

BETWEEN KNOWLEDGE AND PRACTICES: THE ROLE OF TEACHING PROJECTS IN PEDAGOGICAL RESIDENCY AS A STRATEGY FOR CONSOLIDATING REGENCIES AND TRAINING UNDERGRADUATES AND TRAINERS

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ABSTRACT

This text is the result of a research that aimed to analyze teaching projects as strategies for consolidating conducting practices and the training process of undergraduate students and teacher trainers within the scope of the Pedagogical Residency Program (PRP), in a school unit located in the southern region of Rio Verde – Goiás. With a qualitative approach, observation, narratives (including residents' portfolios and reports of the preceptor-researchers) and literature review were used as data collection instruments. The results show that the work with teaching projects was configured as a relevant training strategy, both for the residents and for the preceptors and the advisor. The development of the projects allowed the licentiate students to experience fundamental stages of teaching — from diagnosis to conducting — articulating theory and practice in a contextualized and meaningful way. In addition, collaborative planning, carried out in person at the school, enabled the analysis of official documents (such as the BNCC and the Curriculum Guidelines of the State of Goiás), as well as the selection of skills and objects of knowledge aligned with the demands of the school community. It was noted that the

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projects favored the exercise of autonomy, the development of pedagogical and scientific writing, and the strengthening of the reflective posture of future teachers. For the preceptors, the involvement with the projects and with the monitoring of the residents represented an opportunity for continuing education, as they revisited their practices and acted as mediators in the training process. Thus, the PRP, through teaching projects, has proven to be a powerful space for shared and collaborative learning, contributing to the improvement of teaching and learning in school and to the training of critical teachers committed to the transformation of the educational reality.

Keywords: Teacher learning. Experiences. Reflection. Research teachers.



INTRODUCTION

The opportunity to write this experience report came from the moments of reflection on all the actions developed in the Pedagogical Residency Program (PRP) notice no. 24/2022, of the Coordination for the Improvement of Higher Education Personnel – CAPES, in a school in the southern region of Rio Verde, Goiás, with a focus on teaching projects, as an instrument for consolidating the regencies and the training process of residents and preceptors.

The Coordination for the Improvement of Higher Education Personnel (CAPS) instituted through ordinance No. 38, of February 28, 2018, the Pedagogical Residency Program (PRP). This program aims to support Higher Education Institutions (HEIs) in the implementation of innovative projects that stimulate the articulation between theory and practice in undergraduate courses, conducted in partnership with public basic education networks.

Among the objectives of the PRP are: to strengthen and deepen the theoretical-practical training of students in undergraduate courses; contribute to the construction of the teaching professional identity of undergraduates; value the experience of basic education teachers in preparing undergraduates for their future professional performance and induce collaborative research and academic production based on experiences lived in the classroom (CAPES, 2022).

At the time of writing this article, the Pedagogical Residency Program (PRP), as instituted by the Coordination for the Improvement of Higher Education Personnel (Capes), was discontinued as an independent action and integrated into the Institutional Teaching Initiation Scholarship Program (PIBID), as announced in CAPES Ordinance No. 90/2024, the Higher Education Institutions (HEIs) have the autonomy to consider the activities of PIBID for possible use of credits in the course, including the ECS.

With the reformulation promoted by Capes, the Institutional Scholarship Program for Initiation to Teaching (Pibid) began to include students from the first to the last semester of the undergraduate courses of the linked Higher Education Institution (HEI), and this participation can be considered as part of the curricular internship. This change significantly impacts the organization of training actions in teaching degree courses, requiring new articulations between the HEI, the partner school and the subjects involved in the initial teacher training. According to Ordinance No. 90/2024, it is allowed to the HEI,



as provided for in item X, the HEI can "recognize the participation of the scholarship holder in PIBID for possible use of credits in the course, respecting the internal rules of the HEI".

The Pedagogical Residency is a fundamental formative experience for the professional development of future teachers, by articulating theory and practice in an immersive way in the school routine. By following the planning, conducting, and evaluation activities under the guidance of preceptors and teacher trainers, residents expand their understanding of the challenges and possibilities of teaching. This direct contact with the school reality favors the construction of contextualized pedagogical knowledge, promoting critical reflection on the practice and strengthening of the teacher's identity. In addition, the collaborative work between the HEI and the school contributes to the formation of professionals who are more prepared, committed, and aware of their social role. (Paniago, Nunes and Belisário, 2020).

The development of teaching projects in the context of the Pedagogical Residency represents a powerful opportunity for teacher learning, both for undergraduates in initial training and for preceptors — teachers from the school of basic education — and teachers from Higher Education Institutions (HEIs). It is a collaborative process that favors the collective construction of pedagogical knowledge, critical reflection on practice and the strengthening of the bond between university and school. Among the strategies that can be adopted in this process, project-based teaching stands out, recognized as an active teaching methodology (Busse Mackedanz, 2017; Bacich and Moran, 2018). Active methodologies aim to promote more engaging classes, which encourage students to take a critical and participatory stance towards knowledge (Bacich and Moran, 2018). For Simas and Behrens (2019), project-based teaching contributes to breaking with the passivity historically attributed to the student, promoting greater autonomy and favoring meaningful learning for young people. In this sense, working with projects proves to be a powerful formative practice, capable of transforming the subjects involved in the educational process.

In fact, in the institutional project of the Pedagogical Residency, of IFGoiano, the work with projects is stimulated and considered as an alternative for training in and with research, since residents are oriented to the development of diagnostic practices with an investigative look. This is explicit in the proposal of the three institutional projects submitted to Capes via public notice No. 06/2020, No. 24/2022, in which it is evident that the axis that will articulate the subprojects to the institutional project will be the development of research



projects, aiming to stimulate in residents the development of a sensitive and interpretative look at the issues of reality, an investigative posture, an overall view of the school space, a perception of the difficulties that the school faces (RP-IF Institutional Project, 2020, 2022). In order to enable the materiality of this formative perspective, within the scope of the PRP-IF Goiano, there are several types of training to assist the actors of the program, as well as theoretical productions of those involved (Paniago *et al.*, 2018, 2020).

Silva et al. (2019) emphasize the importance of PRP in the quality training of future teachers, through projects that strengthen the field of theory and practice in the promotion of quality teaching in basic education schools. The institutional project of the Federal Institute of Goiás, Rio Verde Campus, in which the residents of this research are inserted, is called "Insertion in teaching with research in basic education: praxis woven in collaboration". In this bias, initial training is based on bringing residents closer to school spaces by developing diagnosis, observations, regency and teaching projects. The latter opens important paths for reflective practice of pedagogical actions, adding investigation to the process. For Paniago, Ramos and Nunes (2021, p. 35) working with projects "represents a fertile way for the development of collaborative training actions and for the learning of theoretical and practical elements about research".

Thus, in this reflection, we will dialogue about the main formative moments observed with the development of the following teaching projects. The research was conducted by the following guiding questions: What main difficulties, challenges and learning were found in planning and developing the teaching project at school? To this end, the objective was to analyze the teaching projects as strategies for consolidating the practices of regency and the training process of undergraduate students and teacher trainers within the scope of the Pedagogical Residency Program (PRP), in a school unit located in the southern region of Rio Verde – Goiás

METHODOLOGY

The research in this work, linked to an umbrella research project registered and approved by the Ethics Committee under Opinion No. 5,282,771, is characterized as qualitative, as it brings deep approaches, interpreted by the researchers, as reported by Derlandes et al. (2009, p. 22), that "qualitative analysis is not a mere classification of the informants' opinion, it is the discovery of their social codes: speeches, symbols and observations". Within the dimensions of the qualitative analysis, the following instruments



were used for data collection: observation; documentary analysis, narratives of those involved in the interdisciplinary PRP; and, readings of books and scientific articles, which configure the bibliographic research.

The observation technique, as highlighted by Lakatos and Marconi (2003, p. 190), uses the senses to obtain certain aspects of reality. It does not consist only in seeing and hearing, but also in examining facts or phenomena that one wishes to study. It is worth noting that participant observation was also an important process in data collection, since at all times observed there was active participation of those involved.

As defined by Lakatos and Marconi (2003, p. 194), in the procedure of participant observation, the researcher belongs to the community or group that is being investigated, has real participation and is integrated into the normal activities of the fact or phenomenon investigated. Observation occupies a privileged place in educational research, as it enables a personal and close contact between the researcher and the researched phenomenon (Ludke; André, 2017, p. 26).

In the documentary analysis, the Portfolios and reports of the students of the Degree in Biological Sciences, called in the program, as residents, were used, analyzing the writing process and narratives about the learning achieved. According to Lakatos and Marconi (2003, p. 174), documentary research represents a primary source of data collection, being represented by documents, written or not, that can be done during the development of the fact or later.

Within the scope of the Pedagogical Residency Program (PRP), the basic education teachers who accompany the undergraduates are called preceptors, being central subjects in the process of articulation between school and university. In this research, two of the preceptors involved in the PRP actions also acted as researchers, which enabled a sensitive and contextualized look at the processes experienced in the daily life of the Residency. Their reflective narratives, produced throughout the development of the teaching projects, were incorporated into the analytical corpus and identified as Precep 1 and Precep 2, respecting the ethical principles of research and ensuring clarity about the roles assumed. The teachers in question have a degree in Biological Sciences. In addition, we spoke with the institutional coordinating teacher of the PRP at IF Goiano, whose performance was fundamental for the feasibility of significant formative moments, especially those driven by the work with projects in the partner schools.



The narratives were fundamental to report the experiences lived with the teaching projects and reflect on their contributions to the consolidation of conducting classes and the formative possibilities of residents and preceptors. Narratives, as discussed by Cunha (1997), can be a field of investigation or methodological instrument, representing reality full of meanings and interpretations. "The narratives seek to give voice to the subjects, thus reinventing new paths of research in which the narrator's life history, experiences and experience are significant for the understanding of the research object" (Paniago; Sarmento, 2019).

The bibliographic research allowed us to reflect in a contextualized way, analyzing books and scientific articles that corroborated the theme addressed. According to Lakatos and Marconi (2003, p. 45) the bibliographic research brings "the possibility of consulting specialists in the area, for guidance both in the choice and in the analysis and interpretation of specific documentation". The study in question made us delve into discussions regarding training possibilities with the PRP and the importance of developing projects within the school environment and the importance of the preceptor in the formative process of students during the PRP.

The school that the PRP residents developed their projects, serves students from Elementary School (afternoon shift) and High School (morning and night shift). It is located in the southern region of the city of Rio Verde Goiás, with 2032.09 m² of built area, within a plot of land with 5,920 m² of walled area.

The educational actions developed by the school are planned at the beginning of the school year and programmed to contemplate the Pedagogical Political Project (PPP), with some learning practices based on projects. Project-based teaching practices are now signaled in the Law of Guidelines and Bases of Education (LDB) with the inclusion of Law No. 13,415 of February 16, 2017, providing students with mastery of the scientific and technological principles that preside over modern production (BRASIL, 2017).

For data analysis, we used the assumptions of Content Analysis according to Bardin (2019), as it is a systematic and flexible approach, which enables the interpretation of meanings present in qualitative productions. The corpus of the research was constituted by records from, as already mentioned, the direct observation carried out by the researchers and by the reflexive narratives present in the portfolios prepared by the undergraduate students participating in the Pedagogical Residency. The analytical process was developed in three stages: pre-analysis, with floating reading and organization of the material;



exploration of the material, with coding and categorization of the registration units; and treatment of the results and interpretation, in which the data were confronted with the adopted theoretical framework. This methodology made it possible to highlight significant aspects of the training process, emphasizing the contribution of teaching projects in the articulation between theory and practice and in the teaching learning of undergraduates, preceptors and teachers of the HEI.

The data collected were configured in the following categories of analysis: Formative possibilities with the teaching projects observed by the teacher trainers (preceptors and advisor teacher); Teaching projects as an instrument for consolidating the regencies and favoring the teaching-learning process.

FORMATIVE POSSIBILITIES WITH THE TEACHING PROJECTS OBSERVED BY THE TEACHER TRAINERS (PRECEPTORS AND ADVISOR TEACHER)

The projects developed by the residents in a supervised way by the trainers (preceptors and teacher of the IF Goiano) started from the need for learning observed by the residents in the school diagnosis stage. They were previously planned and discussed with the preceptor teacher and other teachers in charge of the classes.

The supervised teaching projects were: Composting of organic waste from the daily kitchen (P1 – Composting), in 9th grade classes, within the curricular component of Natural Sciences; "*Maker*" practices on layers of the Earth, with the use of the *3D printer* of the Federal Institute of Education, Science and Technology Goiano (IF Goiano), (P2 – Layers of the Earth), in classes of the 7th year of Elementary School, in the curricular component of Natural Sciences; "*Maker*" practices in the teaching-learning process of the biology curricular component with terrarium construction (P3 – Terrariums), in classes of the 2nd grade of High School, in the biology curricular component; and; Project entitled "From the morphology of mint to its essential oil: biology and chemistry teaching practices (P4 – Clonal garden of mint), in classes of the 1st and 3rd grade of High School, in the curricular component of biology and chemistry. All projects were developed collaboratively.

It was observed that the pedagogical residency program (PRP) allowed the residents several formative moments, following paths from the meetings with the preceptors and the institutional coordinator; school diagnosis until the final stage of construction of experience reports by residents, after conducting classes and projects. For the preceptors it was no different, all the moments were important and represented, in a



way, continuing education, as the demands for guidance provided readings of books and articles, adding to the acquisition of constant knowledge. We also mention dedication, frequency in face-to-face activities, use of electronic communication tools and learning about active teaching methodologies.

When looking at precep 1, participating in the PRP was another important experience in her formative process. Where it is narrated:

I realized how much knowledge adds when we make ourselves available to guide and mediate the training of future teachers. It was necessary to dedicate yourself, time management, read scientific articles and strategies to develop group work, but at the same time, considering the singularities of each student.

Among the challenges identified throughout the Pedagogical Residency, the initial difficulty of Precep 1 in understanding, in an integrated way, the dynamics between conducting actions and the development of teaching projects stands out. In her report, she states: "A priori I imagined that conductions and projects should be actions developed separately, only after several meetings, and when the students were writing their PAP(s), I was aware that the projects could cover the conducting classes while they were developed." Such reflection shows that immersion in the PRP requires not only theoretical knowledge about the program, but also experience and maturation in the role of preceptor. The reported experience demonstrates how the deeper understanding of the role of the projects — not as parallel activities, but as structuring axes of the regencies — was consolidated as the preceptor became involved with collective planning, the records of the licentiate students and the formative moments. Thus, the report illustrates the formative dimension of the preceptor's own performance, who, at the same time as guiding, also learns and resignifies her role in the process. This situated learning points to the importance of dialogical spaces between HEI and school, as well as the valorization of the time necessary for the subjects to appropriate the specificities and potentialities of the PRP.

Despite the difficulty identified by precep 1 in understanding the program, there was no negative interference in being able to monitor, mediate and guide residents in the construction of their PAP(s), considering regencies and projects.

Another difficulty evidenced during the development of the program was the orientation for the writing of reflective portfolios. The management of this process proved to be challenging, especially because the residents worked at different times and shifts, which



required the preceptors to pay extra attention to follow the productions and guide the writing. In addition, many undergraduates were not in the habit of recording their experiences right after each stage, nor of reflecting critically on them, which required the gradual construction of an investigative and self-reflective posture. In the case of IF Goiano, portfolio writing is understood as a central strategy for training and monitoring, and it is through it that residents narrate their experiences and evidence the learning built throughout the projects. The narratives of the projects developed thus became a privileged space for the articulation between theory and practice, promoting not only the registration, but the resignification of the lived experience. This formative process reinforces the importance of writing as an instrument of teacher learning, which enables the future teacher to look at his trajectory with criticality, intention and authorship.

In the continuity of the analysis, we found that the preceptor's view reinforces the importance of working with projects as a training strategy in the school context. In her speech, she highlights: "working with projects is a strategy that makes it possible to develop the teaching of conceptual content in a problematizing and meaningful way for the resident. Thus, it does not justify developing projects without making a connection with the content taught." (Speaker 1) From this perspective, it is understood that the project should not be treated as a separate activity, but as a pedagogical tool integrated into the curriculum, capable of articulating conceptual content with real and challenging situations, promoting meaning to learning. For residents, this approach represents an opportunity to experiment with contextualized teaching practices, in which theory and practice are intertwined in an organic way. The advisor's speech evidences, therefore, a critical understanding of the role of the project in the training process, defending its direct link to the teaching objectives and to the construction of knowledge in a reflective and meaningful way.

In the view of precep 2, advising in the PRP was challenging, as she had never experienced this experience, however, she recognized that it would be several formative moments with the residents. Among the challenges, he points out that "The first obstacle was to adapt the times to meet. With 05 residents under my guidance, 02 of them living in another city, 03 who work during the day, preventing us from being able to meet in the field school". It also signals: "online meetings were necessary, even so, some did not participate". This time management problem is not something new, Ribeiro and Paniago (2021) point out that "lack of time available to exercise the hours dedicated to teaching;



difficulty of some residents in reconciling their employment with the schedules of the PRP", were challenges listed in the surveys with residents of the period.

Although Precep 2 did not directly address the teaching projects developed under its supervision, its narrative evidences an emphasis on practical experience as a central element of teacher training. It is understood, from her report, that the moments of regency and the confrontation of concrete situations in the classroom constituted, for the residents accompanied by her, the main way of consolidating learning in the context of the PRP. In her speech, the professor highlights the initial difficulties faced by the undergraduates:

The residents have in their teaching degree disciplines that help in teaching, but when they arrive at the field school, even to observe the class, they have a certain resistance (shame) when entering a classroom full of students, sometimes they do not even find a place to sit, sitting in the chair of the regent teacher.

This passage reveals the impact of the reality shock that marks the transition between the academic environment and the school routine, especially with regard to relationships with students, mastery of the classroom and content, and coping with indiscipline. Also according to the preceptor, the residents made an effort to align their classes with the planning of the regent teacher, but found limitations in their practice, which evidences the complexity of teaching. Thus, even without direct mediation by projects, the path lived in the school became a fertile field for teacher learning, marked by concrete challenges that required positioning, critical analysis and adaptation on the part of future teachers.

From the narrative of Precep 2, it is possible to recognize the relevance of the presence of the preceptor in the classroom as a structuring element of the residents' training process, especially in the moments of regency. Her attentive and mediating performance offered pedagogical and emotional support to the undergraduates, still in the initial phase of building their teaching identity. Preceptor 2 reports:

Every time, I realized that without my presence in the classroom, there were no conditions for the resident to teach his class as he had scheduled. But I always talked to the class beforehand, we always made an agreement and showed them the importance of having another person in the class to diversify the class. The residents also felt a little safer being there in front of the students, as they had already gone through elementary school.

This statement shows that, in view of the insecurity and inexperience of the undergraduates, the school environment can become a space of tension, especially when pedagogical mediation is not carefully planned. In this sense, the absence of a structured



project, which involved the residents from the diagnosis of the class to the collective construction of teaching strategies, may have contributed to intensify the difficulties faced. By articulating theory and practice in a meaningful way, project work could act as an organizing and mobilizing element of the training process, promoting greater engagement of the school's students and offering residents a more solid structure to plan, intervene and reflect on their practice. Well-conducted projects tend to involve different languages, promote collaboration and generate meaning for the teaching experience in training, which can contribute to reducing the anxiety of licentiate students in the face of conducting and favoring their progressive autonomy.

TEACHING PROJECTS AS AN INSTRUMENT FOR CONSOLIDATING THE REGENCIES AND FAVORING THE TEACHING-LEARNING PROCESS

All residents made an effort to develop the activities planned for insertion into teaching, fulfilling both the diagnosis stage and the realization of conducting through projects. Most of the projects were developed in groups, as is the case of Project P1 (Composting) and Project P4 (Clonal Garden of Mint), promoting collaboration between licentiate students and the collective planning of actions. There was also the search for interdisciplinary practices, as observed in the P2 Project (Earth Layers), which involved the articulation between residents from different areas, including participants of the Biology PRP. The only proposal carried out individually was the P3 Project (Terrarium), whose organization was adapted to the reality of the resident, who had to carefully manage her time due to professional commitments. This diversity of formats highlights both the flexibility of the program and the effort of the undergraduates to articulate theory and practice in a creative and contextualized way

Each project had its particularities and formative moments. The perception of the learning needs of the school's students by the PRP students was an essential skill for the consolidation of the project. The group work of P4 – Clonal garden of mint provided dialogue and sharing of the classroom at the time of the regencies, such as establishing two didactic strategies in just one class, being shared reading of text and field class in the space of the clonal garden of mint, both addressing the objects of knowledge about ecological relations, biotic and abiotic factors.

In fact, the development of projects in the school environment has been signaled by PRP residents as relevant and important for the training of future teachers, in addition to



the conducting activities that gave them the opportunity to be in front of a classroom, where many aspired as undergraduate students (Ribeiro; Paniago 2021). Paniago, Ramos, and Nunes (2021, p. 42) also emphasize that the projects are possibilities to bring students closer to the field of work, in a problematizing and investigative way, while preparing them to face adversity and new knowledge.

In the continuity of the reflection, we found that the quality structure of the rural school together with the technological resources made available were pointed out by the residents as favorable to the development of the PRP actions, especially the teaching projects. This information contradicts some surveys carried out by Ribeiro and Paniago (2021) in which residents pointed out "the lack of material in schools for the development of activities; lack of adequate space (physical structure)..." as main challenges in the realization of the PRP.

We noticed educational policies being implemented to improve the teaching units of basic education, when we identified, for example in the field school, technological resources such as Datashow, TV, digital whiteboard and science laboratory with microscope and camera, in addition to the school containing spaces where vegetable gardens (vegetables and medicinal) and gardens can be introduced. However, in one of the experience reports, we observed the feeling of frustration of a resident when she realized that there were students in the classroom who were not very participative, not showing interest in the project class and not being immersed in the socialized activities. The resident emphasized that "this type of frustration leads to abandonment of the profession, even before it actually starts". We emphasize that "being a teacher" in Brazil is very challenging, as Paniago (2023) dialogues that there is a disenchantment with teaching in Brazil, which can be initiated in the first contacts made with the classroom.

Associated with the disenchantment with teaching in Brazil, Paniago (2023) circumscribes that "the absence of social and professional appreciation of basic education teachers causes nefarious, perverse marks on the Brazilian education system and directly impacts the initial training of teachers". The lack of interest of some students identified by the resident may be a reflection of the lack of social and professional appreciation of the teachers.

In view of the facts, a reflective analysis was carried out, in which the preceptor made the following argument to the resident:



In your classes, I noticed many conversations, but it seems that they were talking about the project, about what they were observing. They talk to each other due to the affinity they have with each other. It is more difficult for them to make comments with the teacher and all the other students to hear, since they do not have friendship or freedom with everyone. An alternative to circumvent parallel conversations would be for you to assign tasks to students, such as elaborating vocabularies, diagrams or summaries during lectures, making students explore more meanings, in addition to vision and memorization.

The preceptor's reflection was important, however, the perception of the lack of interaction of the students was seen by the resident as a lack of motivation towards the profession of being a teacher. It shows that "there is a lot of planning and arduous study to prepare a differentiated class, when we are faced with an unmotivated room and especially a negative evaluation, it discourages the development of more active strategies".

Regarding the suggestion listed by the preceptor with the assignment of tasks to the students, such as the elaboration of vocabularies, schemes or summaries during the lectures of the P4 project (clonal mint garden), the resident considered that she could have explored more learning resources during the classes of the project. All moments, especially those that left the resident frustrated, are important for the development of teaching skills that focus on teaching didactics that make meaning in the lives of students. In all the residents' reports, practical activities of the projects were mentioned as activities that provided greater participation and engagement of the students. These observations are in line with the pedagogical intentions with the use of active teaching methodologies, such as working with projects.

We noticed in the formative dialogues with the teachers of the rural school, that the feeling of frustration with their classes and demotivation with the process is common, even for teachers who have years of experience. Although the school is recognized for the teaching and learning projects it develops, citing as an example the work entitled "interdisciplinary project in the teaching process learning the importance of water and youth protagonism in remote classes", developed by Assis et al. (2022), we observe that conservative teaching trends are still very strong and present as a routine of the teaching work of several teachers. Traditional pedagogy, as presented by Paniago (2017, p. 36):



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Chart 1 – Traditional Pedagogy, source Paniago (2017, p.36).

In short, in traditional Pedagogy

Role of the school: intellectual development
Role of the student: passive attitude, receiver of information
Teacher-student relationship: vertical and authoritarian
Methodology: expository classes with students lined up,
repetition, homework, memorization
Content: dissociated from experience, transmitted as
absolute truth

Evaluation: punctual and final.

To be present to train a teacher with a research profile, according to the purposes of the institutional project of the IF Goiano, in a school that is strong in conservative teaching tendencies compared to the progressive line, in which "education has as its role the integral formation of the critical citizen, the emancipation and transformation of the subject so that he has the ability to make decisions in the society in which he is inserted" (Paniago, 2017, p. 46) is undoubtedly an additional challenge to be faced by residents and preceptors inserted in the PRP.

The narratives of the residents and the analysis of their respective portfolios indicate that among the main challenges are the difficulty of overcoming the constant lack of interest of the students in the theoretical classes of the projects; mastery of the room; execution of activities; number of residents in the execution of the PRP; absence of accurate evaluations according to the learning objectives of the projects; lack of interaction with some students; personal and work problems; insecurity and fear in transposing the objects of knowledge contemplated by the projects, among others.

Among the possibilities of learning experienced and training evidenced in this research, we mention the writing of portfolios, describing and reflecting on each stage, such as the school diagnosis, which leads the resident to know the school reality and then propose teaching projects; participation in online and face-to-face meetings; the dialogues with fellow residents, with the preceptor and with the institutional coordinator; the reading of the documents that guide the school's pedagogical work, such as PPP, DCGO and BNCC; preparation of classes with technological resources and application of active methodologies, such as "Maker" practices, which leads to practical classes, in which students produce something, strengthening learning.

We identified the teaching projects developed in the PRP as fundamental in the training process of residents, providing opportunities for constant acquisition of knowledge and instigating the research profile of each future teacher. Among the narratives, the following caught our attention:



The selection of strategies and didactic resources to work the class, since the school has a quality structure, I had a range of possibilities to work with, selecting several strategies was great to gain experience. It was very impactful to present the project at the science fair and Beija Flor Circuit, the students participating with us in the presentation. It is very satisfying to see students explaining the content so well, and to arouse the curiosity of other students.

In view of the above, we need to point out that working with teaching projects in public schools still represents a great challenge, especially in view of the prescriptive and normative character of official documents, such as the DCGO in the state of Goiás and the BNCC. These guidelines, while guiding the curriculum, often stifle pedagogical practices by imposing a logic of organization by competencies, skills, and measurable learning outcomes. This structure makes it difficult to implement more flexible and investigative methodologies, such as project-based teaching, which requires time, active listening to students, and interdisciplinary articulation. In addition, the pressure to comply with standardized content and assessments reduces the space for experimentation and the collective construction of knowledge. In this context, teaching projects end up being seen as something "extra" to the curriculum, and not as an integral part of it, which requires effort, creativity and pedagogical resistance from teachers.

FINAL CONSIDERATIONS

When we reflect on the importance of teaching projects as alternatives for consolidating the regencies and the training process of residents and preceptors in the PRP, we find that this methodology goes beyond a didactic strategy: it constitutes a powerful instrument for collaborative training and transformation of pedagogical practices in the school context. The work with projects enabled moments of listening, sharing and collective construction of knowledge, valuing the knowledge and experiences of all the subjects involved — residents, preceptors and faculty advisor of the HEI.

In this process, collaborative actions were fundamental to strengthen the autonomy of future teachers, promoting learning that is not restricted to the mastery of content, but extends to the ability to plan, execute and critically reflect on teaching practice. The preceptors, in turn, re-signified their own performance, by assuming the role of trainers, while the guiding teacher was also provoked to rethink her approaches in the light of experiences in the school field.

However, it is necessary to recognize that the implementation of teaching projects faces structural obstacles, such as the curricular rigidity imposed by official documents



such as the BNCC and the DCGO, the overload of teaching work and the scarcity of institutional time for collaborative planning. Thus, it is urgent to value and encourage continuous teacher training, as well as to ensure autonomy and real conditions for the development of innovative and contextualized practices.

The experience lived in the PRP shows that teaching projects, when built collectively, promote not only the improvement of teaching and learning, but also the construction of a more democratic, dialogical and transformative formative culture — in which everyone learns from everyone, in a movement of shared growth and committed to quality public education.



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