



# FLIPPED CLASSROOM IN TRAINING FOR NEW TEACHER OF THE ELEMENTARY SCHOOL

SALA DE AULA INVERTIDA NA FORMAÇÃO CONTINUADA DO PROFESSOR INGRESSANTE NA DOCÊNCIA DO ENSINO FUNDAMENTAL ANOS FINAIS

AULA INVERTIDA EM LA FORMACIÓN CONTINUA PARA MAESTRO QUE INGRESA EM LA DOCENCIA DE LA EDUCACIÓN BÁSICA



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ABSTRACT: This research is based on the premise that teaching is a challenge for graduates of different undergraduate courses. In this context, the main objective of this study was to analyze the results of continuing education using the active methodology—the flipped classroom for new teachers in the final years of elementary school. The qualitative approach and action research methodology were chosen. The study was conducted in a private education network located in Brasília (DF), with six new teachers in three schools. The following instruments were used for data collection: interviews, questionnaires, workshops, and focus groups. The results indicated that the continuing education program offers important pedagogical support for enriching classes. The conclusion of this study highlights how the program contributed to the performance of the teachers who participated in this research, indicating a change in perspective in the use and application of active methodology.

**KEYWORDS**: Continuing Education. Flipped Classroom. New Professor. Active Methodology.

RESUMO: Esta pesquisa parte da premissa de que o exercício da docência é um desafio para os egressos dos diferentes cursos de licenciatura. Nesse contexto, elegeu-se como objetivo principal deste estudo analisar os resultados da formação continuada com o uso da metodologia ativa — sala de aula invertida — para docentes iniciantes no ensino fundamental, anos finais. Optou-se pelo uso da abordagem qualitativa e pela metodologia de investigação-ação. O estudo foi realizado em uma rede de educação privada, situada em Brasília (DF), com seis docentes ingressantes, em três colégios. Foram utilizados os seguintes instrumentos para a coleta de dados: entrevista, questionário, oficinas e grupo focal. Os resultados apontaram que o programa de formação continuada oferece um importante apoio pedagógico para o enriquecimento das aulas. A conclusão deste estudo destaca como o programa contribuiu para a atuação dos professores que participaram desta pesquisa, evidenciando uma mudança de perspectiva no uso e na aplicação da metodologia ativa.

**PALAVRAS-CHAVE**: Formação Continuada. Professor Ingressante. Metodologia Ativa. Sala de Aula Invertida.

RESUMEN: Esta investigación se basa en la premisa de que la docencia es un desafío para los graduados de diferentes carreras de grado. En este contexto, el objetivo principal de este estudio fue analizar los resultados de la formación continua con el uso de la metodología activa (aula invertida) para docentes principiantes en los últimos años de la educación primaria. Se optó por el enfoque cualitativo y la metodología de investigación-acción. El estudio se llevó a cabo en una red educativa privada ubicada en Brasilia (DF), con seis docentes nuevos, en tres escuelas. Los instrumentos para la recolección de datos fueron: entrevistas, cuestionarios, talleres y grupos focales. Los resultados indicaron que el programa de formación continua ofrece un importante apoyo pedagógico para enriquecer las clases. La conclusión de este estudio destaca cómo el programa contribuyó al desempeño de los docentes que participaron en esta investigación, indicando un cambio de perspectiva en el uso y la aplicación de la metodología activa.

**PALABRAS CLAVE**: Aula Invertida. Educación Continua. Profesor Principiante. Metodología activa.

#### Introduction

The continuing education of teachers is a necessity for novice educators, as the gap between academic knowledge and pedagogical practices in daily school life is evident in the performance of beginning teachers. Garcia (1999) highlights that the early stage of the teaching career is a delicate phase, as it represents a period of transition from student to teacher. This change interferes with professional development, since it can generate insecurity due to the lack of specific knowledge required for didactic actions.

In this context, this research seeks to focus on the need for continuing education in the educational field as an ongoing and permanent process, with the intention of ensuring teachers receive the necessary support and guidance at the start of their journey. Placco and Almeida (2021) emphasize that the pedagogical coordinator is primarily responsible for providing pedagogical support so that teachers may develop and perform efficiently in the teaching and learning process of students.

Given this, the following question arises: What are the effects of continuing education in the flipped classroom methodology for novice teachers in upper elementary school? With the continuing education program in innovative methodology, especially the flipped classroom, there will be an opportunity for beginning teachers to receive support to initiate differentiated and qualitative work, with greater theoretical knowledge and increased confidence in practice. This may lead to improved results through interaction with their students, leaving behind apparent methodological passivity and replacing it with active practice, even in the face of pedagogical inexperience resulting from limited teaching time.

For the development of this research, the general objective was to analyze the results of a continuing education program in active methodology for novice teachers. Specifically, the objectives were: to analyze beginning teachers' perceptions regarding the importance of learning strategies; and to outline the repercussions of the results of the theoretical-practical workshop as continuing education for novice teachers. In this direction, this research adopted a qualitative approach, within the action-research framework, which aligned with the purpose of the study, carried out in a network of private schools located in Brasília (DF).

The research was conducted in three schools, with six novice teachers, five of whom participated in all stages, while one teacher joined starting from the workshop. To conduct the study, information was gathered through interviews, questionnaires, workshops, and focus groups, and data analysis was carried out using the WebQDA software, categorizing responses according to the themes identified in participants' discourse.

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This study holds significant academic and scientific relevance, both for novice teachers and the pedagogical team, as well as for education researchers interested in studying themes such as teacher training, continuing education, in-service training, and the application of active methodologies.

## **Continuing education of novice teachers**

When considering novice teachers, the concern intensifies, as the academic training offered in undergraduate programs, which serves as initial teacher education, does not guarantee consistent theoretical and practical preparation. Often, this is due to the curriculum or the adopted education system. As a result, many graduates leave university unprepared to work and assist students in the classroom. According to (2008), teacher education was reduced to one among many fragmented qualifications, resulting in precarious conditions.

In this sense, welcoming a novice teacher into the school is a situation that requires greater attention from management regarding support, frequent guidance, and, without a doubt, constant pedagogical training, that is, in-service training. This support is indispensable for the novice teacher to develop in the practice of teaching, making the start of the career less traumatic and positively strengthening graduates' classroom experience.

Romanowski (2007) warns that newly graduated teachers are often shocked by the reality they face in schools and that it is necessary for them to be supported by continuing education programs offered by pedagogical management. However, such opportunities are scarce, which renders the teacher's permanence unstable to the point of considering resignation.

Pereira (2011, p. 69, our translation) highlights that "teaching, therefore, is a complex activity, because the reality in which the teacher operates is dynamic, conflictual, unpredictable, and presents unique problems that require particular solutions." This complexity demands a mobilization of knowledge to fulfill the purpose of education, which is the development of diverse capacities—cognitive, affective, physical, ethical, aesthetic, social integration, and interpersonal relations—of students, achieved through the construction of knowledge. According to Gatti and Nunes (2010), teacher education requires a true revolution in institutional structures and curricula. Numerous amendments already exist, and the fragmentation of training is evident. It is necessary to integrate this education into articulated curricula focused on this primary objective.

To ensure the provision of continuing education for teachers, the Law of Guidelines and Bases of National Education no. 9.394/96 (Brasil, 1996), in item II of article 67, states that

"education systems shall promote continued professional development, including paid periodic leave for this purpose." In this regard, continuing education becomes an ally in the professional development of teachers throughout their careers.

The Ministry of Education (MEC), in 1990, created the Fund for the Maintenance and Development of Elementary Education and the Valorization of the Teaching Profession, which was later expanded into the Fund for the Maintenance and Development of Basic Education and the Valorization of Education Professionals, with the main objective of using resources for the training and professional development of in-service teachers (Davis et al., 2012). Gatti et al. (2008, p. 64, our translation) explain that "the creation of these funds offered, for the first time in the educational history of the country, legal support for the systematic financing of inservice teacher training courses for non-qualified teachers working in public networks." This also leads private institutions to take a stance regarding their teachers' training, seeking to invest in continuing education.

The professional qualification of the teaching staff becomes a differentiating factor in achieving results with students. Investing in teachers is, therefore, investing in the academic growth of the institution/school. According to Saviani (2008), continuing education should not be limited to seeking solutions for specific classroom problems, but should also contribute to enabling teachers to move beyond a compartmentalized view of school activities and analyze social events, promoting their transformation, which will then be transmitted to students as a lifestyle. Thus, each teacher must commit to contributing their knowledge to the structural transformation of society (Saviani, 2008). The teacher not only provides social practice but also seeks to qualitatively change the practice of their students, who act as agents of social transformation.

In Freire's (1997, p. 25, our translation) conception, teacher education can be seen as: "those who teach, learn by teaching, and those who learn, teach by learning. There is no teaching without research and no research without teaching. [...] I research to know what I do not yet know and to communicate or announce the novelty."

This reflection by Freire (1997) presents the teaching profession as a lifestyle of continuous learning, in which teachers perpetuate themselves through learning and constructing their knowledge. Thus, in a context where technology permeates the world of work in general, requiring teachers to develop not only technological skills but also a reflective profile, continuing education becomes a sine qua non condition for their survival in the school

environment, since students entering school are usually individuals accustomed to the digital world and, at school, expect more from their teachers.

In line with the school's responsibility for continuing education, aiming to support teachers in practicing in harmony with the current global context and with the purpose of preparing students for a critical reading of the world, it is essential that universities and schools strengthen their partnerships, offering future teachers, during their undergraduate studies, the opportunity to experience pedagogical practices in schools and, once graduated, that universities provide extension and professional development courses so that these recent graduates may continue their learning journey. This would minimize the insecurity and expectations that often distress novice teachers when taking on the role of teaching.

Considering initial training, internships are important means to meet the demand for practical training of novice teachers, as emphasized by Libâneo (2001, p. 192, our translation): "from the moment students enter the program, it is necessary to integrate the contents of the subjects into practical situations that pose problems for future teachers and enable them to experiment with solutions, with the help of theory." This practice of exchanging experiences during the program will allow future teachers to experience the realities they will face in the classroom. Thus, teacher education must be offered with intentionality, since the guidance provided will shape the type of teacher profile to be trained and the type of school to be built through teaching practice.

Silva (2011, p. 100) describes a new model of teaching as a "practical-reflective" model, characterized as a continuous and permanent process of development for both teacher and student. Initial and continuing education are conceived in an "inter-articulated" way, where initial training corresponds to the learning period in undergraduate studies, and continuing education refers to teacher training in practice, through actions inside and outside schools, being defined by MEC as permanent education. In this way, transformations and the enhancement of knowledge and citizenship building may occur through the education system.

To support the novice teachers participating in this research, a continuing education program using the active method of the flipped classroom was proposed. The proposed method aims at the pedagogical development of teachers, their personal growth, and methodological preparation for the application of innovations in teaching practices. Thus, in addition to fostering critical thinking in the pursuit of learning and teaching, this two-way approach will enable the teacher to act as a mediator and the student to become the protagonist of their learning.

The following section presents the contributions regarding the importance of the active

method for teaching experience, as well as possible improvements in the teaching-learning processes.

**Active Method: Flipped Classroom** 

One of the primary objectives of the flipped classroom is for the student to engage with the proposed content independently, so they can take ownership of knowledge on their own. This allows them to reflect and participate actively in subsequent classes, expressing their knowledge, even if only conceptually at first. Thus, in the classroom, they will be able to take part in discussions on the topic.

Valente et al. (2018) describe how it is possible to explore students' skills while using the methodology. Talbert (2017) reinforces this by stating that flipped learning goes beyond a pedagogical technique: it is a teaching philosophy that encompasses course design, pedagogical practices, and professional engagement.

The flipped classroom encompasses stages of practical development, knowledge acquisition, and the development of various skills by students. The didactic sequence to be followed in this method contributes to the development of innovative practices by teachers who wish to expand the way they transmit content to students. Both teacher and student need to be aware of the steps to be followed before starting the lesson. It is important that there be a detailed explanation of the process of applying the method, from beginning to end, to ensure better understanding and to provide an engaging and productive practice for all involved in the teaching-learning process.

Figure 1 presents the seven principles to be addressed in the application of the method.

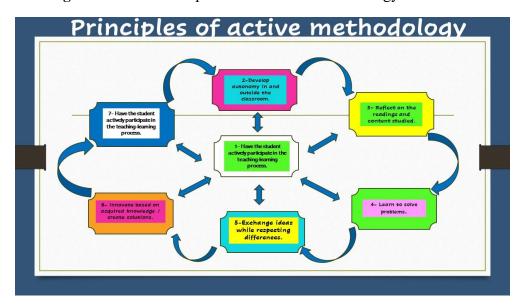


Figure 1: Seven Principles of the Active Methodology

Source: elaborated by the authors, based on the seven basic principles of Diesel, Santos Baldez, and Neumann Martins (2017).

Active learning encompasses these seven principles that strengthen knowledge retention in any content to be explored with students. Diesel, Santos Baldez, and Neumann Martins (2017) state that the seven principles allow teachers to recognize students as the center of the learning process. These principles promote the practice of autonomy, enable students to problematize reality and seek solutions, as well as encourage critical reflection on the topic under study, teamwork, and respect for differences. According to the authors, these principles create opportunities for innovation and production during the learning process. In this way, the teacher acts as a mediator, facilitator, and activator of learning, considering the student's protagonism and providing the opportunity to live, act, and grow alongside peers. Thus, all areas of knowledge can benefit from active methods so that students may learn in a meaningful way.

According to Schmitz (2016), when planning the lesson, teachers must consider the skills and the content they intend to work on with students. In addition, it is important to structure the material students will study to understand the concepts contained in it. This material may be printed or made available in an online environment, allowing students to access the content at their own pace and as many times as they deem necessary before the continuation of the proposed lesson. Teachers must select in advance the materials they wish to provide to students to introduce the content of the class.

Schmitz (2016) further emphasizes that the activities carried out by students before class enable the development of cognitive skills, focusing on the basic levels of Bloom's taxonomy

(Anderson et al., 2013), which include remembering and understanding the subject indicated for preparation and knowledge of the content to be deepened in class. At this stage of the proposal, the student engages in prior reading to acquire fundamental information, which will assist them in participating in the subsequent stages in the classroom.

The following are the steps for applying the flipped classroom method:

- 1. The teacher provides material for prior study. Participants, individually, study the material at home, preparing themselves to continue and deepen their knowledge in the upcoming class steps;
- 2. In the classroom, students participate individually to explain the content studied at home, making them the protagonists of the knowledge previously acquired;
- 3. In the classroom, students, in teams, receive challenges to solve. At this moment, different perspectives on the subject under study are combined; through dialogue, they reach the answer that best addresses the challenge proposed by the teacher, which intentionally demands from students an in-depth, coherent, and detailed understanding of the study carried out by all;
- 4. Collective reflections take place with the mediating participation of the teacher and students who wish to contribute. At this step, all conclusions are shared by the groups, and the teacher adds information, corrects misconceptions, and listens to the students to intentionally guide the class toward a conclusive and assertive outcome in the process of knowledge acquisition through active practice;
- 5. The mediator evaluates the participation and encourages students to continue researching in order to gain more knowledge about the subject relevant to the lesson conducted.

The didactic sequence of the lesson includes individual study, collective participation, reflective actions, and activities that help develop socio-emotional life, creativity, oral skills, and writing. The focus is on the active development of the student, with both individual and collective participation, enabling exchanges among peers and the mediation of the teacher, who guides each step of the teaching-learning process.

Thus, the methodology is applied, bringing life to the lesson, since everyone can participate in the process and, in this format, have the opportunity to acquire new knowledge shared by peers and the teacher. The number of steps will depend on the amount of content and the creativity of the teacher to achieve the objectives previously set for the lessons

For Freire (2008), all schools must always provide space for the development of critical knowledge as a tool for the construction of reality. The thinking being is, for the author, by essence, a being of freedom.

The following are the steps for carrying out and applying the continuing education program using the flipped classroom method, aimed at novice teachers in the final years of elementary school. The entire process was developed in collaboration with the teachers participating in this research.

## Research Methodology

For this study, a qualitative research approach was chosen, specifically action research, since this approach allows the participation of those involved and provides answers that are neither unique nor definitive. Its purpose is to apply and analyze the results of the continuing education program in practice with the novice teachers participating in the research, who have the opportunity to analyze their own educational practices in a systematic and in-depth manner. Elliot and Church (1993) define action research as the study of a social situation with the aim of improving the quality of action in society. Gonçalves (2013) characterizes actionintervention as consisting of the phases of planning, action, observation, and reflection. These stages were followed in this study.

In addition to bibliographic research, the practical part was previously organized in stages, carried out throughout the research process, as described below:

1st Stage: definition and development of instruments for implementing the research;

2nd Stage: individual interview with teachers and creation of the program based on the interviews;

3rd Stage: theoretical workshop for training teachers in active methodology;

4th Stage: practical implementation by the teacher, in their classroom, of the flipped classroom methodology;

5th Stage: teachers' responses to questionnaires;

6th Stage: focus group—collective reflection with the novice teachers who participated in the study.

In this article, the research topics related to active methodology were emphasized in order to present teachers' perceptions of the use and results of the flipped classroom method as a practice of continuing in-service training.

The analysis of the results was carried out using the Webqda software, which contributed to the organization, coding, and categorization of the data, up to their structural and interpretive cross-analysis (Neri; Neri, 2010).

## **Results and Analysis**

The teachers participating in the research signed a free and informed consent form and were referred to in the study as D1, D2, D3, D4, D5, and D6, in order to preserve their identities. In the course of the research, the novice teachers took part in a continuing education program in the form of a theoretical-practical workshop on active methodology.

In order to frame teachers' perceptions, the responses before and after the implementation of the training program were categorized via Webqda as follows:



Figure 2: Categorization of teachers' perception of active methodology

Source: elaborated by the authors using Webqda software.

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Before the implementation of the practical training workshop, a diagnostic assessment was conducted through individual interviews in order to identify teachers' prior knowledge of active methodology and formative assessment, topics fundamental to daily teaching practice. The following presents the content and analysis of the interviews, which constitute the first step of the continuing education program for the teachers participating in this research.

The interview responses were key to analyzing the teachers' prior knowledge and properly preparing the training program to meet their pedagogical needs. To better elucidate the methodologies known and used by novice teachers, they were asked which methods they were familiar with and applied in the classroom.

The teachers' responses revealed the basis of their prior knowledge regarding active methodology and showed that it was minimally related to the practice of active methodology and its principles, as they only described what they knew about the subject. Based on their responses, it was evident that there was a lack of knowledge about active methods, and only the

resources used to make lessons more dynamic were mentioned. For a method to be considered active, there must be planning, sequential steps, and execution following the principles that define teaching with active methodology. In this sense, it was observed that teachers still work in a traditional manner, even though the resources they use differ, reflecting, for the most part, what they learned from their teachers—that is, knowledge acquired through experience.

According to Nóvoa (1995, p. 25, our translation), "the teacher needs to feel the necessity to adapt to what the school and education require in order to develop critical and reflective students, so that the teacher's practice goes beyond the knowledge acquired in undergraduate training," which is a virtue of great utility for the quality of classroom work. Nóvoa (1995) significantly contributes to reflections on learning and teaching in a manner appropriate to students' needs at each moment; every day is an opportunity and time to start anew.

Following the interviews, a theoretical-practical workshop was offered to implement the proposed active methodology, the flipped classroom, for the novice teachers participating in this research. The workshop was conducted online, combining active methodology practice with decisions on what to provide students before, during, and after class, in the stages that make active methodology meaningful. During the workshop, the planned steps were applied, enriched with dialogues about the pedagogical experiences lived by participants, which contributed to the informational advancement that teacher training provides. This strengthened the dynamics with information relevant to the practice, offering teachers the opportunity to develop and acquire skills to continue their activities after participating in the theoretical-practical workshop on active methodology.

Novice teachers, through experiencing the flipped classroom methodology, demonstrated great interest in learning and working in an active context. They were motivated and engaged, showing enthusiasm in mastering the method to apply it in their lessons with students.

#### **Teacher Practice After the Workshop**

For the practice of the flipped classroom methodology, teachers developed individual lesson plans following the guidance received during the workshop. They applied the method with their students, aware that there would be a follow-up to exchange further experiences.

To implement the flipped classroom proposed in the workshop, each teacher selected content from their discipline to apply throughout the term. During this opportunity, they

observed, experienced, and learned from the methodology, providing students with new practices that promote meaningful, interactive, and creative learning.

To gather information on teachers' experiences with the methodology, a third meeting with the participants was scheduled. Inspired by the workshop offered and the observations made during classroom implementation, a meeting was held to exchange information relevant to the continuing education process of novice teachers, focusing on active methodology, especially the application of the flipped classroom. This meeting constituted the Focus Group proposed in this action-research study.

This Focus Group allowed for assessing the impacts and outcomes of the theoreticalpractical workshop offered in the continuing education program for novice teachers. In addition, it confirmed that an active method prepares students for greater challenges, both academically and personally/professionally.

Following the focus group, as part of the ongoing action-research process, an individual questionnaire was administered to obtain meaningful information about these experiences, aiming to assess teachers' perceptions of the application of the flipped classroom method with their students.

Thus, based on the categories structured and presented in Figure 2, it is possible to outline teachers' perceptions regarding the use of active methodology: the flipped classroom.

Category: Main Learning About the Active Method

The responses of the participating teachers that comprised this category were remarkable, as they contrasted sharply with the interviews conducted prior to the workshop, when answers demonstrated little knowledge of active methodology, its terminology, and strategies. After participating in the workshop, their perceptions translated into a motivating discourse, showing understanding of the flipped classroom and a willingness to work with new approaches without resistance. For example, D5 stated: "I believe the activities have great potential, especially to make teaching more collaborative and student-centered. [...] It is essential that we are prepared to guide and support students in this process [...]."

The teachers' responses support Tardif's (2005) premise, which presents the ideal teacher as one who must know their subject, discipline, and program, as well as possess knowledge related to educational sciences and pedagogy. In this sense, it is fundamental that they develop practical knowledge based on experience; if they do not possess it, opportunities

must be provided for them to develop it.

Category: Feelings During the Active Methodology Workshop

Throughout the workshop, the intention was to awaken in novice teachers the desire to

learn increasingly about innovative teaching methods, providing them with the opportunity to

develop professionally in a qualitative manner by applying content creatively in the classroom.

Participants experienced positive feelings regarding the practice of the method, as well

as pleasant emotions related to the learning acquired, both for themselves and for their students.

The responses revealed the beneficial effect that the proposed training program brought to the

participating teachers.

In summary, the responses expressed emotions such as joy at seeing students engaged,

concern with new approaches, happiness with the results, optimism mixed with apprehension,

satisfaction with students' productivity, and a sense of conceptual innovation as a teacher.

From these perceptions, the need emerges to continue encouraging young teachers to

prepare to support their colleagues, demonstrating that education needs them. In this way, it is

possible to contribute to transforming the negative perception that often surrounds the teaching

profession.

Category: Actions to Ensure New Learning

Regarding this category, the participants' responses indicated a perception of

assertiveness, suggesting that the methodology can ensure learning through understanding what

the flipped classroom truly entails and its potential to make students protagonists of their

learning process.

To ensure new learning in the face of challenges, teachers highlighted the importance

of persisting in learning and practicing the method until mastery is achieved. They emphasized

the need to test new tools, exchange experiences through dialogue with more experienced

teachers, and ensure that students are well guided, revisiting previously offered and acquired

learning.

In this training, teachers attentively embraced the new approach. When responding to

questions, they consistently emphasized reflection on the continuation of this new focus, aiming

to engage other educators and expand pedagogical practices. Thus, teachers' discourse

demonstrates the importance of novice teachers continuing their preparation for classroom

practice so that they can act confidently and intentionally.

The pursuit of professional development must be both the initiative of the teacher, seeking autonomous knowledge, and an effort by the educational institution. For professional improvement to occur, Alarcão (1996, p. 18, our translation) states that the "teacher must assume a stance of self-directed and autonomous engagement, must discover the potential within themselves, must retrieve from their past what they already know and are, and upon this, build their present [...]."

Category: Teacher Perception in the Practice of the Active Method with Students

In this category, teachers' responses demonstrated that continuing education can provide novice teachers with recognition of the need for more methodological knowledge. A wellimplemented method not only enriches learning but also generates experiences that open new opportunities and foster effective practices. This makes the work of the coordinator, together with the pedagogical team, more meaningful and motivates them to strive for qualitative education, aiming to improve teachers' pedagogical practice with students.

Participants' statements highlighted motivation to learn, expand knowledge, and innovate in methodological approaches. Experiencing the flipped classroom awakened an understanding that pedagogical practice based on active methodology is an effective path, as exemplified by D2: "gaining a deeper understanding of the flipped classroom means realizing that this method is not limited to simply inverting 'homework' and 'class.' It is about allowing students to explore, discuss, and come to class prepared for deeper debates and critical analyses."

Category: Importance of the Active Strategy

Teachers reported a shift in perception: the lesson model and assessment tools, which were previously teacher-centered, became focused on the students' engagement with the curriculum. Teachers noticed student autonomy and the importance of this involvement in the teaching-learning process, in which students act under guidance, achieving significant results in the retention and application of knowledge acquired through this active and innovative format.

All participants stated that using the methodology brought benefits to both the lessons and the daily practice of teaching, resulting primarily in improvements in student participation and motivation regarding the studied content. In this context, the responses indicated the effectiveness of the active model, as students participate in the knowledge acquisition process intentionally, with greater capacity for individual reflection and collective participation.

The responses for this category highlighted: the student as an active participant; the importance of working differently; encouragement for students to contribute new ideas; the visible independence of students; and notably more productive learning.

From these categories, the perception of the participating teachers, the importance of the pedagogical team's assertiveness was evident in understanding the teachers' daily needs and what they wish to learn within methodological possibilities, so that they can continue practicing in the classroom and, consequently, provide students with greater opportunities to develop competencies and skills.

#### **Final considerations**

In the context of continuing education and the practice of active methodology in the classroom, novice teachers were challenged to experience the active method and apply it with students, a process that led them to perceive significant changes in teaching and learning.

They recognized that new knowledge is necessary to modify the educational environment and that it is possible to improve deeply rooted (traditional) practices. Awareness of alternative teaching approaches sparked in them the desire to continue studying the use of innovative methodologies. According to the information gathered during the continuing education program with the research participants, teachers realized that training is essential, as it provides professional preparation and broadens their perspective on students' learning capacities.

From this experience, it is clear that educational institutions must maintain attentive oversight of new teachers and commit to offering continuing education, increasing the frequency of these opportunities until an autonomous team is formed, capable of implementing meaningful practices in the teaching process.

It is essential that continuing education be present from the beginning of a teacher's career to support the acquisition of new learning and provide guidance throughout the process, especially when facing the inherent challenges of the profession.

The reflections presented here are far from closing the discussion on continuing education for novice teachers; they represent only a starting point for new possibilities for training and strengthening the pedagogical team.

It is expected that this program, as presented, has sparked interest and reinforced the understanding that the path of pedagogical practices requires dedication, knowledge, creativity, reflection, patience, and love for others, especially for students in formation.

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