



FROM TEACHER EDUCATION TO KNOWLEDGE IN PEDAGOGICAL PRACTICE: A COMMITMENT TOWARDS THE CONTEXT AND TO THE SUSTAINABLE DEVELOPMENT GOALS

DA FORMAÇÃO DOCENTE AO CONHECIMENTO PERTINENTE NA PRÁTICA PEDAGÓGICA: UM COMPROMISSO COM O CONTEXTO E COM OS OBJETIVOS DE DESENVOLVIMENTO SUSTENTÁVEL

DE LA FORMACIÓN DOCENTE AL CONOCIMIENTO PERTINENTE EN LA PRÁCTICA PEDAGÓGICA: UN COMPROMISO CON EL CONTEXTO Y LOS **OBJETIVOS DE DESARROLLO SOSTENIBLE**



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ABSTRACT: The purpose of this study is to map evidence of relevant knowledge being appreciated in stricto sensu graduate research which bind teacher education to pedagogical practice. It is a review study which prioritizes a bibliographical review and a qualitative approach utilizing the descriptors "teacher education", "pedagogical practice", and "relevant knowledge" when selecting studies available in the Catalogue of Thesis and Dissertations of CAPES. The results denote special attention to relevant knowledge manifested in meeting local demands while teacher education is still in progress. Some proximity is also observed in part of the researches with global demands, even though this is not clearly indicated in the studies. However, there are no references to the Sustainable Development Goals in the studies we have analyzed, which confirms an issue to be addressed in the policies intended for teacher education in the Brazilian context, because these goals express planetary needs which no longer can be disregarded in the pedagogical practice.

KEYWORDS: Teacher education. Pedagogical practice. Relevant knowledge. Context. Sustainable Development Goals (SDG).

RESUMO: Este estudo tem como objetivo mapear evidências de valorização do conhecimento pertinente em pesquisas de pós-graduação stricto sensu que vinculam a formação docente à prática pedagógica. Trata-se de um estudo de revisão que prioriza a pesquisa bibliográfica e a abordagem qualitativa, no qual foram utilizados os descritores "formação docente", "prática pedagógica" e "conhecimento pertinente" na seleção de estudos disponibilizados no Catálogo de Teses e Dissertações da CAPES. Os resultados denotam especial atenção com conhecimentos pertinentes expressados na preocupação com o atendimento a demandas locais ainda durante as formações docentes. Observa-se também alguma proximidade de parte das pesquisas com demandas globais, ainda que isso não seja declarado explicitamente nos estudos. Contudo, não há referência aos Objetivos de Desenvolvimento Sustentável nas pesquisas analisadas, confirmando uma questão a ser abordada nas políticas de formação docente no contexto brasileiro, porque esses objetivos expressam necessidades planetárias que não podem mais ser desconsideradas na prática pedagógica.

PALAVRAS-CHAVE: Formação docente. Prática pedagógica. Conhecimento pertinente. Contexto. Objetivos de Desenvolvimento Sustentável (ODS).

RESUMEN: Este estudio tiene como objetivo mapear la evidencia de la valoración del conocimiento pertinente en la investigación de posgrado stricto sensu que vincula la formación docente con la práctica pedagógica. Se trata de un estudio de revisión que prioriza la investigación bibliográfica y el abordaje cualitativo, en el que se utilizaron los descriptores "formación docente", "práctica pedagógica" y "conocimiento pertinente" en la selección de estudios disponibles en el Catálogo de Tesis y Disertaciones de la CAPES. Los resultados denotan especial atención a los conocimientos pertinentes expresados en la preocupación por satisfacer las demandas locales incluso durante la formación docente. También existe cierta proximidad de parte de la investigación a las demandas globales, aunque esto no se afirma explícitamente en los estudios. Sin embargo, no hay referencia a los Objetivos de Desarrollo Sostenible en los estudios analizados, lo que confirma una cuestión a ser abordada en las políticas de formación docente en el contexto brasileño, porque estas metas expresan necesidades planetarias que ya no pueden ser ignoradas en la práctica pedagógica.

PALABRAS CLAVE: Formación docente. Práctica pedagógica. Conocimientos relevantes. Contexto. Objetivos de Desarrollo Sostenible (ODS).

Introduction

The relationship between teacher education and pedagogical practice has been discussed by authors such as Gatti (2017) and Nóvoa (2017, 2019) from the perspective that it is necessary to ensure that teacher education responds to the demands of the context and the global reality. In this way, what Behrens (2007) defines as an encyclopedic approach to teaching is avoided, which reiterates the gap between theory and practice and the consequent reproduction of knowledge.

When defending the relevance of training that considers situational conditions, Gatti (2017) highlights the importance of relevant knowledge in this process. This knowledge is considered by Morin (2011) to be one of the seven pieces of knowledge essential to education.

When defending pertinent knowledge, Morin (2011, p. 33, our translation) states that, in the planetary era, it is necessary to "[...] situate everything in the context and in the planetary complex [...]". Therefore, this perspective is opposed to an education that persists in the distance between increasingly global and planetary problems and knowledge worked in a compartmentalized way. Considering these concerns as mobilizing conditions, this article aimed to map evidence of valuing relevant knowledge in *stricto sensu* postgraduate research that links teacher education to pedagogical practice.

Methodologically, we opted for bibliographical research and a qualitative approach for the selection of research available in the CAPES Catalog of Theses and Dissertations. Using the descriptors "teacher education", "pedagogical practice", "relevant knowledge", 10 studies were selected, using the Flow Diagram – Prisma 2009, by Moher *et al.* (2009).

It is expected that the findings from the analysis of selected research will contribute to the valorization of relevant knowledge at the interface between teacher education and pedagogical practice. In this sense, it is highlighted that, regardless of the context in which this interface is intended to be strengthened, it is necessary to link each training initiative to the results of the diagnosis of the local reality and bring them closer to the 2030 Agenda for Sustainable Development, promoting actions that meet both demands context, such as targets set out in the SDGs.

Between teacher education and pedagogical practice: an interface for valuing relevant knowledge

Teacher education has persisted in proposals that are incompatible with the demands of reality. According to Gatti (2014), there is a lack of training proposals capable of adapting the curriculum to current teaching needs. This is because teacher education initiatives are still strongly influenced "[...] by the conception that underlies the conservative paradigm [...]" (LUPPI; BEHRENS; SÁ, 2021, p. 5, our translation). This paradigm, also known as positivist or traditional, was formulated by Descartes and its practice occurs "[...] by separating the thinking subject (*ego cogitans*) and the thing understood (*res extenso*), that is, philosophy and science, and by placing 'clear and distinct' ideas as a principle of truth, that is, the disjunctive principle itself" (MORIN, 2015, p. 11, our translation). This reductionist way of seeing reality "[...] sees the one, or the multiple, but cannot see how the one can be multiple at the same time. Either the principle of simplicity separates what is connected (disjunction), or unifies what is diverse (reduction)" (MORIN, 2015, p. 59, our translation).

For Morin (2015, p. 11, our translation), the positivist paradigm, "[...] which has controlled the adventure of Western thought since the 17th century, has undoubtedly allowed the greatest progress in scientific knowledge and philosophical reflection; its harmful consequences only began to be revealed in the 20th century." Among these consequences, there is an "[...] increasingly broad, profound and serious inadequacy between separate, fragmented knowledge, compartmentalized between disciplines, and, on the other, realities or problems that are increasingly [...] multidimensional, transnational, global, planetary" (MORIN, 2018, p. 13, our translation).

Breaking with this paradigm "[...] based on a reductionist view of reality and knowledge construction processes [...]" does not imply "[...] just changes in the scientific framework [...]", as "[...] also a deconstruction in our way of thinking, communicating, working, perceiving and interpreting science and life [...]" (MORAES, 2021, p. 67, our translation). These changes are fundamental to facing the adversities that affect both the local and global reality, and which are expressed in climate change, the intensification of natural catastrophes, the increase in hunger in the world and, among other conditions, the increase in intolerance observed on the planet and capillarized locally.

Amid the intensification of these problems, the persistence of the encyclopedic approach in teaching, reiterated by the positivist paradigm, continues to strengthen "[...] the distance between theory and practice and the reproduction of knowledge [...]" (BEHRENS, 2007, p. 441, our translation). For Nóvoa (2017), the feeling of dissatisfaction has been the result of the distance between the theoretical ambitions preserved in training and the concrete reality of schools and teachers, as it is "[...] as if there were an insurmountable gap between the university and schools, as if our academic development had contributed little to transforming the socio-professional condition of teachers" (NÓVOA, 2017, p. 1108-1109, our translation). Therefore, Gatti (2017, p. 733, our translation) argues that "[...] curricular dynamics in teacher education [...] need to reinvent themselves. To do this, it is necessary to be aware that the training offered is not sufficient or adequate [...]". To change this panorama,

[...] besides it being necessary to discuss and modify the training framework offered in undergraduate courses, it is essential to have a reflection on continued training, so that alternatives can be identified that consider the complexity of the teaching fields (ZWIEREWICZ; ZANOL; HORN, 2020, p. 236, our translation).

Among the alternatives, Imbernón (2016) argues that continuing education should involve teachers reflecting on their own practice. Therefore, the relevance of training that considers situational conditions, with clarity of its purposes, that is, "[...] the whys, the for what and the for whom this training is carried out, assuming ethical and social commitments" (GATTI, 2017, p. 722, our translation).

For Nóvoa (2019, p. 3, our translation), the continued education of teachers in the current scenario is conceived as an object of metamorphosis of the school environment, which occurs when "[...] teachers come together collectively to think about work, to build different pedagogical practices, to respond to the challenges posed by the end of the school model [...]" traditionally adopted. This perspective converges with the reflection defended by Imbernón (2016), cited previously.

Given these perspectives, pedagogical practice is understood by Franco (2016, p. 536, our translation) as "[...] a conscious and participatory action, which emerges from the multidimensionality that surrounds the educational act". To the author:

It will be a pedagogical practice when it incorporates continuous and collective reflection, in order to ensure that the proposed intention is made available to everyone; it will be pedagogical as it seeks to build practices that guarantee that the directions proposed by the intentions can be carried out (FRANCO, 2016, p. 536, our translation).

Therefore, when defending teacher education linked to pedagogical practice, corroborating Franco's (2016) position, conditions are provided for overcoming separatist and reductionist thinking, thus approaching a thinking "[...] that distinguishes and unites" (MORIN,

2011, p. 42, our translation). For Morin, this does not mean "[...] abandoning knowledge of the parts for knowledge of totalities, nor of analysis for synthesis [...]", but understanding that "[...] it is necessary to combine them [...]" (MORIN, 2011, p. 42, our translation). These are the potentials that reside in the relevant knowledge.

This knowledge is produced by an open rationality, which contextualizes and conceives human, social and natural multidimensionality (SÁ, 2019). It is indispensable in the planetary era due to the need to "[...] situate everything in the context and in the planetary complex" (MORIN, 2011, p. 33, our translation). Morin (2011) also states that, for knowledge to be relevant, education must make the context and the global, the multidimensional and the complex evident.

Therefore, according to this conception, it is essential that in teacher education, paradigmatic perspectives are worked on that favor pedagogical practices committed to "[...] situating information and data in their context so that they acquire meaning [...]" (MORIN, 2011, p. 34, our translation). Likewise, pedagogical practices committed to the global must be favored, since this is "[...] more than the context, it is the set of different parts linked to it in an inter-retroactive or organizational way [...]" (MORIN, 2011, p. 34, our translation).

While context demands can be mapped through interviews, questionnaires, evaluation results, analysis of institutional documents, discussion groups, dialogues stimulated during the training itself and other actions, global demands can be mapped with the contributions of these options, but also with access to publications of international scope and international reports such as *COVID-19 and Sustainable Development: Assessing the Crisis with an Eye on Recovery 2021* (UNDP *et al.*, 2021), the *United Nations World Water Resources Development Report 2021: the value of water: data and facts* (UNESCO, 2021), *Reimagining our futures together: un new social contract for it education* (UNESCO, 2022), *World mental health report: transforming mental health for all* (WHO, 2022), *The State of Food Security and Nutrition in the World 2022: repurposing food and agricultural policies to make healthy diets more affordable* (FAO *et al.*, 2022) and the *2030 Agenda for Sustainable Development* (UN, 2015).

Specifically in relation to the 2030 Agenda for Sustainable Development, its continued use is defended at the interface between teacher education and pedagogical practice as it constitutes an action plan adopted by many countries, committed to people and the planet, in addition to seeking strengthening universal peace with more freedom (UN, 2015). The 17 SDGs indicated in the document are linked to 169 actions to be fulfilled by governments, private sectors and citizens, through a co-creation process (ZANOL, 2021). These actions constitute

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planning tools, in the medium and long term, to enable the national alignment of social, environmental and economic policies. They also constitute guidelines for public policies at a global level (PIMENTEL, 2019).

As an example, we cite the prediction linked to the 4th SDG to guarantee, by the year 2030, that all students acquire the knowledge and skills necessary to promote sustainable development. Another prominent example for the educational process is in the 16th SDG, for the commitment to "Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, responsible and inclusive institutions at all levels [...]", actions reiterated in the 4th SDG, which provides for quality education and committed to "[...] culture for sustainable development" (UN, 2015, p. 2, our translation).

The commitments to demands such as these, aligned with those locally detected, justify this research in its effort to map evidence of valorization of pertinent knowledge in *stricto sensu* graduate research that links teacher education to pedagogical practice. The results presented, in turn, intend to contribute to re-signify teacher education rooted in the positivist paradigm and that prioritize content detached from the context and planetarily disconnected.

Research methodology

In order to map evidence of valorization of pertinent knowledge in *stricto sensu* graduate research on teacher education and pedagogical practice, bibliographic research was chosen. Gil (2019, p. 65, our translation) notes that the use of this option is common in all research, but that there are initiatives developed "[...] exclusively from bibliographic sources [...]", as is the case of this study.

Due to the intended analysis, a qualitative approach was chosen. This approach differs from the quantitative "[...] as it does not employ a statistical instrument as the basis of the process of analyzing a problem [...]" (RICHARDSON, 2017, p. 79, our translation).

To select the studies, the following descriptors were used: "teacher education", "pedagogical practice" and "relevant knowledge". The selection was carried out in four stages, using Moher 's Flow Diagram – Prisma 2009 (Figure 1) as a basis. *et al.* (2009): in the first stage, 223,230 studies were identified; in the second stage, the most current studies were prioritized, resulting in the identification of 724 research studies defended in 2022; in the third stage, those linked to Human Sciences as a major area of knowledge and Education as an area of knowledge, area of evaluation, area of concentration and name of the program were selected, identifying 156 studies; In the fourth stage, studies whose titles showed a relationship between

teacher education and pedagogical practice were selected, 12 studies being identified. However, 2 surveys were not accessible at the time of selection, reducing the analysis to 10 surveys.

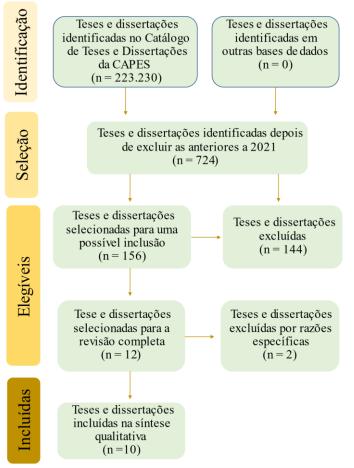


Figure 1 – Selection of analyzed research

Source: Adapted from Moher et al. (2009)

Of the 10 research studies, 2 are theses and 8 are dissertations. Furthermore, its objectives and linking institutions denote specificities that differentiate intentions and contexts (Chart 1).

Researcher	Title	Туре	University	goal
Andrade (2022)	Education for ethnic-racial relations in times of migration: training and teaching practice in public schools in the Federal District	Dissertation	University of Brasilia (UNB)	Carry out a comparative study between the training (initial and continuing) and teaching practice of pedagogues who teach students black people from sub-Saharan Africa.
Flag (2022)	Training and pedagogical practice of Physical Education teachers in the Interactive Educational System of Pará: technology, communication and media	Dissertation	University of the State of Pará (UEPA)	Analyze hybrid teaching in the organization of the pedagogical work of SEI Physical Education teachers.
F erreira (2022)	The initial training of Physical Education teachers and the inclusion of students with disabilities in regular education: the curriculum and training at public universities in Minas Gerais	Dissertation	Federal University of Ouro Preto (UFOP)	Analyze the curricular proposals for initial training courses for Physical Education teachers, with a view to including students with disabilities in regular education.
Lanfranco (2022)	The experience report and Teacher education: mapping of dissertations and theses	Dissertation	Federal University of São Carlos (UFSCar)	Map the theses and dissertations, developed in Brazilian postgraduate studies, which describe reports of classroom experiences.
Oliveira (2022)	CEFAPRO and its activities in continuing education: significance for the professional development of teachers at the Pontes e Lacerda-MT center	Dissertation	Pontifical Catholic University of Campinas (PUC- Campinas)	Analyze and understand the production of meanings that a group of elementary school teachers attribute to the training practices of Cefapro in the city of Pontes e Lacerda/MT for their professional development.
Perucci (2022)	Teacher education and teaching work: Professional-Technological Education and Higher Education in Federal Institutes	Dissertation	Federal University of Ouro Preto (UFOP)	Understand the perceptions that teachers have when reflecting on their teaching performance at more than one level of education.
Rela (2022)	The supervised internship in teacher education: encounters, disenchantment, and experiences in times of pandemic	Dissertation	São Francisco University (USF)	Analyze the insertion of pedagogy students in rural schools.
Silva (2022a)	Literary literacy and human formation based on the sentence remission through reading project: student experiences in a prison unit in the interior of Pernambuco	Dissertation	University of Pernambuco (UPE)	Investigate the contributions of literary literacy actions in the Reading Remission Project to human formation and the formation of literary readers.
Silva (2022b)	Teaching in formative dialogues: biographical narratives and identity	Thesis	Federal University (UFF)	Understand how the identity processes of Chemistry teachers, working in Basic

Table 1 – Selected research

RIAEE – Revista Ibero-Americana de Estudos em Educação, Araraquara, v. 18, n. 00, e023106, 2023. DOI: https://doi.org/10.21723/riaee.v18i00.17767

	processes of high school chemistry teachers			Education, influence their agencies in the classroom.
Xavier (2022)	Training of educators from the perspective of the Collective Intellectual: experiences from the Study Complex in the Degree in Rural Education at the University of Brasília	Thesis	University of Brasilia (UNB)	Identify the contributions of work with the Complex System, with an emphasis on the use of the Reality Inventory, for the training of educators from the perspective of the collective intellectual in the Degree in Rural Education at the University of Brasília, observing the training matrices, starting from the tripod that constitutes the phenomenon that is Rural Education itself: Countryside - Education - Public Policy.

Source: Prepared by the authors

Of the 10 studies, only 2 originate from the same university, showing a distribution of research that links teacher education and pedagogical practice in different institutions, although new research defended in 2022 may still be included in the CAPES Catalog of Theses and Dissertations after having been the selection of works for this research was completed, changing this situation in future works. Therefore, this time frame must also be considered, which highlights a specific moment in the dissemination of *stricto sensu* postgraduate research in Brazil.

Methodologically, mapping the general objectives of the selected research and crossing it with the most frequent concepts in the results and discussion chapters were decisive in defining the analysis categories. Contextualized in the next section, the crossing was supported by the use of MaxQDA, an analysis *software that enables the processing of qualitative data*.

Results and discussions

To analyze the valorization of relevant knowledge at the interface between teacher education and pedagogical practice, the most frequent concepts mapped in the general objectives of the 10 research studies were used as a reference for selecting the analysis categories: "training" (f = 5); "education" and "teachers" (f = 4); "class", "teaching", "room" and "work" (f = 3); "students", "schools" and "physics" (f = 2).

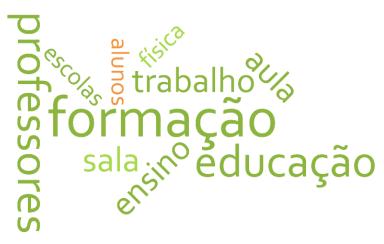


Figure 2 - Most frequent concepts in the general objectives of the research analyzed

Source: Prepared by the software MaxQDA with survey data

Of the most frequent concepts, those that made reference to pedagogical practices connected to evidence of the appreciation of relevant knowledge in the transposition of training to practices carried out in educational institutions were used. They are: class, teaching, living room, work, schools and physics.

The term "class", for example, was used in research by Andrade (2022), Bandeira (2022), Ferreira (2022), Lanfranco (2022), Oliveira (2022), Perucci (2022), Rela (2022), Silva (2022a), Silva (2022b) and Xavier (2022). Therefore, it appears in all the research analyzed, although in part more associated with the environment (classroom) than with the action of teaching classes.

Specifically in the research by Andrade (2022), its inclusion is due to the fact that study participants were asked questions about their initial and continuing education and their practices in the classroom with foreign black children. For the researcher, "It is essential to understand the migratory phenomenon as an experience present on the classroom floor so that the reception process happens in a full and satisfactory way [...]" (ANDRADE, 2022, p. 18, our translation), now This study is based on guidelines from UNESCO (2019) which indicate that the format of classes and the language can alienate students from other countries.

Xavier (2022, p. 223, our translation), in turn, defended the need to overcome the traditional method, which for him means "[...] breaking with the pedagogical organization focused only on the classroom and content [...]". Rela (2022) described in her research experiences that are alternatives to this need, such as the use of an interdisciplinary textbook, studied collaboratively and in a way articulated with the students' experiences.

In relation to "teaching", the concept can also be identified in the 10 studies analyzed. In some studies, however, it refers more to the stages and modalities of teaching or to educational institutions than to the teaching process. Therefore, in the analysis, research related to dynamic teaching in pedagogical practice was intentionally selected.

One of the examples is the research by Oliveira (2022), which recovers Brazilian education regulations and highlights guidelines on investments in educational policies that include, among other conditions, the continued training of teachers. Oliveira also cites the National Education Plan (PNE), especially one of the goals, which foresees strategies aimed at continued training, highlighting the competence of the State and Municipal Education Secretariats, in partnership with the Ministry of Education (MEC), in carrying out initiatives that provide "[...] teachers with knowledge about the transformations produced in teaching, so that they adapt to new ways of teaching and the role they must play" (OLIVEIRA, 2022, p. 23, our translation).

These examples confirm concerns regarding the relationship between teacher education and pedagogical practice in the selected research. They reiterate Nóvoa 's (2019) position on the continued training of teachers in the current scenario being the object of metamorphosis of the school environment.

This perspective converges with Gatti's reflection (2014, p. 378, our translation) regarding the need for "[...] conscious actions, based on a more objective reflection on the experienced reality [...]". Choices with this focus, for the author, drive "[...] innovative attitudes and actions, which translate into effective practices of change".

In the analysis of the 10 studies, it was also observed the appreciation of relevant knowledge at the interface between teacher education and pedagogical practice. For this analysis, the most frequent concepts (Figure 3) present in their results and discussions were identified, crossing them with those identified in the general objectives presented, aiming to identify relevant conditions for the present research in convergence. Figure 3 – Most frequent concepts in the results and discussions of the research analyzed



Source: Prepared by the software MaxQDA with survey data

The most frequent concepts were: "training" (f = 956), "education" (f = 788), "teaching" (f = 664), "school" (f = 587), "teachers" (f = 564), "work" (f = 413), "students" (f = 340), "class" (f = 338), "practice" (f = 329) and "experience" (f = 327) (Figure 3). The initial intention was to map evidence of relevant knowledge from the analysis of all these concepts. However, as only four of the six concepts closest to pedagogical practice selected in the general research objectives (Figure 2) were identified in this new mapping, evidence was sought regarding them – "class", "teaching", "work" and " schools" –, using 40% of the selected studies as support for analysis.

In the research by Andrade (2022), whose objective was to carry out a comparative study between the training and teaching practice of pedagogues who teach black students from Sub-Saharan Africa, the results showed that, despite the efforts and sensitivity of professionals in the anti-racist fight, there is a long way to go in the search for "[...] visibility and recognition of black children with a history of migration as subjects of law, focusing on the fight to promote racial equality in the school environment" (p. 13, our translation). Based on her studies, the researcher claims that the results highlight challenges in balancing training, teaching practice and what she defines as "other subjects" in educational institutions.

Furthermore, Andrade highlights that, among the results, a hierarchization of the training process was observed, placing practice at the top of actions while relegating theory, despite the interdependence of these two processes. As a way of advancing the interdependence of these two aspects, the "[...] need to evaluate each situation in the classroom or outside it is defended, in order to then seek, in continuous training, solutions for such demands and, from then, diagnose the events and find appropriate methodologies to face the situations [...]" (ANDRADE, 2022, p. 129, our translation).

Andrade also highlights the need for reflections on society as a whole, especially in relation to the type of society to be built. Given this consideration, it positions the role of the school as a space for "[...] dialogue, welcoming and opening doors to the different arrangements that make up the segments of society" (ANDRADE, 2022, p. 129, our translation).

Bandeira's research (2022) aimed to analyze hybrid teaching in the organization of the pedagogical work of Physical Education teachers in the Interactive Educational System (SEI). It presents as main results the need for continued training to provide a more significant involvement with scientific knowledge about communication and media and to deepen the theoretical contribution "[...] about cultural manifestations arising from the knowledge constituted by students in society [...]", thus enabling "[...] knowledge of different cultural languages and identity to be integrated into teaching mediated by technologies in a hybrid way [...]", aiming at an innovative pedagogical practice (BANDEIRA, 2022, p. 9, our translation).

Ferreira's research (2022) aimed to analyze the curricular proposals for initial training courses for Physical Education teachers from the perspective of including students with disabilities in regular education. The results revealed that public universities in one of the states that make up the national territory include in their curricular proposals contents or themes aimed at diverse and inclusive initial training, through subjects and/or content on special education and/or inclusion of students with disabilities. However, "[...] they still focus the issue of disability on a traditional perspective of attributing the intrinsic characteristics of disability to the difficulties of their schooling [...]", encouraging in teachers "[...] a training stance for adapted sports" (FERREIRA, 2022, p. 5, our translation). Considering these observations, the research indicates the relevance of not conditioning the contents to "[...] a traditional perspective of attributing the difficulties of schooling to the intrinsic characteristics of disability [...]". Therefore, the researcher defends "[...] school inclusion focused on the social, political and pedagogical aspects relating to the schooling of students with disabilities" (FERREIRA, 2022, p. 129, our translation).

Lanfranco's research (2022) aimed to map the theses and dissertations developed in Brazilian postgraduate studies that describe reports of experiences in the classroom with an emphasis on the collaboration that these experiences in teaching work can have in the training of other professionals. The study focused "[...] on the continuing education of teachers, specifically on work in the classroom, where their experiences and relationships with other more experienced professionals contribute significantly to teacher education" (LANFRANCO, 2022, p. 4, our translation). The research differs from the other studies analyzed by the fact that it is an analysis of related studies. Furthermore, it adopts the perspective that practice can collaborate with training, not focusing so much on how much training contributes to practice.

Regarding the results, Lanfranco (2022, p. 89, our translation) concludes that "[...] experience reporting needs to be recognized as a research method to be used in postgraduate programs, as [...] it can contribute to practice teacher's pedagogy". Furthermore, it suggests that, when using the experience report methodology, the researcher delves deeper into it, since:

[...] the more details the report has, the better. Therefore, the teacher who seeks support in experience reports, when having contact with the experience of others, can have a complete guide to pedagogical activity and thus be inspired to do similar things, which can be, in this way, a means of self-education. We suggest that future research that works in the field of Experience Reporting as a continuous training methodology seeks to understand why it is difficult to find reports from Early Childhood Education and Elementary School I teachers, and that they delve deeper into the possibility of self-training through experience reports (LANFRANCO, 2022, p. 89, our translation).

In the analysis of the contributions of research to the valorization of relevant knowledge, based on concerns about classes, teaching, work and schools, Andrade's (2022) research shows a commitment to local and global demands. The locals refer to the need to include black students from Sub-Saharan Africa and concerns about the gap between theory and practice. The global ones are included in the defense of the discussion of the role of the school in the construction of society.

Bandeira's research (2022) argues that technological insertion must be accompanied by the appreciation of the different cultural languages and the identity conditions of the participants. Even when dealing with issues of context, there is a global demand for the appreciation of different cultures and technological inclusion, which also gives this study a proximity to the relevant dimensions of knowledge, even if this is not stated in the research.

Of the 4 studies analyzed at this stage of the research, the one that comes least close to global demands is that of Lanfranco (2022). Regarding the perspective of this research, it is highlighted that the focus on reporting experiences can contribute to focusing training attention on the context, focusing on its distancing from global demands. Therefore, this alert is registered to be considered by research focusing on reporting experiences. This warning is justified by the statement made by Morin (2011) when defending the need to place everything locally, but also in the planetary complex. This also means overcoming the positivist paradigm, which for the author separates and reduces instead of distinguishing and uniting, observing only the parts to the detriment of the whole.

Considering that pertinent knowledge involves the context and the global, as argued by Morin (2011), evidence was also sought of the relevance attributed in research to planetary emergencies based on the valorization of the SDGs. This search is justified because the SDGs express the commitment to what Morin (2018, p. 13, our translation) defines as increasingly "[...] transnational, global and planetary problems".

As can be seen in Figure 2 and Figure 3, the SDGs were not included as the most frequent concepts in the general objectives, results and discussions of the 10 surveys analyzed. Therefore, a search was carried out for both the full term (Sustainable Development Goals) and its acronym in the texts of each of the 10 studies, and no reference was found in any of the studies.

Therefore, in the research analyzed, a demand is observed that can be considered in studies that relate teacher education to pedagogical practice. Even if they defend the valorization of the context and indicate proximity to some global demands, the failure to approach the SDGs shows that it is necessary to advance in research so that it takes into account not only what is locally relevant, but also issues that are planetary emergencies and that appear in the SDGs.

Likewise, it is necessary to link teacher education and pedagogical practice to the SDGs. The defense of this priority is reiterated in the research by Zanol (2021), linked to a professional master's degree, whose objective was to develop a transdisciplinary and eco- training program compatible with the training demands of teachers in the final years of Elementary School at a school in Paraná and with the SDGs. Thus, in addition to considering the context, this work linked training to planetary emergencies, among them those indicated in the 4th SDG, which provides for quality education and committed to "[...] culture for sustainable development" (UN, 2015, p. 2, our translation). The defense of this link between training and the SDGs is justified by the existence of problems that should no longer be disregarded in pedagogical practice, such as world hunger and global warming.

This is a perspective that reconnects teacher education with the contextual and global reality, corroborated by Gatti (2014) in his defense that teacher education is guided by conscious actions, motivated by objective reflections on the reality experienced while considering that the educational agenda for the coming years will have to be directed not only to the processes of building knowledge and learning, but also to issues of ecological sustainability, as Torre (2008) also argues, among other essential conditions for people and society.

Final remarks

Consolidating teaching education directly related to pedagogical practices that connect with contextual and global demands is a challenge that can be overcome, especially when reflections that value distinction and discernment are prioritized while establishing relationships with actions committed to people, society and the environment. This perspective contributes to overcoming educational references based on the gap between what is taught in schools and what actually exists in reality. By seeking and analyzing the existence of commitments to these objectives, this study presented research that serves as a reference for these changes to occur.

Highlights in the research conclusions include the need to overcome the traditional teaching method, breaking with an organization incapable of contemplating more than the classroom and the content, the importance of promoting training that puts teachers in contact with essential knowledge to transform the ways of teaching and attention so that, at the interface between teacher education and pedagogical practice, there is a commitment to relevant knowledge.

In the studies analyzed, regarding the valorization of local demands, concerns were also observed with the inclusion of immigrant students and demands for technological insertion accompanied by the valorization of the different cultural languages and the identity conditions of the participants. As for global demands, although less expressive in part of the research, it was observed the defense of the discussion of the role of the school in the construction of society, through the involvement of social, political and pedagogical conditions relating to the schooling of students with disabilities, already that this is a condition that affects policies in all contexts on the planet.

The results also indicate conditions to be observed at the interface between teacher education and pedagogical practices committed to relevant knowledge. This is because relevant knowledge goes beyond the local scope to find meaning, also in the midst of planetary emergencies. To this end, appropriate guidelines regarding global needs are part of the 2030 Agenda for Sustainable Development (UN, 2015), hence the defense of bringing the interface between teacher education and pedagogical practice closer to the SDGs and their goals.

Finally, the analysis of the studies selected for this research concludes about the need for stricto sensu graduate research to include among its objectives the commitment to verify whether the training proposals have considered demands linked to the SDGs. In the same way,

it is alerted to the need for training policies in the country to advance to bring teachers closer to both contextual needs and planetary emergencies.

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