CONTINUING EDUCATION OF TEACHERS FOR THE USE OF ACTIVE TECHNOLOGIES AND METHODOLOGIES: AN ON-SITE EXPERIENCE IN PUBLIC SCHOOLS

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ABSTRACT

This article derives from an empirical research conducted in a Professional Master's Degree in the area of New Digital Technologies in Education in an educational scenario transformed by the post-pandemic period where pedagogical practices demand adaptations to new school realities. The research seeks to investigate, through a qualitative approach with data collection through questionnaires and focus group, how teachers of Elementary School I of a Public School in the Municipality of Rio de Janeiro, can be trained for the use of Digital Information and Communication Technologies and Active Methodologies. The objective is to develop continuing education that personalizes teaching, making classes more dynamic and interactive, promoting critical reflections, engagement and protagonism of students. The study highlights the importance of aligning these practices with the curriculum, the needs of the classes and the Pedagogical Political Project, ensuring coherent integration and avoiding isolated actions. In addition, it examines the factors that influence the adoption or resistance of teachers in relation to the use of these methodologies and evaluates the impacts perceived in the teaching-learning process of fifth grade students. Among some results we found the lack of institutional support, the available training does not meet the real demands of teachers to work in the school routine; the need for a more detailed teacher planning and the difficulty of teachers to appropriate more technological resources, among others.

Keywords: Teacher Training. Active Methodologies. Technology in Education.

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INTRODUCTION

This study originates from a professional concern related to the challenges inherent to teacher training in the context of constant technological transformations in education. The research seeks to understand how these changes impact the training processes of teachers, requiring methodological and conceptual adaptations that favor a pedagogical practice aligned with the contemporary demands of teaching.

The COVID-19 pandemic has brought an intensification in the use of the internet, especially through mobile technologies, as a response to the requirements imposed by social isolation. This emergency scenario resulted in the implementation of remote work and online teaching models, exposing, however, significant limitations in preparing to face this new reality. Among the challenges identified, the absence of specific teacher training for remote teaching and the insufficiency of technological resources, such as devices and internet access, which directly impacted the adaptation of teachers, stand out. During the pandemic period, educators faced uncertainty when adjusting their practices to the new curriculum guidelines, often turning to social media to preserve the bond with students and families.

With the gradual resumption of face-to-face classes, which began in August 2021, combined with the introduction of hybrid teaching models, efforts were made to integrate digital technologies into pedagogical practices, with the aim of making classes more interactive and dynamic. Despite these advances, barriers persist in the effective use of technological tools by the teaching staff, often related to insufficient initial training, scarcity of continuing education programs, and limitations in access to technological resources in schools. Recognizing this reality, it is essential to implement strategies that enhance the digital technological mastery of teachers, promoting a coherent integration of technologies into the teaching-learning process.

In the context of the Municipal Public Schools of Rio de Janeiro, there is a pressing need for the training of teachers of the Early Years (Elementary School I), including those who work in classes of 6th grade Carioca (Elementary School II), classes that are allocated in institutions predominantly focused on Elementary I. In this context, the proposal of a Continuing Education gains prominence, aiming at the incorporation of Active Methodologies and Digital Information and Communication Technologies (DICT) in teaching practices, stimulating reflections and initiatives that promote the protagonism of students in the educational process.

THEORETICAL FRAMEWORK – THE DIGITAL AGE, EDUCATION AND TEACHER TRAINING

The technological era has profoundly transformed both daily life and the educational field, highlighting the need for teacher training specialized in the use of technologies. The COVID-19 pandemic context has accelerated the adoption of technological resources, especially among the so-called digital natives (Prensky, 2001), highlighting the importance of overcoming barriers related to access and intentional use of Digital Information and Communication Technologies (DICT) and Active Methodologies.

The development of pedagogical projects that incorporate active methodologies and the use of DICTs have proven to be an effective strategy to promote interdisciplinarity in the school environment. This approach allows students to experience learning processes that are more connected to each other, expanding the meaning of the content worked on (BACICH, 2018; MORAN, 2018; TREVISANI, 2015; MORAN, 2018). By favoring the articulation between different areas of knowledge and using technologies as mediation tools, a space is created where the student assumes a more participatory role, building knowledge in a contextualized way (VALENTE, 2011). In addition, educational projects act as bridges between the curriculum and the interests of the students, allowing a more critical, dynamic pedagogical practice that is closer to the reality of the learners (HERNÁNDEZ, 1998).

These tools are essential to make pedagogical practices more interactive and dynamic, promoting learning in line with contemporary demands.

Buckingham (2022) stresses the relevance of training critical subjects in the face of the media, highlighting that media literacy must be integrated with active methodologies that promote the active participation of students in the learning process. Corroborating the author's idea, when these practices are articulated with well-defined educational objectives, they contribute significantly to the development of collaboration, creativity and critical thinking, favoring a more engaged and meaningful pedagogical approach.

The National Digital Education Policy (PNED), instituted by Law No. 14,533/2023, of January 11, 2023, based on the articulation between programs and projects between various federated entities, seeks to enhance the Brazilian population's access to digital resources and practices.

This policy is structured around four fundamental axes: i) Digital Inclusion, which aims to democratize access to technological tools and promote digital literacy; ii) School Digital Education, which integrates the teaching of digital skills into the curriculum, ranging from digital literacy to advanced knowledge such as programming and robotics; iii) Digital

Training and Specialization, aimed at professional qualification to meet the demands of the digital market, including immersion programs and technological certification; and iiii) Research and Development (R&D) in Information and Communication Technologies (ICTs), which encourages innovation and scientific production to strengthen the sector's competitiveness and digital inclusion.

In this way, the PNED consolidates itself as a strategic instrument for the digital development of the country, promoting the autonomous and productive use of technologies by society.

According to Moran (2019), active methodologies play a fundamental role in the reconfiguration of teaching and learning processes, influencing the school structure, the organization of educational spaces, curriculum evaluation methods, and certification systems. However, many institutions are still in the early stages of implementation, adopting these methodologies in a timely manner and dependent on the initiative of professors and managers, without a consolidated institutional alignment. On the other hand, some schools already have more structured practices, integrating projects, investigations, problem solving, digital narratives, and maker culture into their pedagogical approaches. There are also institutions that promote a deeper transformation, reorganizing the curriculum based on projects and competencies, making spaces more flexible, and incorporating active methodologies as central elements of the educational process.

The National Common Curriculum Base (BNCC) also emphasizes the central role of Digital Information and Communication Technologies (DICT) in education, recommending their integration into teaching with pedagogical intentionality. This process aims to develop skills such as creativity, critical thinking and student protagonism . However, for teachers to be able to implement these practices effectively, it is necessary that continuing education takes place in institutional contexts that favor innovation and reflections on the use of technologies. As highlighted by Imbernón (2009), lasting educational changes need to emerge from receptive and collaborative environments, capable of sustaining the necessary transformations.

Projects based on active methodologies and the use of DICT have shown potential to strengthen interdisciplinarity, offering students more integrated and meaningful educational experiences, (BACICH: MORAN; TREVISANI, 2028). Thus, teacher training aimed at Elementary School professionals can promote exchanges between peers and consolidate innovative pedagogical practices, contributing to a more inclusive and student-centered education in the digital age.

In addition, the proposal for teacher training assumes a strategic relevance by fostering the integration of active methodologies and digital technologies into the daily routine of classes. Such an initiative not only promotes the exchange of experiences and knowledge among teachers, but also enables the development of transformative pedagogical practices. According to Masetto (2012), innovative projects have the ability to unite teaching and research, stimulate interdisciplinarity and develop skills that integrate ethical, professional and citizenship values.

By addressing the challenges encountered in educational practice and in the literature on teacher education, this study seeks to contribute to the development of more robust educational policies and programs, capable of training teachers to face the demands of the digital age. In this way, it aims to promote an innovative, inclusive education centered on the protagonism of students.

Continuing Education plays an essential role in the qualification of educators, preparing them with indispensable skills and abilities to face the pedagogical challenges of today's education. This study proposes to involve teachers in a continuing education program aimed at the gradual and conscious use of digital technologies in the school environment, promoting the updating of pedagogical practices and the implementation of innovative approaches, aligned with the needs of contemporary students.

The suggested training model aims to foster the exchange of knowledge among teachers, encouraging the personalization of teaching and the design of interactive and dynamic classes. Through the adoption of active methodologies integrated with the use of digital technologies, it seeks to enable the creation of more engaging pedagogical strategies, capable of stimulating critical thinking, student autonomy and the practical application of the knowledge acquired.

Additionally, continuing education aims to build learning environments that promote student engagement and co-creation, positioning them as protagonists of the educational process. In place of the traditionally passive role, students are encouraged to act actively, contributing with ideas, reflections and solutions, thus developing crucial skills for the 21st century, such as creativity, collaboration and problem-solving skills.

By adopting a gradual and structured approach to the use of digital technologies, the training seeks to empower educators with greater confidence and preparation to integrate these tools into their pedagogical practices. Consequently, the impacts on students are amplified, contributing to the continuous advancement of education and the strengthening of innovative and transformative pedagogical practices.

METHODOLOGY

The research has as its main objective the Teacher Training for the use of Digital Technologies in the process of co-creation of teaching and learning. Several aspects were considered for the implementation of the study, including the choice of the target audience, the objectives to be achieved, and the possibility of adjustments in the methodological path to meet the demands of the research.

The selected field of application was a Municipal School of Rio de Janeiro, located in the West Zone, which operates in two shifts and serves students from the 1st to the 6th grade of Carioca. The choice of the school unit was due to its accessible structure and experienced faculty, composed mostly of PII[4] and PI[5] teachers, which makes the place suitable to explore pedagogical practices related to Digital Information and Communication Technologies (DICT) and active methodologies.

The research is characterized as exploratory, with a qualitative approach, and uses semi-structured questionnaires and Focus Groups (FG) for data collection and preparation of the Didactic Sequence, and an *e-book* based on a schedule of the Trainings that were applied to the participating teachers, with the objective of improving the pedagogical use through digital technologies and active methodologies.

Six teachers participated in the study: two from the 6th grade, two from the 5th grade and two from the resource room , with diverse experience and ties to the school unit. Adherence was voluntary, after presentation of the proposal in a meeting with the school team and signing of the Informed Consent Form (ICF) and the Image and Voice Term, ensuring informed consent.

The focus of the research is on the continuing education of teachers *in loco*, aiming at professional development and positive impact on pedagogical practice and student learning. It is hoped that the results obtained will allow teachers to apply more meaningful and innovative practices.

The methodological path included the preparation of the Research Project for its submission to the Ethics Committee, the presentation of the Research proposal to the School Team, invitation to participants via *WhatsApp*, sending materials such as *online*

[4] PII - Teacher II - Composed of teachers with high school education, with a working day of twenty-two hours and thirty minutes per week. Made up of teachers qualified to carry out their professional activities from pre-school to the fourth grade of the first grade.
[5] PI – Teacher I – Made up of teachers qualified to carry out their professional activities from the fifth to the eighth grade of the first grade, provided that they are registered with the Ministry of Education for the Teaching of subjects in this segment, with a workload of sixteen hours per week.

forms, holding the Focus Group (FG) and elaboration of the Didactic Sequence (SD), an *e-book* (ISBN 978-65-00-97562-8) with methodological aspects of the Training, creation of training schedules and *slides* through *Canva,* application of Continuing Education and final evaluation of the activities by the teachers involved.

Image: Stages of the technological path of Research

Source: Author herself (2025)

DATA ANALYSIS

The analysis of the data in this research was carried out based on a descriptive approach, which covers the interpretation of open and closed questions collected through *Google Forms*. These forms served as the main instrument for obtaining data, allowing a systematic organization of the information provided by the participants.

The table prepared below clearly and objectively exposes data collected from the diagnosis that the teachers answered:

Chart 1: Description of the Diagnosis questionnaire sent to the teachers:

Category	Subcategory	Information
Participation	Number of invited teachers	9 teachers
	Did not participate	1 did not accept, 1 sick leave (answered), 1 works in another unit (answered)
	Participated in the focus group	6 - 2 from 6th grade carioca, 2 from 5th grade, 2 from resource room
Age group	Gender that identifies with each other	Female
	41 to 50 years old	2 teachers
	51 to 60 years old	3 teachers
	61 to 70 years old	3 teachers

Education	Higher Level	All have higher education
	Degree in Pedagogy	7 teachers
	Degree in Letters/Literature	1 teacher
	Pedagogy and Visual Arts	1 teacher
Specialization	Number of teachers with specialization	6 teachers
	Areas	Textual and Linguistic Production, Psychopedagogy (3), School Administration, Educational Management
Time in Teaching	26 to 30 years old	2 teachers
	21 to 25 years old	5 teachers
	11 to 15 years	1 teacher
Two Enrollments	It has two license plates	Only 1 teacher (one retired enrollment)
Time working in the School Unit	Varied time	23 years old, 17 years old, 12 years, (2) 9 years old, 6 years, 3 years (2)
Previous Experience	They have never worked in a private school	2 teachers
	They have already worked in another public school system (Maricá)	Only 1 teacher
6th Grade Experience	They have already worked in the 6th grade of Carioca	4 teachers (3 for 1 year, 1 for 9 months)
	They never worked in the 6th grade	3 teachers
Current Classes (2024)	Year/class	4 from 5th grade, 2 from 6th grade carioca, 2 from resource room
Technology in the Room	They use technology	5 teachers
	They don't use technology	2 teachers
	Resources used	Data show, overhead projector, videos, notebook, tablet, cell phone

Source: Author (2025).

In addition, a content analysis methodology was used, based on reports of experiences shared by the participants, enabling an in-depth understanding of the perceptions and experiences of the teachers throughout the training process.

This qualitative approach seeks not only to quantify the answers, but also to interpret the meanings underlying them, in order to provide a richer and more contextualized analysis. The interpretation of the data will follow the guidelines according to Bardin (2011) of content analysis, which defines this method as a way of interpreting messages objectively and systematically, with the objective of identifying patterns, categories and recurring themes.

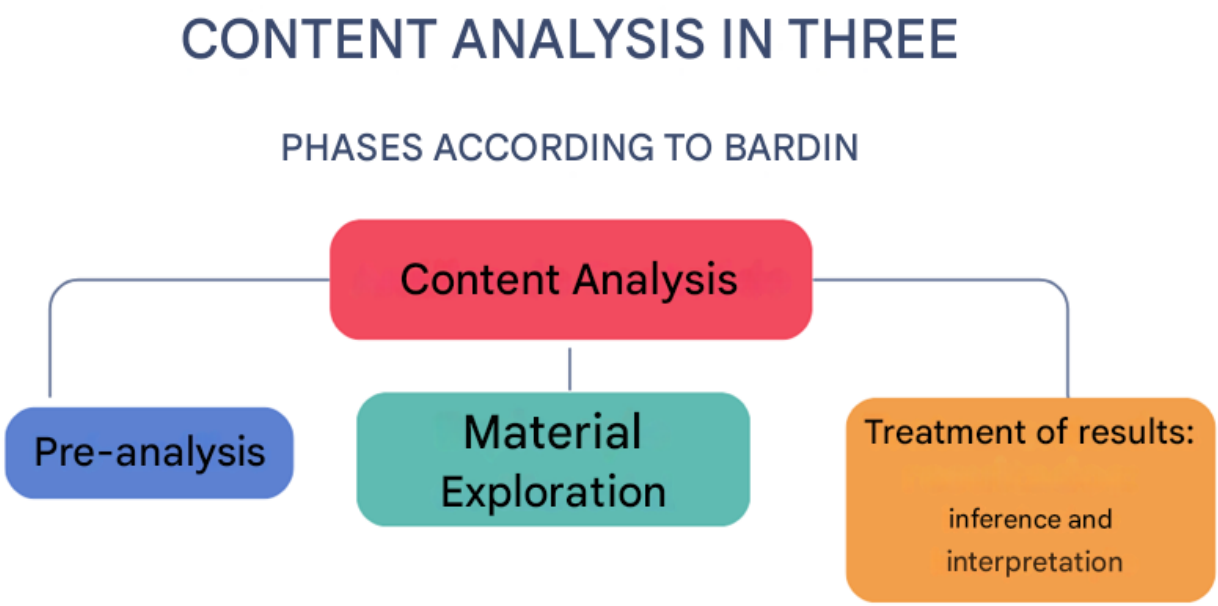
In the context of this research, the answers obtained in the questionnaires were organized and categorized according to the themes that emerged, considering the objectives of continuing education and the integration of digital technologies in the educational environment. The analysis process was structured in stages: initially, a detailed reading of the answers will be made, aiming at identifying emerging preliminary categories. Next, the information was coded, assigning codes to the speeches and descriptions aligned with the study objectives. Finally, the identified categories were grouped, forming a broad panorama of teachers' perceptions about the impacts of continuing education and the use of digital technologies.

In addition to the analysis of the answers to the questionnaires, reports were also prepared after each training meeting, allowing for continuous documentation of the process. These reports served as tools to monitor the absorption and application of the knowledge acquired by educators over time, as well as to identify trends and provide *feedback* that enabled adjustments in the conduct of continuing education.

The proposed methodology seeks to integrate quantitative analyses, derived from closed questions, and qualitative, arising from open questions and experience reports, promoting a comprehensive understanding of the impact of continuing education on the use of digital technologies in teaching. All stages were conducted in accordance with the guidelines established by Bardin (2011), aiming to ensure rigor and depth in the analysis of the data collected.

Content Analysis according to Bardin is carried out in three phases, as we can see in the organizational chart below:

Image: Bardin's Content Analysis Organizational Chart



Source: The author herself (2025)

FOCUS GROUP

The Focus Group was held in a single day, with 6 participants in the School Unit itself. We have 2 5th grade teachers, 2 6th grade teachers from Carioca and 2 resource room teachers. Some initial questions were asked to break the ice, in order to create proximity and provide a more comfortable environment for the participants. It was also clarified that there were no "right or wrong" answers and that we would follow a defined order, respecting the time and turn of each one.

The meeting lasted approximately 110 minutes, during which recordings and photographic records were made. All the questions foreseen for the two stages were answered by the participants. The recording was made through a mobile application, exported to the *Google Drive* and transcribed using the application *Turbo Scribe*. To create a welcoming atmosphere, a *coffee break* during the focus group (FG), and at the end of the meeting, the participants received a souvenir as a way of thanking them for their collaboration.

The analysis of the "6th Grade Carioca" educational model reveals a diversity of perceptions among teachers, reflecting both efforts to mitigate learning gaps and criticisms of its structure. Following the content analysis methodology proposed by Bardin, thematic categories were identified that highlight the main aspects of the model: such as Continuing Education and Teacher Appreciation, Absence of Specialist Teachers, Post-Pandemic Learning, Perceptions of School Inclusion, Use of Digital Technologies, Active Methodologies: Knowledge and Application.

The results obtained from the focus group[6] held in October 2024 with teachers from the municipal network of Rio de Janeiro are presented below. The speeches were organized by thematic axes, respecting the anonymity of the participants, identified by alphanumeric codes (P1 to P6). The data were collected through audio recording and transcribed by the researcher. All statements are considered personal communication, according to NBR 6023:2018, and are not included in the list of references.

Continuing Education and Teacher Appreciation

The teachers reported the fragility of the training offered by the municipal network. Although they participated in training actions in 2022, they questioned their applicability,

[6] Focus group conducted in October 2024 with six teachers from the municipal public school system of Rio de Janeiro, as part of a professional master's research. Personal communication. Unpublished data.

especially due to the gap between the content covered and the moment of pedagogical practice;

"We had already worked on that content, we had already done experiments with the students, everything (...). Then they had training almost a month later. It didn't help us at all. It was not fruitful." (P1, 2024, personal communication).

Absence of Specialist Teachers

The transition to the 6th grade model in Carioca raised concerns about the lack of specialist teachers in the subjects, traditionally present in Elementary School II. "The difficulty of the project is the absence of specialist teachers. He is greatly missed." (P4, 2024, personal communication).

Post-Pandemic Learning

The impact of the pandemic on the teaching-learning processes was also highlighted. The experience with the 6th grade in 2022 revealed significant gaps in student development.

"It was in the post-pandemic (...). Almost two years out of school, right? Watching online classes, which is not the same thing. And not everyone participated. But I exceeded my expectations." (P1, 2024, personal communication).

Perceptions of School Inclusion

One of the most valued aspects of the 6th grade Carioca model was the closer and more welcoming service to children who are the target audience of Special Education.

"Children in special education benefit from this model, right? Because of the proximity, because of this non-compartmentalized view of the teacher. (...) It's another year that he has in an environment that sees the whole." (P6, 2024, personal communication).

Use of Digital Technologies

All teachers recognized the transformative potential of digital technologies, but pointed out structural limitations, such as *Wi-Fi* instability and lack of equipment.

"I would like to be able to, to be able to use more. Because it is extremely unsafe. It is a tool that if we had access, we could, in fact, work, it is wonderful. But, with the fifth year, what do we do? We work as much as possible, when we have a projector, when it works, when we have a computer. *Wi-Fi*." (P2, 2024, personal communication).

Active Methodologies: Knowledge and Application

A lack of terminological knowledge was observed among the teachers about the concept of Active Methodologies. However, many already applied practices aligned with the proposal, although without formally naming them.

Table 1 – Talks about Active Methodologies *(Focus group held in April 2024. Personal communication.)*

Participant	Speech
P1	"What is active methodology?" "I don't know what active methodology is, I'll find out now."
P2	"Also, still, I have no knowledge."
P3	"Intuitively, I can imagine what it is. In my opinion, the active methodology would be for you to put, contextualize everything you are teaching in the child's life."
P4	
P5	"The active methodology, it opens space for creativity, collaboration, exchange of information and the student is actively working on the activities. You enter as a mediator and take the proposal and they coordinate it. I've always done this, I didn't know it was part of an active methodology."
P6	"The resource room, you know, as a whole, even if we don't give names, we work ALL THE TIME (EMPHASIS) with active Methodology, you know, because we are always in this process of doing it together, of interfering little."

ELABORATION OF DIDACTIC SEQUENCE (SD) AND *E-BOOK*

As part of the research for Continuing Education of Teachers, a Didactic Sequence (SD) was developed for the creation of an *e-book* (digital book). Its construction followed a *framework model*[7], with activities organized in the organizational modality of Didactic Sequence.

After the initial structuring, the Training for Teachers of the 6th Grade of Rio de Janeiro was expanded to teachers of the 5th grade, consolidating the proposal entitled "A Training Beyond Active Methodologies", organized in four meetings of 2h30 each. After approval by the SD, the *e-book*, schedule and *slides* for the implementation of the training were prepared.

The use of *e-books* in education offers benefits such as accessibility, interactivity, and sustainability. Its digital format allows remote access to teaching materials, favoring the democratization of knowledge. In addition, the integration of multimedia resources such as

[7] *Framework*: consists of a set of techniques, tools, or generic concepts that can be adapted to different contexts.

videos, *hyperlinks,* and *quizzes* makes learning more dynamic. In the environmental aspect, *e-books* reduce the printing of physical materials, minimizing costs and ecological impacts.

In the context of the research, the elaboration of an *e-book* was incorporated as part of the development of didactic sequences, using the *Canva tool* to ensure an attractive and didactic visual presentation. The material, entitled "Methodology and Practice with the Use of New Technologies" (ISBN 978-65-00-97562-8), made it possible to analyze the effects of active methodologies and technological resources on the engagement and understanding of teachers.

The implementation of the training included the presentation of the content through a *data show* in the Reading Room, complemented by support material and moments of interaction between the participants.

CONTINUING EDUCATION SCHEDULE

The continuing education schedule is an essential tool for the planning and organization of activities aimed at the professional improvement of teachers. Its main function is to structure the temporal sequence of contents, methods and training strategies, ensuring that the established objectives are achieved efficiently.

From an academic point of view, the schedule acts as a guiding instrument, allowing the definition of steps, deadlines and resources necessary for the training of teachers. In addition, it allows adjustments according to the demands of the participants, promoting a more personalized and optimized training process.

Another relevant dimension of the schedule is its relationship with the evaluation of training, enabling the monitoring of the planned steps and the identification of any necessary modifications throughout the implementation. In this way, it assumes a strategic role in the quality of the training process, encouraging reflection on pedagogical practices and favoring the adoption of innovative approaches.

In the context of continuing education, Nóvoa (1992) emphasizes the importance of planning and organization as fundamental aspects for the improvement of teaching practice. Although he does not specifically deal with the schedule in his works, his emphasis on the systematization of pedagogical practices reinforces the relevance of this tool in structuring an education aligned with contemporary educational demands.

The schedule prepared for Continuing Education was structured to cover four face-to-face meetings, ensuring flexibility for any adjustments throughout the process, according to the needs identified.

APPLICATION OF TRAINING TO TEACHERS

The Continuing Education aimed at teachers of the 6th Grade of Rio de Janeiro and the 5th Grade was structured in a dynamic way, integrating didactic and technological resources such as paradidactic books, *slides, data-show*, oral presentations and digital devices. The approach included the use of tools such as *YouTube*, free apps, and active methodologies, providing an interactive environment aligned with contemporary educational demands.

The first meeting of the Training focused on the use of technological resources and active methodologies, using platforms such as *Padlet, Mentimeter and Kahoot,* as well as conversation circles. The videos shown stimulated critical debates, promoting a space for reflection and exchange of pedagogical experiences. In the context of active methodologies, co-creation was highlighted, a strategy that transforms students into protagonists of learning, involving them in the creation of projects, in the definition of evaluation criteria and in the development of didactic materials. This approach aims to strengthen core competencies such as critical thinking, creativity, collaboration, and problem-solving.

In the second meeting, the approach was about the production of collaborative texts ("*hands-on*")[8] and the use of the *Canva platform.* During this phase, the professors registered in the tool, with the support of more experienced colleagues.

Subsequently, a review of the contents of the first meeting was carried out through slides, highlighting technological tools and the relevance of active methodologies**,** according to José Moran's perspective**.** These methodologies, when well structured, transform teaching by making spaces more flexible, integrating projects, and redefining curricula. The training ended with videos and collaborative activities, exemplifying the practical use of active methodologies in the production of content and in the professional development of teachers.

PRESENTATION OF RESULTS

The analysis of the "6th Grade Carioca" educational model revealed diverse perceptions among teachers, evidencing both efforts to mitigate learning gaps and structural criticism of the program. Using Bardin's (2011) content analysis methodology, four

[8] *Hands-on* - Teaching and/or training approach popularly known as hands-on. Where participants or students learn through direct experimentation.

main categories were identified: pedagogical challenges, institutional support, school inclusion and use of educational technologies.

Pedagogical challenges include the shortage of specialized teachers and the continuous need for teacher training, especially in the face of the gaps accentuated by the post-pandemic period. Institutional support was pointed out as insufficient, since the available training does not meet the real demands of daily school life, making it difficult to adapt to the new pedagogical requirements.

In school inclusion, the possibility of a more individualized service to Special Education students was highlighted, although the lack of specific preparation of teachers still represents an obstacle to the consolidation of effective practices. The use of educational technologies has been recognized as potentially transformative, but the absence of adequate infrastructure and limited connectivity hinder their implementation.

Finally, active methodologies face challenges related to the heterogeneity of classes, the need for detailed planning, and resistance to pedagogical changes. Although some teachers are unaware of the technical concepts of these methodologies, many already apply them intuitively in their practices, varying between empirical use and more structured adoption.

FINAL CONSIDERATIONS

The study, based on previously established theoretical references, resulted in the creation of a didactic sequence, a digital book and a continuing education aimed at teachers of the 5th year of Elementary School I and the 6th year of Carioca Elementary School II of the municipal network of Rio de Janeiro. The research aimed to analyze the challenges of implementing DICT and active methodologies, also promoting the exchange of pedagogical experiences.

In addition, it sought to understand the incorporation of digital technological resources and active methodologies in interdisciplinary curriculum planning. The study included PII teachers from the 5th and 6th grades of Carioca, as well as teachers from the Resource Room, professionals with high school education and a weekly shift of 22 hours and 30 minutes.

The results indicate a significant potential to support innovative and replicable practices of professional development, which can serve as a pilot project for the continuing education of educators in the municipal public network.

In view of these analyses, it is concluded that, in order to improve the "6th Carioca Year", it is essential to have a pedagogical and institutional restructuring, the

implementation of effective training and the strengthening of the technological infrastructure. These changes can ensure greater equity and quality in teaching, benefiting both students and teachers.

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