

Training research from different perspectives in the field of professional teacher development¹

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ABSTRACT

This article aims to discuss different types of training research, which manifests itself with characteristics and peculiarities in the form of action research, collaborative research and critical-collaborative action research in the light of a critical theoretical framework. These researches in education, especially in the field of teacher education, share a commitment to transformation and are anchored in the counter-hegemonic perspective of training and scientific knowledge production. Therefore, the work was organized in two parts: in the first, we tried to find elements and theoretical-methodological considerations about the specificities, potentials, and main challenges of training research. In the second part, we present the theoretical-methodological path, results and analysis of a collaborative research carried out teachers who work in Basic School in municipal and state public schools in Uberlândia/MG (PEDRO, 2019) and its surroundings, with the aim of analyze issues related to the use of this research methodology, as well as the main assumptions to be observed for the strengthening of training research in education, especially in the field teacher professional development.

KEYWORDS: Research-training. Action research. Collaborative research. Teacher training. Teacher Professional Development.

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A pesquisa-formação sob diferentes perspectivas no campo do desenvolvimento profissional docente

RESUMO

O objetivo desse artigo é discutir diferentes tipologias da pesquisa-formação, que se manifesta com características e peculiaridades na forma de pesquisa-ação, pesquisa colaborativa e pesquisa-ação crítico-colaborativa à luz de um referencial teórico crítico. Essas pesquisas em educação, especialmente no campo da formação de professores, têm em comum o compromisso com a transformação e ancoram-se na perspectiva contra hegemônica de formação e de produção do conhecimento científico. Para tanto, o trabalho foi organizado em duas partes: na primeira, procuramos encontrar elementos e considerações de ordem teórico-metodológicas sobre as especificidades, potencialidades e principais desafios da pesquisa-formação. Na segunda parte, apresentamos o percurso teórico-metodológico, análises e resultados de uma pesquisa colaborativa realizada com professores da Educação básica da Rede pública de Ensino de Uberlândia/MG (PEDRO, 2019) com o intuito de analisar questões relacionadas ao uso dessa metodologia de pesquisa, tendo em vista o fortalecimento da pesquisa-formação em educação e o desenvolvimento profissional docente.

PALAVRAS-CHAVE: Pesquisa-formação. Pesquisa ação. Pesquisa colaborativa. Formação docente. Desenvolvimento Profissional Docente.

Investigación en formación desde diferentes perspectivas en el campo del desarrollo profesional del profesorado

RESUMEN

El El objetivo de este artículo es discutir diferentes tipologías de investigación-formación, manifestada con características y peculiaridades en la forma de investigación-acción crítico-colaborativa a la luz de un referencial teórico crítico. Estas investigaciones en educación, especialmente en el campo de formación de profesores, tienen en común el compromiso con la transformación anclándose en la perspectiva contra hegemónica de formación y de producción de conocimiento científico.

Para eso, el trabajo fue organizado en dos partes: en la primera, procuramos elementos y consideraciones de orden teórico-metodológicas sobre las especificidades, potencialidades y principales desafíos de la investigación-formación. En la segunda parte, presentamos la ruta teórico-metodológica, análisis y resultados de una investigación colaborativa realizada con profesores de Educación Básica de la Red Pública de Enseñanza de Uberlândia/MG (PEDRO, 2019) con la intención de analizar cuestiones relacionadas al uso de esta metodología de investigación, teniendo en vista el fortalecimiento profesional docente.

PALABRAS CLAVE: Investigación-formación. Investigación-acción. Investigación Colaborativa. Formación Docente. Desarrollo Profesional Docente.

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Introduction

In Brazil, teacher education, its specificities, dilemmas and challenges are the focus of concern and interest of researchers from all over the world, whether from the point of view of public policies, pedagogical practices, professional knowledge and identity, professionalization and teaching work, among other themes. Such interest can be verified by the growing number of scientific productions, events and publications specifically dedicated to the theme; by the visibility achieved in the media and by the growing partnership between schools and universities, when it comes to initial and continuing teacher education.

Regarding the consolidation of this theme as a field of study, André (2010, p. 178) points out that "an additional indicator of the constitution of the area is the insistent attention of politicians, administrators and researchers to teacher education as a key piece of the quality of the educational system", perhaps justifying the great interest as a thematic area of research. The fact is that teacher education and its unfoldings are

presented in an extensive scientific production, most of the times being configured as the core of the teaching-learning quality.

However, despite the number of productions and the growing interest in the theme, there are still many challenges and reasons that explain the gap between what is offered in teacher education and the daily demands of school work. Among the many contradictions inherent to this educational phenomenon, it is worth mentioning the centrality given to the training of teachers who work in Basic Education by the current model of regulation of national educational policies, circumscribed in the cycle of reforms in the educational systems of Latin American countries from the 1990s.

It is necessary to emphasize that, regarding the impacts of the reforms on teacher education in the current educational scenario, the concepts that outline teacher education are based on the notions of competence, efficiency, competitiveness, and productivity. This becomes visible when we observe the attempt to standardize the curriculum and the teaching work under the logic of the capital, the neoliberal policies, and the minimal State order. The same occurs when we consider the engendering of education and teacher education to an ideology determined by the market from the administrative and business principles: management, planning, forecasting, systemic evaluations, control and success, materialized by the implementation of official documents of normative/prescriptive character, as is the case of the BNCC (BRASIL, 2017) and the BNC Teacher Education (BRASIL, 2019).

In this field of contradictions of educational policies, two projects in dispute are evident, especially regarding teacher education. On one hand, the defense of progressive, critical-emancipatory conceptions and, on the other hand, the strengthening and maintenance of conservative conceptions of education.

In this context, researches and reports on Brazilian education stand out, with the purpose of obtaining scientific evidence to point out (dis)paths for (con)training teachers, marked by investments from international organizations and by the precarization/disqualification of

the teaching work under a managerialist logic of education. On the other hand, numerous educational researches are carried out, especially in the field of teacher education, which have in common the commitment to social transformation, anchored in the counter-hegemonic perspective of training and knowledge production.

Among these researches, we highlight Pedro (2019), whose theoretical and methodological path will be presented in the subsequent parts of this text, Jordão (2016), Melo and Naves (2014), Silva and Bueno (2021), among others, which have pointed to a tendency to overcome the technical rationality model, subsidized by the pragmatic and technocratic premise of education and teacher education, according to which a competent/efficient professional is one who is able to solve problems through the rigorous application of scientific theories and procedures.

It is also worth mentioning the research carried out within the Group of Studies and Research on Teaching in Basic and Higher Education (GEPDEBS), linked to the Graduate Program in Education at the Federal University of Uberlândia (UFU). Since 2015, when it was constituted, the group has as its axis the relationships between teacher education, knowledge and practices, seeking to understand the processes by which teachers of Basic Education and/or Higher Education build their knowledge and how initial and continuing education have repercussions in educational actions and in the constitution of their professional identities. In addition, the group has stood out in the proposition of research-training conducted by teachers and students, which manifest themselves with characteristics and peculiarities in the form of action-research, collaborative research and critical-collaborative action-research in the light of a critical theoretical framework (MELO, 2018).

These studies have pointed out that research-training has been used in several ways and with different intentions for the training and emancipation of subjects, in which the production of knowledge underlies the elaboration and continuous reflection of pedagogical

praxis, anchored in the unity theory-practice. Among the foundations presented, it is argued that when conducting research with teachers, it is important to consider them as subject-authors of their own formative process, reducing the hierarchy between researchers and research participants and contributing to the critical-collaborative reflection on their teaching practice, as well as the limits and possibilities of the various constraints engendered in their work.

However, the literature presents several definitions for the research-training process, since it is a polysemic term. The plurality regarding the nomenclature and its social meaning, as well as the configuration it assumes in the scope of research on teacher education, is possibly linked to the historical and epistemological specificities of this type of research, as well as to the different contexts in which it has been used. Although they have common aspects, they are presented with different terminologies, definitions, concepts, and philosophical foundations, making the task of deepening their understanding and definition an arduous and complex one.

Thus, having as reference the different approaches, forms and theoretical and methodological paths attributed to this type of research, as well as its formative potential, we propose this work with the aim of discussing and analyzing different typologies of research-training, which manifests itself with characteristics and peculiarities in the form of collaborative research, research-action and critical-collaborative research-action, in the light of a critical theoretical reference. To do so, the work was organized in two parts: in the first, we tried to find elements and considerations of theoretical and methodological order about the specificities, singularities, potentialities and main challenges of action research, collaborative research and critical-collaborative action research. We based ourselves on authors who strongly influenced the conceptualization and propagation of research-training in Brazil, such as: Ibiapina (2008), Franco (2005) and Pimenta (2005).

In the second part, we present the theoretical and methodological course, analyses, and results of a collaborative research carried out with licensed teachers who work in Elementary II and Secondary Education in municipal and state public schools in Uberlândia (MG) and its surroundings, in order to analyze issues related to the use of this research methodology, as well as to present the main assumptions to be observed for the strengthening of research-training in education, especially in the field of teacher training.

Research-Training Epistemology: different approaches

Considering the commitment to the transformation of society through the production of critical scientific knowledge in the field of education and teacher professional development, we will delve into the issues surrounding the epistemology of Research-Training, emphasizing action research, collaborative research, and critical-collaborative action research.

The choice of this focus is justified to the extent that research such as that of Magalhães and Souza (2012) points out that despite a significant and gradual increase in the number of research and publications on teacher training and performance, it is still very common to do research on teachers taking them as the major responsible for the successes and failures in the teaching-learning process, not analyzing the teaching profession considering the different forces that determine it.

The definition of teachers as a problem is, currently, a theme that is present both among those who defend its reformulation, in the sense of modifying the performance of teachers to adapt it to the new demands of capital, and among those who are against these adaptations, since they are concerned not only with the quantity, but also and, above all, with the quality of this performance (MAGALHÃES; SOUZA, 2012, p. 670).

The authors emphasize how this conception of teacher corroborates to sustain the hegemonic vision of education in our society and, supported by Sacristán (2006, p. 82), establish a critical analysis of this production,

considering that, although the teaching profession is on the agenda, most of the research carried out "[...] is biased, partial, unstructured, decontextualized and does not go into the essence of the problems" of teaching.

Based on this assumption, we argue that when conducting research on teacher education, it is important to consider teachers as subject-authors of their own educational process, reducing the hierarchy between researcher and research subjects and contributing to the reflection on their teaching practice and on their professional development process, as well as the limits and possibilities of their work.

This approach, which leads to the development of research in a collaborative way, is in line with the Dialectical Historical Materialist method, which was the theoretical perspective on which this work was based. According to this method, in a scientific research, the phenomenon must be analyzed in its process, in a dialectic way, instead of taking as a basis the object itself; the objective of the research should not be to describe the phenomenon, but to explain it in its movement, in its historicity, establishing a relationship among the several factors that determine it; and, finally, the analysis should start from the real concrete to the most basic relations that determine such phenomenon, understanding it in its historical essence (VIGOTSKI, 2000).

The choice for a critical epistemological referential is related to the conception that the production of knowledge is interconnected from three simultaneous movements: of criticism, construction of new knowledge and action aiming at transformation, having as a guiding axis the Marxist categories: work, mediation and transformation (MARX, 2004). In this sense, transformation of reality implies movement, change, and not just being limited to critical analysis. Thus, it is of utmost importance the coherence between method and study methodologies, because from the approach with the historical-dialectical materialism we understand the reality experienced by teachers as a whole, an articulated totality, in which it is up to the researcher and research participants to transform it and not only criticize it.

Based on Desgagné (2007) and Pimenta (2015) we understand the need to strengthen research methodologies aimed at teacher education that aim to reduce the existing distance between the world of professional practice and the world of research. Based on this statement, we highlight the participatory, collaborative, intervention and/or research-training research as a possibility of unity between research and training, insofar as it understands teachers as protagonists of their development process and as subjects who can build knowledge about teaching through critical reflection on their activity, in the collective dimension.

Thus, in the first part of this work we conducted a state of the question⁵ about the concepts and discussions considering three types of research, supported by the following works: "Collaborative research: investigation, training and knowledge production" (IBIAPINA, 2008) and the articles "Action Research Pedagogy" (FRANCO, 2005) and "Critical collaborative action research: building its meaning from experiences with teacher training" (PIMENTA, 2005).

The state of the question will allow us to know and critically reflect about the referred research methodologies and their impacts in the area of teacher education, taking up historical, political and cultural dimensions. Therefore, our goal is not only to present the concepts of each type of research, but based on the historical-dialectical materialism, we intend to know the historicity, the interrelationship with the area of teacher education and the totality vision of each research methodology.

Collaborative research in education according to Ibiapina

For Ibiapina (2008), developing a collaborative research in education requires the involvement of researchers and teachers in the process of co-production of knowledge for research and in the professional development of

⁵ For Terrien (2014, p.2) the purpose of the state of the question is to "lead the researcher to record, from a rigorous literature survey, how the topic or object of his investigation stands in the current state of the science within his reach."

peers through a collaborative attitude whose purpose is to create space for study, reflection, and construction of new knowledge and possibilities for action when facing educational challenges.

This methodology emerges in Education as an important possibility for the development of emancipatory type researches that have as marks: the horizontality in the relationships among collaborators, the dialectical movement between theory and practice and the critical reflection about the aspects that involve the teachers' field of action, always considering the sociopolitical context that engenders the microsocial reality (IBIAPINA, 2008).

Thus, in this investigative modality it is important to be at all times aware of the relationship that exists between education and society, since,

It is assumed that, in order to transform the school, it is necessary to understand that education and society are complex and contradictory phenomena and that the school, besides being an instrument of transmission of accumulated knowledge and training of skilled labor, is also a space of transformation. This means recognizing that the conflicts existing in the school are part of the social conditions that impose limits on teaching practices, but also knowing how to visualize the possibilities of transforming this reality (IBIAPINA, 2008, p. 27).

Another important aspect to consider when referring to this research modality is the understanding about the term collaborative itself. What does collaborate mean in this context? For Ibiapina (2008 p. 34) "collaborate means democratic decision-making, common action, and communication between researchers and social agents. This does not necessarily indicate that teachers and researcher must participate together in all stages of research, have equal tasks and dedicate themselves to the same intensity. In fact, when we talk about collaborative research, we objectively mean that all participants have a voice in the process of co-production of knowledge about and for education, aiming to understand the concrete conditions of teachers' work.

Therefore, in collaborative research, the researcher offers his contribution not only when he writes an academic paper, but above all,

when he builds conditions for the group to reflect critically on the complexity of educational situations considering the dialogicity between theory and practice. Teachers, in turn, collaborate to the extent that they share aspects of their daily work, seeking to understand the conflicting relationships inherent to teaching in order to create possibilities of action, which results in their professional development (IBIAPINA, 2008).

Therefore, the development of a collaborative work presupposes the constitution of a group of subjects who have common personal, professional, and social interests and who are willing to reflect on a given theme based on mutual respect and on the qualification of the know-how of each subject involved, culminating in a democratic, collective, reflective, critical, politicized, dialogical formation made by and among peers.

To develop a collaborative research in the academic field, it is necessary that the researcher adopts attitudes that, in fact, favor collaboration among peers. Initially, it is recommended that the researcher share all the details of the research process with the teachers, encouraging them to actively participate in each step. In this sense, it is important that they collectively reflect on the theme, the object of investigation, the objective, the theoretical conceptions that guide the work, the methodology used to build the research corpus, the paths chosen to analyze the information and how to disseminate the results (IBIAPINA, 2008).

Ibiapina (2008) recommends the systematization of essential procedures for the realization of research in this modality. For the author, the collaborative cycle of research in education must begin with the sensitization of collaborators to the principles of collaborative research, through conversations that clarify the main characteristics of this investigative methodology and with the negotiation of the attributions of the mediator (researcher) and collaborators (teachers), making clear the role of each one.

Besides dialoguing with the collaborators about everything that involves the research process, Ibiapina (2008) also emphasizes the

importance of talking thoroughly about every aspect that involves the formative meetings: the objectives of the meetings, the way they will be organized, the type of interaction and involvement with the proposal, the need to do theoretical readings and share the reflections raised, the duration of the meetings and the research, and the need or not for anonymity.

Next, a survey of the training needs and previous knowledge of those involved in the research should be carried out. This is a fundamental point, because it is based on the knowledge of the themes that teachers want to learn, the difficulties encountered in their daily work, the gaps perceived in their initial training, their professional experiences and their aspirations, that the readings and the way the meetings will be conducted can be defined. Having always in mind the organization of a space in which teachers can build "knowledge, skills and attitudes capable of providing them with conditions to understand the problematic situations experienced, as well as to solve and change the contexts of performance" (IBIAPINA, 2008, p. 42).

Thus, according to the author it is understood that to research collaboratively, it is necessary that researchers and teachers meet constantly to reflect on this knowledge, from reflective cycles that help the analysis, the dialogism and the collaboration between pairs of different levels of professional competence, expanding the levels of theoretical and practical knowledge of researchers and teachers.

The collaborative research scenario is, therefore, marked by the co-production of knowledge among teachers, as teachers and researcher elaborate the knowledge they have and their professional experiences to share with others, mediated by each other's speech and by theoretical readings, they expand their possibilities of understanding about teaching and build new ways of thinking and acting as educators.

In this reconstruction process, the elaborated social and personal meanings go beyond the space of understanding the text itself, since they "penetrate the conceptual system already elaborated by the teacher, making

it evolve to another level". In reflexivity, "the teacher dives into practice and brings theory to the surface to understand more clearly the concepts that guide teaching activity" reconstructing, critically and reflexively, his/her pedagogical praxis . (IBIAPINA, 2008, p. 47).

To structure this reflexivity process in collaborative research, Ibiapina (2008), inspired by the writings of Freire (2004) and Smyth (1992), proposes the organization of reflective actions based on the following steps: description, information, confrontation and reconstruction. Briefly, the first moment refers to the detailed description of professional practice; the second characterizes the reflections that turn to the understanding of the fundamentals that guide the choices made by teachers in the exercise of their profession; the third moment, the confrontation is a crucial period in this reflection process, because it is when teachers seek to understand critically the social meaning of their actions, pondering about the maintenance or transformation of inequalities, differences and prejudices and, finally, in the final moment, there is the possibility of reconstructing the professional practice.

The objectification of this reflective process can be done, according to the author, through different tools, resources and procedures that are used as mediating devices in the development of research. For example: face to face dialogue; video training; autobiographical narrative; collaborative observation and/or reflective sessions.

Action research in teacher education in Franco (2005) and Pimenta (2005): the Pedagogy of Action Research and Critical-Collaborative Action Research

To explain her perspective on the pedagogy of action research, Franco (2005) deepens her reflections on the pertinence and possibilities of action research as a pedagogical and scientific instrument, allowing us to reflect on the possibilities and limits of research. Based on Kurt Lewin (1946), the author reports some of the history of action research and highlights in

which contexts and intentionalities action research has been used in the last decades, as well as its different methodological aspects. In this way, she affirms the need to deepen on its epistemological essentiality, and its possibilities as investigative praxis to guarantee unity between theory and method and the scientific validity of the studies carried out.

Based on a survey of research carried out with this methodology, observing the direction, meaning, and methodological routes, the author presents three different conceptualizations based on surveys and analysis of action research in Brazil: collaborative action research, critical action research, and strategic action research.

According to Franco (2005), among the main differences between the conceptions presented is the fact that in the former, the search for transformation is requested by the reference group to the team of researchers, and it is up to the researcher to scientize a process of change previously triggered by the subjects of the group; In critical action research the need for transformation is perceived from the initial work of the researcher with the group and has as its main objective the emancipation of the subject; and finally, in strategic action research the transformation is previously planned, without the participation of the subjects, and only the researcher will monitor the effects and evaluate the results of its application.

In this sense, the author emphasizes that:

The condition for being critical action research is the plunge into the praxis of the social group under study, from which latent perspectives are extracted, the hidden, the unfamiliar that sustain the practices, being the changes negotiated and managed in the collective. In this direction, collaborative action research, in most cases, also assumes the character of criticality (FRANCO, 2005, p.486).

Supported by authors such as Lewin (1946), Kincheloe (1997), Barbier (2002), Thiollent (2003), the author traces a historical course of action research to understand the epistemological transformations present

over time, showing how this type of research has been strengthened in the educational space, especially with regard to the formative character allied to research. From the historical survey, the author points out a key problem question to understand this investigative modality: what type of research is intended when we refer to action research?

In the analysis undertaken by Kincheloe (1997, p. 179), critical action research, "[...] is not only intended to understand or describe the world of practice, but to transform it; (...) it is always conceived in relation to practice - it exists to improve practice." Thus, the effort of critical action researchers is to try to uncover those aspects of the dominant social order that undermine efforts to achieve emancipatory goals.

In order to epistemologically ground this type of research, Franco (2005) distinguishes the clues found in three dimensions: i) ontological dimension: referring to the nature of the object to be known; ii) epistemological dimension: referring to the subject-knowledge relationship; iii) methodological dimension: referring to the knowledge processes used by the researcher.

When explaining these dimensions, the cited author highlights which action we refer to in action research and also what is the role of the researcher and participants in this type of research. She emphasizes that for this approach, it is necessary to move away from the positivist perspective so that there can be the much needed interpenetration of roles, in which researcher and participants are co-authors of the research, establish a communication of equals with the actors, giving them voice, sharing power and recognizing their ability to give meaning to events. All this, always with the perspective of collaborating with the changes intended by the group and without losing the dimension of the formative character of the process.

Supporting this discussion, Pimenta (2005) brings an approach to the process of reconfiguration of the meaning and significance of action research as a critical-collaborative research, with reference to two experiences coordinated by her together with teams from the University of São Paulo

and public schools in that state. The assumptions that sustain this approach show that it is up to researchers to establish links with school teachers in order to build a partnership with them to help problematize situations of practice. It is emphasized that, by reflecting, teachers are able to analyze, problematize, and understand their own practice and it is precisely in this movement that Pimenta (2005) emphasizes the need to use pedagogical, scientific, and experience knowledge, since they are constituents of teaching.

The author asserts that the most fruitful assumption of continuous training,

is the one that takes the school contexts as the object of analysis, which favors the relationship between theory and practice, since in the traditional modalities of continuing education, such as courses and various trainings, the mediation between these modalities and the school contexts have not been established, resulting in an investment more in the professionalization of the teacher and less in changing the institutional practices necessary to improve the results of schooling (PIMENTA, 2005, p. 534).

Exploring this question further, the author considers that the research problem lies in detecting to what extent collaborative research can favor processes of group identity construction, benefiting a space for reflection for all involved, seeking to produce knowledge whose objective is to produce changes in institutional culture resulting in professional qualification.

Also in the conception of Pimenta (2005), the collaborative action research aims to encourage institutional actions and practices. However, it becomes critical according to the commitment of those directly involved in the research, to the extent that it enables the transformation of institutional practices and makes possible the role of social and political democratization of society. In other words, it considers the social actors in the process, since they collaborate in the formulation of the conclusions "sharing and contributing from the knowledge produced, constituting themselves also researchers and authors of the changes" (PIMENTA, 2005, p. 529).

Pimenta (2005, p.534), making use of Franco's collaboration (2004), reiterates that "the condition for being critical action research is the plunge into the praxis of the social group under study, from where the latent perspectives are extracted, the hidden, the unfamiliar that sustain the practices, and the changes will be negotiated and managed in the collective". It should be added that "collaborative action research most often assumes the character of criticality as well" (p.534).

By expanding the meaning of this research, this author confirms the relevance of conducting this type of research between universities and schools. In this process, it is essential to start from the needs of the teachers involved to determine the research objectives. As teachers find that they are able to reflect and change their practices, they become stronger as professionals.

As emphasized by Pimenta (2005), it takes time to "implant and mature" to implement significant changes in teaching, since persistence is needed to modify the current authoritarianism. For the author, it is necessary to strengthen the professionalism of teachers, through explicitness, registration, shared reflection, proposition, realization, follow-up, and analysis of participative projects that are subsidized by the formative needs expressed by teachers and/or perceived by researchers. With this, "they make possible the enlargement of the spaces of decision and autonomy of teachers against the impositions imposed on them" (PIMENTA, 2005, p. 537).

Regarding the potential of critical collaborative action research and action research pedagogy in teacher education, research conducted in Brazil and worldwide ratify the transformations of practices provided by this approach. It should also be noted that such results make fertile the transformations in public policies, especially in the forms of management of education systems and in the new weaves about teacher training and teacher professional development.

A possible way to proceed - collaborative research and teacher development

After concluding the first part of the article in which we brought different elements regarding the epistemology of research-training from different approaches, in this second moment we bring as an illustrative example of research-training from a collaborative perspective, the theoretical-methodological path, analyses, and results of an investigation developed at the doctoral level.

The referenced research entitled *As if it were a wheel game - the collaborative group as a mediator of teacher development* (PEDRO, 2019), had as its theme the teacher professional development and aimed to apprehend and analyze the teacher professional development process in the movement of a collaborative group. To this end, it carried out, as a proposal for continuing education, a university extension course aimed at licensed teachers, with up to six years of professional experience, who worked in Elementary II and High School in municipal and state public schools in Uberlândia and its surroundings.

For the development of this formative proposal, we took as subsidies: the knowledge of Education that understands teaching as a profession; the principles of the Cultural-Historical Theory and its concepts; the discussions about the schooling process promoted by School and Educational Psychology from a critical perspective and the guidelines brought by Collaborative Research. For the present text we will emphasize the methodological aspects of this research.

The tool chosen to provide the construction of the reflective process with the collaborating teachers was the development of reflective sessions that, in synthesis, consisted of meetings with teachers, organized in order to share meanings and senses about a given problem or aspect of their professional practice (IBIAPINA, 2008).

Sixteen reflective sessions were developed that comprised the extension course. This was constituted in the form of a collaborative group, according to Ibiapina's guidelines (2008), in which 11 licensed teachers who worked in Elementary II and Secondary Education in public schools in Uberlândia and region were collaborators. In addition, the research was restricted to teachers who were in their first six years of professional activity, that is, in the "exploration" and "stabilization" phases of their careers.

The exploration phase refers to the first three years of professional performance and is the moment in which the teacher has the initial contact with the teaching practice and seeks to survive in the face of the challenges presented. The stabilization phase, on the other hand, goes from four to six years of professional experience and is the moment when the teacher defines more clearly his/her professional identity (GARCIA, 1999).

The reflective sessions were apprehended in their entirety by means of audio recordings and were later transcribed, transforming the spoken word into text. To complement the empirical material produced, we also used the researcher's and teachers' notes taken in a logbook, in addition to the materials produced in the meetings themselves, such as drawings, letters, posters, etc.

Considering the guidelines of collaborative research, the first five meetings were dedicated to creating a bond among the participants, organizing the practical aspects and surveying the teachers' expectations and needs. Thus, all the details of the extension course and, consequently, of the research were defined as a group. The themes were chosen based on the demands presented by the collaborating teachers themselves, and, in summary, addressed the following points: the physical structure of the school, space, materials, traditionalism; aggressiveness, indiscipline, lack of interest, teacher-student relationship; inclusion and specialized educational care; sexuality, diversity, prejudice, bullying; relationship with management, supervision and co-workers, bureaucracy, lack of support and being a teacher, remuneration, overwork, continuing education, autonomy, fears, workers' health.

To analyze the empirical material produced by the research, we chose the methodology of the Nuclei of Meaning that guides from the empirical expressed in speech, gestures and other elements of communication recorded by the researcher to thus understand the areas of meaning expressed by the research subjects (AGUIAR; OZELLA, 2006; NAVES, 2011).

Thus, considering the entire research corpus built in the referred investigation the analysis was done following the following steps: careful reading of the empirical material produced; elaboration of the pre-indicators of analysis, highlighting the most significant excerpts; grouping of the pre-indicators, by complementarity, similarity or contradiction, creating initial indicators for understanding the data; construction of cores of meaning, elaborated from the organization of indicators, in order to identify areas of meaning that help in the understanding of the investigated phenomena and, finally, the analysis of the cores of meaning was performed, through the exercise of articulation between them, the broader contexts that constitute the investigated reality and the relevant theoretical reference (AGUIAR; OZELLA, 2006; PEDRO, 2019) .

Taking the following question as a problem: How does the process of professional teacher development occur in the movement of a collaborative group? After the due analysis, the referred investigation culminated in the understanding that the process of development experienced in and by the group occurred through three main areas of meaning: the mediation of the other, the environment, the aesthetic elements and the shared theoretical knowledge; the drama, the crisis, the confrontation and experimentation of the new and the affectivity present in the way the collaborative group was built and conducted.

When analyzing the empirical material produced by the research, it was possible to identify that the analysis indicators that brought signs of transformation in the beliefs and conceptions about teaching and the re-signification of professional knowledge had mediation as a basic principle at its root. In this collaborative group, mediation

happened specifically in the context of the relationship with the other, with the researcher as a school psychologist, with the aesthetic elements, with the environment, and with the texts of School and Educational Psychology from a critical perspective that subsidized the conversations carried out. In this sense, through the exchanges and dialogues that took place along the reflective sessions, it was possible to see, in the movement of the collaborative group, that the teachers were transforming their beliefs and conceptions about teaching and re-signifying their professional knowledge, indicating how the continuous training space that was built was configured as a social situation favorable to teacher development.

Aware that man is a driven social being and that his formative needs come from his social practice (teaching), it was possible to observe during the formative meetings that the crises experienced by the teachers helped them to elaborate new meanings about teaching and, consequently, to build differentiated pedagogical practices, besides collaborating in the constitution of their professional identity.

Finally, in the research in question, the collaborative group proved to be a social situation conducive to the teacher's professional development and this did not happen naturally, but through specific choices made by the researcher.

The choice to carefully follow the guidelines of collaborative research, considering horizontality in relationships, democratic decision-making and clear communication among research collaborators (IBIAPINA, 2008), soon culminated in evidence of effective collaboration. For this, some tools were used: the search for knowing the participants in a deeper way, understanding the professional and personal aspects that determine their constitution; the investigation of the teachers' previous knowledge and their formative needs; the construction of a group contract with guidelines on how to be in the group; the welcoming of the participants at each meeting with a tasty and careful snack; the writing of a reflective letter summarizing the whole process.

Thus, the pedagogical decisions adopted to conduct the collaborative group highlighted the importance of affectivity in learning spaces, since, "[...] affective processes are complexified during development, suffer influence and influence cognitive processes, maintaining a dialectical relationship with them throughout the subject's life (LEITE, 2017, p. 163).

The potential of the collaborative group in question came about from the use of some assumptions: the careful planning of the extension course having clear the theoretical references used to support the reflective sessions; the clarification of the research objectives with the group; the construction of a collective contract; the organization of the meetings making use of different teaching resources; the establishment of a horizontal and democratic posture with everyone; having affectivity as a guide to guide the relationships between teachers; proposing an attentive and active listening; have a careful attitude towards the details of the research; conduct the research with sensitivity and flexibility; recognize one's own faults as a group mediator; use Art as a mediator in dialogues; consider the historical, cultural and political context in which the group was inserted; value the personal and subjective aspects of the collaborators; make evaluations and give feedback throughout the process and express, as a mediator, the love for teaching and education.

All this had repercussions in transformations in the teachers and their teaching practices, showing that the collaborative group movement was the foundation of the formative dimension for the construction of identity, for the re-signification of teaching knowledge and the elaboration of new knowledge, therefore, for the professional development of teachers.

In addition to highlighting that professional development also includes the development of the teacher as a unique, singular, and subjective subject who works in a complex profession. Pointing, finally to the value of building teacher collectives that enable "transcend the solitary paths of teaching, for solidarity encounters, through the construction of collaborative and fraternal partnerships aimed at the emancipation and transformation of the human, education and society" (PEDRO, 2019, p 182).

Final considerations

Considering that in the current times many measures have been imposed to Education in order to deprive it of its role in the process of constitution and development of conscious, critical and reflective subjects, we believe that the investment in continuous training proposals that promote a collective space of sharing and construction of new meanings about the professional practice of teachers is fundamental. We consider that the distinct and important contributions brought by Ibiapina (2008), Pimenta (2005) and Franco (2005), besides the exposition of the theoretical and methodological path of a collaborative research carried out with Basic Education teachers, allow us to have an overview about the possibilities of implementation and realization of research training in the field of education.

Moreover, we realize that despite the singularities of each methodology, the epistemologies of these researches are close to each other as they suggest formative actions in a critical and emancipatory perspective that directly intervene in the teacher's praxis and in the social transformation. In this sense, the research-training from the theoretical and methodological perspectives analyzed, presents itself as a possibility of transformation of the formative processes in view of the professional development of teachers of basic and higher education; and of the production of scientific knowledge in a counter-hegemonic perspective, from the consolidation of collaborative partnerships (between university and school) aimed at the emancipation and transformation of the subject, education and society.

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