

Teacher training in a network context, possibilities in the face of the Covid-19 pandemic

Formação docente em contexto de rede, possibilidades diante da pandemia Covid-19

Formación docente en contexto de red, posibilidades ante la pandemia Covid-19

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ABSTRACT

This article aims to reflect on the possibilities that the Covid-19 pandemic imposed on education systems, related to continuing teacher education in the context of the network. It describes and analyzes the conceptions of training to exist in the historical process, through bibliographic research and literature review, in an approach of qualitative analysis in education. It is based on the theoretical framework: Scarpa (1998), Imbernón (2011, 2022), Tardif (2014), and Placco e Almeida (2015) among others. In the first section, a history of training policies will be made based on the institutional approach. In the second section, the analysis of the formative design appropriate to the new educational reality will be carried out. The third section points to educational planning and training policies. Finally, the training proposal is presented in a network context in the face of the Covid-19 pandemic. The possibilities of a formative work that emerges from the teaching practice based on the teaching network itself are highlighted.

Keywords: Teaching systems. Teacher education. Planning. Pandemic.

RESUMO

O presente artigo tem como objetivo refletir sobre as possibilidades que a pandemia Covid-19, impôs aos sistemas de ensino, relacionadas a formação continuada docente no contexto de rede. Descreve-se e analisa as concepções de formação existentes no processo histórico, por meio da pesquisa bibliográfica e revisão da literatura, numa abordagem de análise qualitativa em educação. Apoiar-se no referencial teórico: Scarpa (1998), Imbernón (2011, 2022), Tardif (2014), Placco e Almeida (2015) dentre outros. Na primeira seção far-se-á um histórico sobre as políticas formativas

a partir do enfoque institucional. Na segunda seção será realizado a análise do desenho formativo adequado a nova realidade educacional. A terceira seção aponta para o planejamento educacional e políticas formativas. Por último apresenta-se a proposta formativa em contexto de rede diante da pandemia Covid-19. Destacam-se as possibilidades de um trabalho formativo que emerge da prática docente alicerçado no interior da própria rede de ensino.

Palavras-chave: Sistemas de ensino. Formação docente. Planejamento. Pandemia.

RESUMEN

Este artículo tiene como objetivo reflexionar sobre las posibilidades que la pandemia Covid-19 impuso a los sistemas educativos, relacionadas con la formación continua del profesorado en el contexto de la red. Describe y analiza las concepciones de formación existentes en el proceso histórico, a través de la investigación bibliográfica y revisión de la literatura, en un enfoque de análisis cualitativo en educación. Se basa en el marco teórico: Scarpa (1998), Imbernón (2011, 2022), Tardif (2014), Placco e Almeida (2015) entre otros. En la primera sección se hará una historia de las políticas de formación con base en el enfoque institucional. En el segundo apartado se realizará el análisis del diseño formativo adecuado a la nueva realidad educativa. La tercera sección apunta a la planificación educativa y las políticas de formación. Finalmente, la propuesta de capacitación se presenta en un contexto de red ante la pandemia Covid-19. Destaca las posibilidades de un trabajo formativo que surge de la práctica docente basada en la propia red docente.

Palabras clave: Sistemas de enseñanza. Educación del profesorado. Planificación. Pandemia.

INTRODUCTION

Since the 1990s, with the enactment of the National Education Guidelines and Bases Law (LDB) 9394/96, the country inaugurates a period of educational reforms, based on progressive principles, based on the autonomy, decentralization and flexibilization of education systems and their educational management.¹

Government agendas, whether at the national, state or municipal level, incorporate the challenge of students' access and permanence to a quality education, where the teaching, learning, curriculum and evaluation process project results that will guide educational funding and educational public policies.

Along this route, Brazilian municipalities chose to create their own system, decentralized by the municipalization process at the local level, with collaborative characteristics with the other federated entities: Union, States and Cities. To this end, there is the challenge of implementing democratic management, already explained in the Federal Constitution of 1988,

Art. 206. Teaching will be taught on the basis of the following principles:
(...) VI - democratic management of public education, in the form of the law;
(Constitution, 1988) (Our translation).

And how it dialogues with LDB 9394/96

Art. 14. Education systems will define the rules of democratic management of public education in basic education, according to their peculiarities and according to the following principles:
I - Participation of education professionals in the elaboration of the school's political pedagogical project;

¹ Silva Eliani Cristina Moreira da. The supervision of education in the municipal education system of São José do Rio Preto/SP (1996 to 2016): the specificities of the historical-political-normative trajectory and the process of democratization of basic education. Master's thesis. São Paulo State University (UNESP), 2018.

II - Participation of school and local communities in School Boards or equivalent (Law no. 9,394, 1996) (Our translation).

The normative acts point to an openness in the elaboration of upcoming educational policies and explain points of attention to the educational systems that choose these paths. One of them would be the elaboration of the pedagogical project of the school, with the participation of education professionals. Another aspect to consider would be the participation of the school and local communities in school boards, or equivalent, in the construction of the educational project of each school unit, in a management marked by the participation of the actors involved in the educational process: school and family.

However, another crucial point for ensuring a quality teaching-learning process, which makes us reflect during the research, concerns teacher education. We can affirm that, increasingly, we need to advance on this educational front called teacher training, especially by imposing the new educational demands to come from the pandemic context of Covid-19, starting in March 2020.

Nóvoa and Alvim (2021, p.8), point out that the new demands of the post-pandemic context, underpoured the professional training of teachers to break with the organizational structures of teaching learning based on individual processes. In the post-pandemic context, the continuing education of teachers corroborates the collective work and no longer focused only on the individual work of the teacher.

The knowledge society, in the era of computerization of digital and communication technologies, gain space between teaching-learning processes, mediating information, knowledge and learning. It will be up to the education systems to seek in the reconstruction of their educational networks, the very reinvention of their educational processes in this new context that emerges, overcoming their paradigms so far built.

Thus, thinking about the training of teachers will be made eminently, given the new official curriculum imposed by the National Common Curriculum Base - BNCC (2018) and by the pandemic and post-pandemic context experienced, it will require investments and efforts in the construction of a formative space proposed to teachers. A teaching training proposal based on the context of each school network, in the school unit itself, respecting the training path, knowledge and teaching practices is presented.

Imbernón (2022), is consistent with this proposal, as it highlights in its research that teacher education should take place in the context itself, because it is necessary guidance and support, development of organizational models for classroom management, development of collective work among peers in the school itself, associating theory and practice in the very territory of the school unit.

In addition, compliance and advances in this area pointed out by the legal regulations on the subject must be considered. As an example, one can mention the one described in LDB n. 9394/96, which points to the implementation of a formative policy in service to education professionals. The National Council of Education (CNE), in its documents, are consistent with the need for formative policies for education professionals. Recently, the promulgation of the BNCC, the new curriculum for basic education, requires the rethinking of the pedagogical practice of teaching.

Therefore, this study plans to advance this path: to rethink the continuing education of teachers from the context of the educational network. This is qualitative research in education based on a review of the literature on the subject, according to Ludke and André (2018, p.31), because "direct observation also allows the observer to come closer to the "perspective of the subjects", an important target in qualitative approaches. To the extent that the observer accompanies on the daily experiences of the subjects on the ground, he can try to grasp his worldview, that is, the meaning they attribute to the reality that surrounds them and their own actions."

To carry out the bibliographic survey, it is observed that the formative contexts approach the conceptions of continuing education from the external approach of training, with structuring axes *a priori* predetermined, carried out by institutional teams, advisory and partnership with universities. Not that this is an obstacle to professional development, it is necessary, an external view, but the approach of this research points to a continuous formation in the context of network, among peers, which emerges from the pedagogical practice itself.

Therefore, it will be based on academic studies on continuing education for pre- and post-pandemic teachers highlighted in the theoretical framework of Scarpa (1998), Imbernón (2011, 2022), Tardif (2014), Placco and Almeida (2015) among others. The look at the official and institutional documents that support the elaboration and implementation of curricular programs and how they record the formative paths will be presented as a tool for analyzing studies of paramount importance for the relevance of research.

In this sense, the schools will need to rethink their formative processes from their own pedagogical path experienced, due to the context imposed by Covid-19, which suspended face-to-face classes and pointed to innovation of innovative pedagogical practices through remote teaching and online classes. A path way to implement their own training centers in a network context from their territories.

To this do so, the historical overview of teacher education will be presented in the first section; in the second section the possible trajectory for teacher education; in the third section the challenges for implementing educational planning as an ally in the post-pandemic context; the fourth section will support teacher training in the face of an innovative context and, finally, the final remarks.

TEACHER TRAINING, A HISTORICAL PANORAMA

The Covid-19 pandemic, the isolation and social distancing and the non-face-to-face classes, mediated by technologies, call into question the traditional paradigms in force that have long supported the theory and pedagogical practices in the classroom space. In addition, the knowledge society, the information age, digital and communication technologies, did not deprive us of the emergence of denialism to scientific principles, which are often challenged by common sense. This makes the teaching role as a mediator of scientifically consolidated knowledge essential.

To convert the large volume of data into meaningful and contextualized knowledge, it was necessary that many reinvented themselves as teachers, especially in the production of classes mediated by Digital Information and Communication Technologies (TDIC). It was also necessary to reflect and make choices about the object of knowledge and the ways of transmitting them, transforming the pedagogical doing beyond what was taught in undergraduate courses, in initial formation.

Alarcão (2003, p.45), states that the "reflective teacher is based on reflective and active thinking in the world and needs a holistic formation", a posture of know-learning, knowing-do in a continuous movement in his teaching practice. It describes a path to teacher education from a reflective teacher through action-reflection-action in practical learning contexts. This has never been more necessary than it is now.

We highlight the training of education professionals to meet the specificities of their activities throughout the and basic education, based on scientific and social foundations, on the association of theory and practice and use of previous academic experiences to establish the training path of these professionals.

With the approval of BNCC, the curricula present in the teacher training courses will have as reference the basis itself, from technical courses of medium or higher level and technology, distance or face-to-face, carried out, in the workplace or in institutions of basic and higher education,

including professional education courses, full undergraduate or technological and postgraduate courses.

In addition, education systems should promote ways of valuing education professionals expressed in their statutes and career plans to ensure continued professional development, with periods reserved for studies, planning and evaluation, included in the working day, as expressed in Article 67 of LDB 9394/96.

The established provisions indicate that each education system must, in its Municipal Education Plans (SMEs), assume the commitment to develop guidelines and establish goals together, emphasizing the obligation to carry out training programs for all active teachers, using face-to-face resources and distance education (Distance Education).

Later, Decree No. 8,752, of May 9, 2016 - National Policy for the Training of Basic Education Professionals highlights,

Art. 1º The National Policy for the Training of Basic Education Professionals is instituted, with the purpose of establishing its principles and objectives, and organizing its programs and actions, under collaboration between education systems and in line with the National Education Plan - PNE, approved by Law No. 13,005 of June 24, 2014, and with the decentral plans of the States, the Federal District and the Municipalities (Decree no. 8,752, 2016) (Our translation).

This Decree, establish the objectives of the National Policy for the Training of Basic Education Professionals, openly expressing in Article 3(V)

Art. 3. The objectives of the National Policy for the Training of Basic Education Professionals are: [...]

V - Support the offer and expansion of initial and continuing training courses in exercise for basic education professionals by higher education institutions in different networks and education systems, as established by Goal 15 of the PNE (Decree no. 8,752, 2016) (Our translation).

The CNE/CP resolution. No. 02, of December 20, 2019, which defines the National Curriculum Guidelines for the Initial Training of Teachers for Basic Education and establishes the Common National Base for the Initial Training of Teachers of Basic Education, consolidates the proposal of implementation in all modalities of courses and programs intended for teacher training through specific skills design you are fundamental to prioritize teacher education through professional knowledge, acquisition of knowledge that gives meaning and meaning to professional practice.

Professional practice involves how contents are worked in class situations, pedagogical knowledge of content, association between the object of knowledge and object of teaching, reflections on and professional engagement; moral and ethical commitment to students' learning; interaction with peers, managers and community; commitment to personal and professional development. Both initial and continuing education should excel in the articulation of theory and practice, teaching experiences, the freedom to learn, teach, research, disseminate culture, art, knowledge and, mainly, respect for pluralism of pedagogical ideas and conceptions.

These norms support and signal formative paths in the education system, but it is known that there is an object of reflection that needs to be considered for teacher education to be consolidated, which characterizes the political will for this purpose.

It is known that, during the political opening and redemocratization of the country, the promulgation of CF/88, LDB 9394/96, the educational policy carried out at the federal level, by the Ministry of Education and Culture (MEC), assumes an incisive stance in the responsibility of the public power for the performance and teaching career in basic education, from the formulation of a national policy of teacher education whose horizons are consistent with a national education system.

The educational departments or educational departments need to invest in continuing education programs, teachers and managers, to fill the gaps in initial training, allowing the updating of the knowledge of these professionals in their daily work. The improvement of the National Institute of Educational Research (INEP) as a federal agency that oversees and evaluates the curriculum policies of basic and higher education, teacher training, student learning outcomes and the National Plan for Teacher Training of Basic Education (PARFOR) with their joint actions to provide training to those who do not have, it has boosted training actions to meet the educational demands of the educational networks.

The National Network for Continuing Teacher Training, created by MEC in 2003, aimed at institutionalizing the care of continuing education of early childhood education and elementary school - is resized. It is responsible for the training of the group of basic education professionals and, in addition to strengthening the strategic programs of the area and hosting a greater number of training projects, promotes greater articulation between the demands of states and municipalities and the courses offered by partner institutions. It benefits from the greater refinement of the requirements of federal entities provided by the Articulated Action Plan, an offshoot of the Education Development Plan, launched in 2007.

It is noteworthy that the education systems promoted a teacher training, often hiring the external training advisory, making partnerships with a higher education institution, instead of investing efforts to establish their own network training team. This demonstrates differentiated paths in its performance and its results in the short, medium and long term (Silva, 2018, p.108).

Therefore, the historical trajectory of formative policy for teachers and specialists of education gained prominence and was present intensely until mid-2016. From there, there is a period of apparent discussion of a curricular restructuring and a dismantling of training policies for educational networks, with rare exceptions, whose structure was already consolidated, to be able to break and continue public policy at the local level. The education networks that constituted respecting their pedagogical path managed to maintain, even timidly, a policy of continued training guaranteed and effective from the current legal regulations.

The questions in this regard allow us to point out that the education systems that have walked paths of pedagogical autonomy in broad aspects, especially in formative policies from their network context, have managed to continue their formative public policies.

A POSSIBLE TRAJECTORY FOR TEACHER EDUCATION

According to the World Bank Report (Joint Report, 2021) *The State of the global education crisis: a path to recovery*, "the COVID-19 crisis has forced the global educational community to learn some critical lessons, but also highlighted that transformation and innovation are possible for resilient and transformative educational systems that truly provide learning and well-being for all children and young people". They corroborate this idea the research in previous years, which explained ways for continuing teacher education, which now in the post-pandemic context should be revisited and intensified in the teaching networks.

Scarpa (1998), supported by the reflexive idea of teacher education, points out possible paths to the practical nature of the teaching activity. The need for knowledge in action, his knowledge to effect, reflection for intervention in his pedagogical practice.

Arroyo (2000), complements the previous position by highlighting that, in general, we observe the absence of skills and mastery of knowledge, distance the recognition and appreciation of teaching professionals and that to inversion of this image we must build a social image of our know-how, even if this occurs in a slow process of formation of our master image.

Imbernón (2011), points out ways for a teacher and professional formation for change and uncertainty, which certainly proposes a critical reflection on the pedagogical practice and the directions that teacher training must take for professional consolidation.

The permanent formation of teachers needs to go through the practical-theoretical reflection on the understanding, analysis and intervention of reality; the exchange of experiences between equals to make possible the updating, intervention and educational communication; the union of training with a work project; training as a critical stimulus against professional practices such as hierarchy, sexism, *proletarização*, individualism, little prestige, etc., and social practices such as exclusion, intolerance, etc.; the professional development of the educational institution through the joint work to transform this practice, enabling the transition from the experience of innovation (isolated and individual) to institutional innovation (Imbernón, 2011, p.50-51) (Our translation).

Tardif (2014) explains to us that the current trends of continuing education start from the principle of valuing teacher knowledge. The training work should start from the investigation of the knowledge of teachers, their nature, their origin, in the capacity of construction and reconstruction of specific knowledge of teachers and the relationships that these professionals establish between the knowledge constructed in daily school life and the educational sciences. Therefore, one can recognize the need to rethink teacher education at all levels of education and find a way to effectively make it feasible. As Scarpa says,

this need is justified above all by the evolution of the sciences, by the transformations of social, cultural, economic and technological circumstances that affect the new generations, and by the very nature of the teaching function, as it seeks to understand it at the same time. This requires the ability of initial and permanent training programs to be a constant instrument of innovation and improvement of the personal and collective situation of teachers. It means training a teacher who knows how to deal with new curricular requirements, with new skills and professional skills, to be an active member of his school team, author of his practice, researcher in the classroom, able to constantly reflect on his pedagogical practice (Scarpa, 1998, p.33) (Our translation).

This indicates that the new curricular proposals, the new teaching-learning methodologies mediated by Digital Information and Communication Technologies (TDIC) will need to be part of the formative context of teachers, in order to promote in the innovative formative environment of development of skills and professional skills, from the practice of individual pedagogical practice to a collective pedagogical practice (Imbernón, 2022).

CHALLENGES FOR IMPLEMENTING EDUCATIONAL PLANNING IN THE POST-PANDEMIC CONTEXT

Education systems and school units will need to meet this new formative challenge imposed by the pandemic context, in order to minimize the damage caused by the lack of national coordination of educational policy from national official bodies, such as the Ministry of Education and Culture (MEC), National Institute of Educational Studies and Research Anísio Teixeira (INEP).

It will be an imperative need for education networks to fill gaps in such a close past and, to do so, educational planning will become essential and significant to recover and address the deficiencies caused. Consistent with this proposition, the training programs will go with compensatory and restorative purposes.

The conceptions and models of teacher training projects in service are directly related to the different ways of defining the teaching profession. Each of these paradigms responds to a determined philosophical conception about what it is to be a teacher and, according to it, I defined

the most important factors to develop and the guidelines used in its formation processes (Scarpa, 1998, p.34).

The training path and the valorization of education professionals foster this process of educational planning articulated the public policy of continuing education with regard to the educational networks. Looking into the network itself, of the needs and formative demands, will provide us with a collective reflection, of which citizen and society we want for the future.

However, how is educational planning in education systems articulated with public policies of continuous education that are thought and actually implemented? It is worth asking how the education systems have been constituted in their historical path and how educational planning develops for the consolidation of formative public policies articulated with local identity, analyze the territory as a space for educational development possibilities.

In this age, there is a so-like complementation of the master's research, in 2018, observing that the education system, despite the entire organizational path, until now, has still been a long way to go, whether at the local, state or federal levels. This fact is realized with government policies and not state policies.

The rupture of the continuity of educational policy, in the various spheres of federated entities, imposes an effort for articulation and engagement in order to rescue the educational path of education systems and survive the conservative and denialist wave that were reborn in the educational universe.

The education systems, which were organized in collective actions of representativeness of the various segments of education professionals, aiming to rebuild the actions, educational planning, training and continuity of educational actions so far experienced with positive results on educational quality, were able and can continue to seek organization in this new context.

It is necessary to resume the path of reflection and decision-making of the organization of an educational planning for the coming years, outlined in a dialogical perspective and of continuity and educational innovation, through the curricular reorganization and the (re)elaboration of the Pedagogical Project of the school units.

It is a political process, a continuous collective purpose, of reflection and broad debate, in order to deliberate on the construction of the future of the community, with the participation of as many members of the categories that constitute it as possible. Participatory planning within the school implies continuously reviving the process of reflection and action of the collective.

This historical trajectory allows us to compare the municipal systems in (re)construction, which wish to transform education with characteristics of pedagogical autonomy into administrative and financial, according to the local historical-geographic context. It is worth mentioning the construction and valorization of education professionals who act as direct and indirect promoters of the elaboration, implementation and monitoring of the educational quality offered.

The current scenario consists of several government programs and educational institutions. However, recent research and studies (national and international) indicate that offering programs focused on theoretical contents, teaching models and practices elaborated by specialists is not effective, as it does not help teachers significantly and does not result in effective changes in practices. In this perspective, municipal education systems have different forms of organization, degrees of autonomy in their administrative and pedagogical structure, acting in collaboration with federal entities. The educational quality is consolidated from the elaboration, monitoring and evaluation of educational planning that does not distance itself from the local context and that does not escape federal educational guidelines.

Vasconcellos (2014), characterizes the planning in the dialectical perspective of a theoretical-methodological instrument for intervention in reality, a posture of organizing reflection and action with a global strategy of positioning in the face of reality. The author defines the three basic

dimensions of the planning elaboration process: reality (*for what and what*), purpose (*intentionality explanation*) and the mediation plan (*forecast of actions*).

Thus, it is clear the urgent need that the educational networks, rethink their educational planning, from a formative policy in a network context, where education professionals, especially teachers, can reinvent their collective pedagogical practices within the territory for intervention in reality.

TEACHER TRAINING INNOVATIVE PANDEMIC CONTEXT

We see the organization and systematization of digital and communication platforms such as *Zoom, Google Meet, Teams, Skype, Youtube, Facebook*, which have transformed in order to enable the user greater connectivity no longer as a form of entertainment, but now as the educational objectives expressed for this purpose. They gained visibility in the educational market, during the pandemic, in non-face-to-face classes and as a great power of interconnection with families and students, who were willing to learn how these digital and communication tools (Rocha, & Lima; 2021, p.377-390).

According to Rocha and Lima (2021, p.378), "the power of influence of these digital platforms in the coming decades to disseminate information, knowledge and entertainment to people is not able to measure, but it is known that, every moment, they gain more users. "The researchers point out that "the educational universe will have to somehow appropriate this use by the need generated by the Covid-19 pandemic, and, in addition, equalize the distortions of internet access so that in fact access is for everyone, indifferent to the socioeconomic conditions that each student may be inserted".

The path of teacher training should reflect on this universal problem the access to mediated knowledge through digital information and communication technologies, possibilities and their challenges.

A new scenario for learning and teacher training is presented, and new designs for formative meetings can be found as a promotion for the reflection of teachers and other education professionals from the reality of their practices in the work context adjusted to the new demands problematized by the pandemic context.

The proposed formative path uses the professional environment to construct knowledge through reflection, analysis and problematization of the pedagogical praxis experienced, allied to the collective teaching, mediated by the theorization of the practice expressed in a training project focused on the network context itself (Imbernón, 2022). This interactive and dialogical approach foresees the development of a self-formative process, peer learning and development of a reflective and investigative professional who conceives the school as part of a collaborative network, centered on learning.

Highlights that school-centered training plans to develop a collaborative paradigm among teachers, a reconstruction of school culture within its own reality, a self-regulation, collaborative criticism as a philosophy of work and management, in a continuous process and mutual respect of participation, involvement, appropriation and belonging (Imbernón, 2011).

Rethinking the processes of continuing teacher education promotes the reflection on the subjectivities of teachers, when they look at their knowledge and practices, from a perspective of construction and articulation, continuous movement of knowledge and know-how (Tardif, 2014).

Recently the national teacher training program has undergone the implementation of the Pedagogical Residency Program (2018) by the Ministry of Education, in order to stimulate the articulation of theory and practice, already in initial training, with room regency and pedagogical interventions. Gatti (2021, p.9) (Our translation), points out that:

The discussions and reflections on the situation of teacher education, held in some higher education institutions, have led to proposals that have shown appreciable innovations. They are institutionalized by renewing perspectives and practices and require effort and degree of cooperation of the teaching collective, full awareness of the proposal related to teacher education and dedication to the curriculum project assumed. Among several initiatives we will highlight here, by way of example, only three. They also show the feasibility of renewing when there is collective commitment and political will.

This bias allows the elaboration and execution of a formative proposal aligned with participatory planning, which considers the educational historical path of the educational networks. To this end, it is necessary to consider political will, since it involves the discussion of objectives, the representation of different groups, tensions and conflicts, in addition to the valorization of processes, and not only of results.

Meanwhile, Nóvoa and Alvim (2021, p. 3) point out, "that today it is not possible to think about education and teachers without a reference to technologies and "virtuality". We live connections without limits, in a world marked by fractures and digital divisions."

Thus, we highlight the essentiality of caring for the role of the teacher in the post-pandemic context, ensuring the maintenance of democratic and participative spaces in the production of human and social knowledge.

CONCLUSION

The schools have specific demands, being to invest in the strengthening of the school as a space for training and investigation of pedagogical practices. The management teams need to make a diagnosis of the formative demands of teachers, so that they can support them in their routine. The pedagogical project of each school unit, affected by the pandemic, will promote a reflection and a reimagining of the alignment of teaching practices in a network context, in the school territory itself.

Thus, it is necessary to support schools in the process of reflection of action planning to improve learning, improve supervisory actions and invest in structural aspects of schools with more specific pedagogical interventions in the context of classroom for the learning progress of children, youth and adults.

It is known that only technical knowledge is not enough, it is necessary that this continuing training in service is centered on contemporary challenges, based on the figure of the teacher as a researcher, through a contextualized work, which contemplates theory and practice, and that provides a constant action-reflection-action between peers.

The constant training in service has a dimension of complementation of initial training and theoretical-critical elaboration of educational practice throughout the professional career. It is important to take into account the different types of knowledge and experiences, following a dialogical interaction, articulation of theory and practice, focused on investigative and reflexive activity, with emphasis on the development of collective learning, in the process of constant education.

The Pedagogical Project of the school units should include spaces for study, problematizations, reflections on practice, valorization of peer training, collective construction of knowledge towards innovative and effective learning perspectives. The work environment promotes advances in the quality of teaching and learning teacher and student, since both build and reflect on the production and dissemination of knowledge in a procedural and contextualized way in its territory, linking theory to practice.

By analyzing the existing formative paths, it is possible to conclude that the proposals of continuing teacher education evolved from a technical, academicist perspective, to a reflexive approach that values the development of an autonomous, investigative and reflective professional. It is necessary to promote formative designs, articulated with the arrangement between theory and practice, management of teaching techniques and methods, dialogical and collaborative professional development.

Collaborative practices build and reconstruct from the problematization of the *locus* of education from their resignification accessible to the understanding of the citizens of the world, opposing only the marketing logic of education, bearing in mind that a process of formation, however well-founded and intended, will not be able to meet different world views and conflicting interests and, for this reason, efforts should be centered for continued teacher training in a network context, which desist from the reality of the pedagogical project of the school unit and promotes concrete and lasting educational advances.

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