz/Escola Piloto (EBC – Bolama); Internato Saco Vaz (EBC – Pelundo); Internato Frantz Fanon (ESG – Bor); Internato Osvaldo Vieira (ESG – Morés) and Internato Fernando Cabral (Bafatá). The other three boarding schools were not included and the reason why they were not mentioned in the official document of the Instituto Amizade from 1993/1994 was not clarified (Cá, 2015, p. 129-130).

In the official documents analyzed from the Instituto Amizade [Friendship Institute], it is stated that besides the boarding schools created in Guinea-Bissau, the Guinean state had also created a boarding school in Cuba, called Domingos Brito, in the Isle of Youth. This boarding school received Guinean students and had the support of some Guinean professionals, among them, a party representative, a person responsible for social affairs, and eight teachers, who taught Portuguese, History, and Militant Training, together with the Cuban teachers. The boarding schools were intended for children, from kindergarten up to those who finished Elementary School. From this level on, the students left the boarding schools to study in Lyceums, where they would either attend high school or be sent to Cuba or another country to continue their studies. As an example of this reality, we point out that the boarding schools created by the members of the African Party for the Independence of Guinea and Cape Verde (PAIGC) attended children of the freedom fighters, children and youngsters who had families living in the countryside far from schools, war orphans, and children from low-income families.

Also in this period, it is important to highlight that the schools and boarding schools were public, except for the João XXIII College, of the Catholic Church and the Portuguese School. In the first, the objective was to prepare future priests and nuns, who would later continue their education in other countries. Even with this specific public, this school received other children without any commitment to become priests or nuns, as long as the family paid for the son or daughter's studies. In the second, those who studied there were children of the diplomatic corps accredited in Guinea-Bissau and other foreigners who lived in the country, and also the children of Guineans who could afford to pay the tuition. The public school received both children of high officials and those of the popular classes. According to Pereira (1976, p. 112), "Breaking with the past, Guinea-Bissau lays the foundations for a new education, a decisive undertaking for its own national reconstruction".

Still on the education process in Guinea-Bissau, it is worth noting that, in terms of curriculum, there were changes, starting with the contents that began to deal with the Guinean reality, differently from the colonial period when these were more focused on the Portuguese reality, as Pereira (1976) shows:

The contents of the teaching reflected the most aberrant form of cultural colonization, since the school programs were obligatorily equal to those of the 'metropolis' and the whole transmission of knowledge aimed at showing the Portuguese reality - its history, its geography, its culture - as the best, the most pleasant and the most heroic Students were presented with a strange world which they had to identify with, led to despise their community and ultimately to despise themselves in order to imitate the white - lord (Pereira, 1976, p. 108, emphasis added).

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Regarding the practice and attitude of teachers in the classroom, we observed that until the 1980s no significant changes had been made, because students continued to be humiliated by teachers when they did not know the lesson, getting down on their knees, for example. This practice was also used in boarding schools, according to reports of former students of the Boarding School of Bor, presented by Cá (2015), about the punishment. Such reports, at no time, point out that the punishment was related to physical aggression. Former teacher Higino Duarte also admitted that there was punishment at the Bor Frantz Fanon Boarding School, such as washing the dishes, providing support in the kitchen, taking care of the cleaning, and being denied the right to trips. Her research also pointed out that such punishments were not related to physical aggression against the offender; the teacher also defended that the punishment was necessary to avoid that facts like those committed by the students would be committed again.

By analyzing this situation from a pedagogical point of view, we understand that, despite the government's efforts to implement new policies in education, in the years from 1976 to 1986 it was necessary to provide teacher training that would guarantee these professionals a solid pedagogical basis to deal with the learning difficulties of the students. On the other hand, the policy of trying to guarantee quality public schools in public education in Guinea-Bissau did not remain for long either. According to Cá (2009), with economic liberalism in Guinea-Bissau, there was a change in the formulation and implementation of an educational policy. In 1986, it started in the country the educational policy proposed by the World Bank and other financial institutions. These financial institutions conditioned the new profile of the educational system, due to the immediate economic needs of Guinea-Bissau. For Lopes (1982), Guinea-Bissau is a country that lives off foreign aid. Its resources do not come solely from accumulation in the country itself, being foreign countries the major suppliers of a large portion.

The practice of humiliating students was only overcome in the late 1980s and early 1990s, but in the area of teaching methodologies there was a great precariousness, because teachers continue to write on the blackboard for students to copy and, leaving little time to explain the content, practice and verify learning, steps that almost always did not happen. In this condition it is possible to notice that there is not enough time for a quality interaction between teachers and students, and likewise, there are no conditions for a reflection that can help the student to find solutions to the problem and look for alternatives. The methodology used, besides leaving the peaceful students with no reaction for questioning, also ends up not stimulating the student's reasoning.

According to data presented by Cá (2015), in Guinea-Bissau, the more students fail, the more teachers are praised and considered as very difficult teachers. Attitudes like these are worrying and draw attention, because when a large number of failures occur in a class it is because something wrong is happening, and this something can come from several factors, such as the methodology used by the teacher, the content developed, or else the problem is in the students. However, whatever the nature of the problem is, it requires an investigation by the teacher, by the coordination and school management, in order to find ways to solve it.

Cá (2015) brings in her text the following experience report of a mother whose son failed at school:

When my son failed it looks like it was in 7th grade, or 8th grade, in a class of forty students if I'm not mistaken, thirty-nine students failed. I didn't hold back; I expressed my displeasure about the teacher's attitude. He didn't feel good about it, but I told him in front of everyone that the teacher who is teaching physics to these students doesn't deserve to be a teacher. He may have knowledge of physics, but he doesn't know how to transmit it to others. Students all failed physics, it is not correct. I told him that I studied in Cuba and if there is a class of forty students and twenty-nine had failed, the teacher could rest (Cá, 2015, p. 245).

The interviewee's words lead to reflect on a very common practice in the Guinean reality, in which teachers seem to be more concerned in failing students than in teaching them. It was not different in the 1990's, the failure rate in Guinea-Bissau was perceived in all subjects, but in math, physics, and chemistry it was higher. Procedures like these raise questions about the teaching methodology used by many teachers in Guinea-Bissau, since the role of the teacher is to mediate the activities that are being taught and not hide the information from the students. In the sequence, the interviewee also said the following:

When I finished speaking, a teacher's colleague arrived, I called him over and told him that I had a clear conscience, so I didn't hide to speak what I was feeling. I even told the teacher's colleague that, like a mother, I wasn't there asking for a score to help my son to move on the next grade, but what I had to say was that out of forty students, thirty-nine couldn't fail a subject. I do care about my son's future, but when he fails (not studying seriously), I don't have to pay anyone a thousand "francos cfea" [1000 FCA francs] to get him promoted to the

next grade. Because if he fails, he will have to work hard to improve his grade, but it turns out that all the students are complaining about the teacher. According to these, as soon as the teacher finished explaining, no one could raise a doubt, because the teacher would ask the student where he/she was when (the teacher) was explaining (Cá, 2015, p. 245).

It is important to emphasize that the fact of the teacher explaining does not mean that all students understand, because students do not have the same capacity to understand or assimilate information.

In this context, it is understood that the methodologies used in the classroom should be a concern of the school, of the country's education policy, and not only of the teacher, as it has been treated. With this in mind and to help teachers of basic education, we present the Fedathi Sequence as a methodological proposal that can be tested in the Guinean reality.

Fedathi Sequence: a methodological proposal for Guinean education

It is appropriate, in this part of the text, to discuss a little about the new methodological proposal Fedathi Sequence that, besides adding techniques that welcome diversified activities, also enables the involvement of the teacher and the student in a pedagogical practice (Borges Neto, 2018). According to Torres (2014), the Fedathi Sequence methodology as a proposal for teaching mathematics was created by Professor Dr. Hermínio Borges Neto, from the results developed in his post-doctoral study at the University of Paris VII - Université Denis Diderot, U.P VII. The author also explains that the name FEDATHI was created from the initial syllables of the names of Professor Hermínio Borges Neto's three sons: Felipe, Daniel, and Thiago.

The Laboratory of the Faculty of Education of the Federal University of Ceará, where the Fedathi Sequence was originated, exists since 1997, and has as its objective the development of research on the use of technologies in Mathematics and Science teaching, such as the study on Educational Informatics and Technology in Teacher Training (Matos, 2013). The book organized by Professor Hermínio Borges Neto reveals the Fedathi Sequence as a teaching methodology in which the teacher is identified as a mediator of the practices developed with the students. It is understood that the more involved they are in the teaching-learning process, students become more responsible and take a more autonomous position in front of the information presented to them. To this end, we understand that it is not enough that the teacher only mediates his/her pedagogical activities, but it is also necessary to know the area where the school is located, the physical space, as well as the available material resources that, in a way, need to be considered to make the didactic procedures possible.

The same concern was also raised by Borges Neto (2018, p. 11) when he states that "[...] when mediating a teaching situation, the teacher realizes the need to know the teaching environment and the subjects inserted in it, the students". With this sentence, it is understood that a teacher needs to know his/her students, know where they come from, their potential, as well as their difficulties. One believes that, based on this reading, it is possible for the teacher to best manage his/her teaching practice and ensure a teaching-learning process that reaches all students with quality.

We consider that the Fedathi Sequence methodology can contribute both in the Exact and Human Sciences. Santana (2018), in his article, entitled 'Hand in pocket: posture or methodology?' makes it clear that, in principle, the Fedathi Sequence was created for teaching mathematics, but it can also be used in other areas, according to the results of the theses by Torres (2014) e Cardoso (2015), and Cardoso (2015), and the dissertations by Bezerra (2015) and Santana (2018), as well as the monograph by Teixeira (2010).

Santana (2018) also assures that the new methodological proposal

It aims to stimulate students to research, reflect, investigate, collaborate, and systematize knowledge, that is, the Fedathi Sequence intends to give new meaning to the roles in the classroom, which for many years, were based on the master's acts of talking and dictating, in the traditional teaching perspective (Santana, 2018, p. 17).

In the Fedathi Sequence, the teacher's role is to mediate the knowledge, being the main responsible for the development of this methodology. He is the central piece to manage the discussion that generates knowledge from the content that will be presented by him as a challenge to students; a challenge that needs an organized environment for a search for maturation of ideas that can be questioned, in order to gain convincing arguments by the defender of this idea, in the presentation of results, or solutions related to a theory, as well as a practice experienced by the student. In this case, the role of the teacher is to direct the

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findings presented in the solution with arguments for an evaluation related to the content addressed. Practices like this, besides generating interesting discussions coming from different thoughts, also stimulate students to speak in public, to reflect on their ideas, to defend them with convincing arguments, to ask questions, to respect the ideas of others, etc.

In presenting the Fedathi Sequence we are not going to mislead, however, by claiming that this is an easy methodology. Every new pedagogical practice demands from the teacher the effort to reinvent him/herself. We emphasize that no teaching methodology has the power to make the student learn without the construction of knowledge. It is worth remembering that the construction of knowledge is possible through a teaching-learning process, whether collective or individual, through an experience that provides learning.

In the Fedathi Sequence methodology, it is important to remember that the student learns by participating in the construction of his own knowledge, with the mediation of the teacher. In this case, the teacher's attitude is very important to outline the necessary strategies to lead the discussion, unlike other methodological practices, in which the teacher is responsible for transmitting the knowledge to the students, without their participation in the construction of this knowledge.

In a classroom experience, with higher education students from the Pedagogy course, the discussion flowed, and the class became less tiring, because the construction of this knowledge was no longer only the teacher's responsibility, and everyone involved felt responsible for the teaching-learning process.

Based on this experience, the Fedathi Sequence is understood as a methodology that enables dialogue between teacher and student, as well as among students, brings security and confidence in the group, and makes the discussion in the knowledge construction environment more pleasant and enjoyable. This moment of discussion can also inspire the less participative students to interact and present their ideas and doubts.

It is important to highlight that when the student understands the proposal under discussion, he can relate it to his social environment, with his daily practice, making it easier to detect the problem, reflect and find answers. Thus, the probability to find the solution or reach an answer is very high, since the exchange of ideas during the construction of knowledge raises the level of students' critical sense, but for this, the teacher needs to mediate and encourage students to think collectively, or in small groups, in order to find or not the solution to the problem, and this role of mediating teacher is the essence of the Fedathi Sequence.

In this perspective, the Fedathi Sequence was designed in four stages: Positioning, Maturation, Solution, and Proof. One understands that these four stages represent the moment of each one (teacher and student) in the classroom. Positioning, according to Silva (2018, p. 81), is, in an objective way, when "[...] the teacher, through the choice of a problem or a situation, intends to turn the classroom into a teaching and learning environment favorable to the construction of knowledge, in such a way that students can develop their actions and investigations". In this phase, it is important to emphasize that every care is too little, because before choosing a problem or a situation, the teacher needs to know the competence of his/her students, the formulation of the question needs to be done very clearly before proposing any challenge to students, because this is necessary to enable a healthy reflection and compatible with their level of knowledge.

In Maturation, the second phase of the Fedathi Sequence methodology, the student begins his search in face of the challenge proposed during the pedagogical practice. It is a period of reflection that will allow the student to process and organize his ideas to meet the situation or the problem proposed by the teacher. This moment is important and necessary, because the students, besides concentrating to think about the situation raised by the teacher, select the information related to the situation or problem. In this moment of maturation, the students can resort to knowledge acquired from theory (readings and content covered in the subject), as well as practical knowledge based on their social and cultural experiences. But to make the discussion interesting, the teacher needs to mediate the debate with interesting and challenging questions that lead the students to reflect on the proposed topic, as well as on their social and cultural practices.

The Solution is a very rich phase from the pedagogical point of view because it is on this occasion that students get to participate in the construction of their knowledge, with diverse information; not forgetting that the student, besides helping with his knowledge, learns from the knowledge of other classmates.

About the same discussion, Menezes (2018a, p. 93) argues that "The student, after maturing and reflecting, presents with arguments his answer or multiple trajectories to be analyzed or debated by the other classmates [...]", who may have answered differently. In this sense, one understands that, in a certain way, the Fedathi Sequence is a teaching method that allows the involvement of students in search of a solution or answer. However, in this phase, the teacher should have a mediator role and use strategies that make the students argue more in defense of their findings.

Finally, there is the Proof, the final phase of the Fedathi Sequence methodology, which according to Menezes (2018b p. 99), "[...] is called Proof and is characterized by being the moment of the teaching action to synthesize or model the situation presented in positioning [...]". In this way, one understands that the mission of proof in the Fedathi Sequence is to describe the moment when the teacher takes a stand in clarifying the problem or situation under discussion and tries to relate it to the students' answers.

Thus, it is worth remembering that when one talks about teaching methodology it is equally important to talk about pedagogical practice, since one is linked to the other. Without the practice there is no way to apply the teaching-learning methodology, and, in the same way, without the teaching methodology, the teaching-learning process becomes a simple meeting without the obligation to mediate the content to the students.

It is also worth mentioning that in the Fedathi Sequence the educational practices require the teacher to be a mediator of the proposal that he is submitting to the students, but for this to be consolidated in practice, it is necessary that the teacher has mastery of the subject that is being addressed. One believes that when the teacher knows and masters the content, mediation occurs more safely, and the teacher can better manage the contributions presented by the students.

From this conception, one understands that, to avoid the students' difficulties, sometimes it doesn't depend only on the teacher's attitude, but perhaps it is necessary to extend our gaze a little further to the students' reality, starting with the society that they are a part of, their economic situation, their relationship with their family, and other problems that may interfere in their learning. In this case, it is not enough to think only about teacher training and leave aside the student's reality; it is not enough to have an enviable teaching methodology without worrying about teacher training or the reality in which the student is inserted.

Given the need for a teaching methodology capable of helping to overcome the students' learning difficulties, the Fedathi Sequence emerges as an excellent alternative to be tried out in the African reality, since it stimulates the student's involvement in the construction of their knowledge, placing the teacher as a mediator to manage the discussion around the content in the best possible way, thus making the class more active and less tiring for the students.

Still on the pedagogical practice, it is important to emphasize that any pedagogical practice requires planning, in order to ensure an organization in several aspects, such as the time of performance of activities, duration of each activity, frequency, spaces in which the activities take place. All these things need to be considered in a teaching methodology that involves the students to participate in the pedagogical practice (Borges Neto & Capelo Borges, 2017).

Continuing education: its importance in the teaching-learning process

To address the importance of continuing education, it is necessary to point out that any teaching-learning methodology, as previously mentioned, by itself does not solve the problem of learning difficulty. It is necessary to count on other strategies that can help in the teaching-learning process, such as continuing education for the teaching staff, curriculum, school management policy, infrastructure, Political Pedagogical Project, content, methodology, pedagogical resources, etc. All this, in our view, requires an investment.

Guinea-Bissau is a country that does not have its own resources to invest in education. For this, it depends on international organizations, such as the World Bank (WB), the International Monetary Fund (IMF), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the European Union (EU) and different countries that cooperate with Guinea-Bissau, like Brazil and Portugal. Given this, the question arises: how can Guinea-Bissau evolve or ensure the functioning of its educational system to a better quality, without its own resources?

The educational scenario in Guinea-Bissau is worrying, and to overcome this situation, the government, along with researchers, need to seek alternatives as soon as possible, because the situation is serious and tends to worsen the country's development index.

It is worth mentioning that if we want quality teaching-learning, it is necessary to invest in teacher training. The fact that the teacher has an initial training does not mean that this professional is already guaranteed enough knowledge to deal with all the challenges set in his area, because, to innovate the teaching practice, it is necessary to count on short, medium and long term training that brings immediate benefits and can contribute significantly to the renewal of the teaching-learning practice, such as conferences, lectures, symposia, workshops, study groups, and others. In these meetings, it is possible to have explanations about the classroom experiences, and from this exchange it becomes possible to develop knowledge that can stimulate change in the

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teaching-learning practice. Moreover, on these occasions, teachers can share with other professionals in the area their difficulties, doubts, and the experiences that have worked well in their practice.

We believe that the knowledge acquired in these meetings, as well as in the readings of different works, can also generate knowledge and complement the continuing education, and this knowledge can help the teacher in the application of a methodology capable of bringing improvement in the quality of teaching-learning.

Final considerations

This article brought a reading directed to the teaching-learning process in Guinea-Bissau's reality, aiming to present the Fedathi Sequence as a methodological proposal capable of improving the teaching-learning process in elementary and high school in Guinea-Bissau. To understand the needs of the Guinean education system, it was necessary to review some of the history of education in the country, which highlights some facts pointed out in previous studies that refer to the theme of Guinean education, such as: the content addressed in the classroom, teacher training, the methodology used in teaching of content, the curriculum, etc.

The results presented in this research show that, despite the various problems pointed out, the major obstacle in the teaching-learning process lies on the methodologies used in the classroom, in general, typical of traditional pedagogy, in which the teacher is the center of the teaching-learning process and the knowledge holder.

Given the need pointed out in previous studies for improvement in teaching-learning, we present the Fedathi Sequence methodology, which can help to overcome the difficulties in the teaching-learning process in basic education in Guinea-Bissau. This methodology becomes ideal to be tried out in the African reality, since it stimulates the students' involvement in the construction of their knowledge, placing the teacher as a mediator to manage the discussion around the content in the best possible way, thus making the class more active and less tiring for the students.

In this perspective, one understands that the reading of this article can guide the reader (an educational professional or not, a local authority or a researcher) to think and reflect on this methodological proposal that involves the students in the construction of their own knowledge from their participation in the discussion mediated by the teacher.

References

- Bezerra, A. M. S. (2015). *Inclusão digital: uma sistematização sobre a proposta metodológica do Laboratório de Pesquisa Multimeios (IDM) da FACED/UFC* (Dissertação de Mestrado). Programa de Pós-Grauduação em Educação Brasileira, Universidade Federal do Ceará, Fortaleza.
- Borges Neto, H. (2018). Apresentação. sequência Fedathi: fundamentos (Vol. 3). Curitiba, PR: CRV.
- Borges Neto, H., & Capelo Borges, S. (2007). As tecnologias digitais no desenvolvimento do raciocinio lógico. *Linhas Críticas*, *13*(24), 77-87. DOI: https://doi.org/10.26512/lc.v13i24.3344
- Cá, C. M. O. (2009). *A trajetoria dos quadros guineenses formados e em formação no Brasil, na visão de estudantes e profissionais de 3º grau* (Dissertação de Mestrado em Educação). Faculdade de Educação, Universidade Estadual de Campinas, Campinas.
- Cá, C. M. O. (2015). Formação feminina no Internato de Bor (1933-2011) na Guiné-Bissau: reflexos na educação da sociedade guineense contemporânea (Tese de Doutorado em Educação). Programa de Pós-Graduação em Educação, Universidade Federal do Ceará, Fortaleza.
- Cardoso, R. P. L. (2015). *MASF: modelo de referência para aplicação da sequência Fedathi na formação profissional na produção de conteúdo* (Tese de Doutorado). Programa de Pós-graduação em Educação Brasileira, Universidade Federal do Ceará, Fortaleza.
- Freire, P., & Guimarães, S. (2011). *A África ensinando a gente: Angola, Guiné-Bissau e São Tomé e Príncipe.* São Paulo, SP: Paz e Terra.
- Freire, P. (1978). Cartas à Guiné-Bissau: registros de uma experiência em processo (4a ed.). Rio de Janeiro, RJ:
- Lopes, C. (1982). Etnia, estado e relações de poder na Guiné-Bissau. Lisboa, PT: Ed. 70.
- Matos, F. C. C. (2013). *Uma análise da metodologia do Laboratório de Pesquisa Multimeios/FACED/UFC, utilizada na disciplina de Educação a Distância do Curso de Pedagogia* (Trabalho de Conclusão de Curso de Graduação em Pedagogia). Curso de Graduação em Pedagogia, Faculdade de Educação, Universidade Federal do Ceará, Fortaleza. Retrieved from http://www.repositorio.ufc.br/handle/riufc/27027

Menezes, D. B. (2018a). Solução. In H. Borges Neto (Org.), *Sequência Fedathi: fundamentos* (Vol. 3, p. 93-97). Curitiba, PR: CRV.

Menezes, D. B. (2018b). Prova. In H. Borges Neto (Org.), *Sequência Fedathi: fundamentos* (Vol. 3, p. 99-103). Curitiba, PR: CRV.

Pereira, L. T. (1976). Guiné-Bissau: 3 anos da independência. Lisboa, PT: Cidac.

Santana, A. C. S. (2018). Mão no bolso: postura, metodológia ou pedagogia? In H. Borges Neto (Org.), *Sequência Fedathi: fundamentos* (Vol. 3, p. 15-21). Curitiba, PR: CRV.

Silva, M. A. (2018). Tomada de posição. In H. Borges Neto (Org.), *Sequência Fedathi*: fundamentos (Vol. 3, p. 81-85) Curitiba, PR: CRV.

Teixeira, A. L. (2010). *Centros rurais de inclusão sócio-digital: uma (re) sistematização (*Trabalho de Conclusão de Curso de Graduação). Curso de Pedagogia, Faculdade de Educação, Universidade Federal do Ceará, Fortaleza.

Torres, A. L. M. M. (2014). Sobretecnologia, educação, formação e etnografia: a experiência do Laboratório de pesquisa Multimeios da Faculdade de Educação (UFC) (Tese de Doutorado em Educação). Faculdade de Educação, Universidade Federal do Ceará, Fortaleza. Retrieved from http://www.repositorio.ufc.br/handle/riufc/12756

Valente, J. A. & Almeida, F. J. (1997). Visão analítica da informática na educação no Brasil: A questão da formação do professor. *Revista Brasileira de Informática na Educação*, (1).

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