INITIAL TRAINING IN PHYSICAL EDUCATION: WHAT DO TEACHER EDUCATORS THINK AND DO?

FORMAÇÃO INICIAL EM EDUCAÇÃO FÍSICA: O QUE PENSAM E FAZEM PROFESSORES FORMADORES?

FORMACIÓN INICIAL EN EDUCACIÓN FÍSICA: ¿QUÉ PIENSAN Y HACEN LOS FORMADORES DE PROFESORES?

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ABSTRACT: The present article aimed to investigate the conceptions and practices of teacher trainers in a Physical Education teacher education program. The interview was chosen as the methodological procedure for understanding the contributions of the four selected teacher education. The results presented convergences between the teachers' reports and a formative proposal aimed at constructing knowledge and practices aligned with the school environment. In conclusion, it was observed that, despite curricular contradictions, movements towards a school-focused training appeared forcefully in the reports constructed in this research.

KEYWORDS: Teacher Education. Physical Education. Teacher Educator.

RESUMO: O presente artigo objetivou investigar as concepções e práticas de ensino que orientam a docência de professores formadores de um curso de licenciatura em Educação Física. A entrevista foi escolhida enquanto procedimento metodológico para compreensão das contribuições dos quatro professores formadores participantes. Os resultados apresentam convergências entre os relatos dos docentes e uma proposta formativa voltada à construção de conhecimentos e práticas alinhadas ao ambiente escolar. Em conclusão, observou-se que, apesar das contradições curriculares, os movimentos em prol de uma formação voltada à escola apareceram de forma contundente nos relatos construídos nessa pesquisa.

PALAVRAS-CHAVE: Formação de Professores. Educação Física. Professor Formador.

RESUMEN: El objetivo de este artículo fue indagar en las concepciones y prácticas docentes que orientan la enseñanza de los formadores de docentes de la carrera de Educación Física. La entrevista fue elegida procedimiento metodológico para comprender las contribuciones de los cuatro formadores de docentes participantes. Los resultados muestran convergencias entre los relatos de los docentes y una propuesta formativa orientada a la construcción de conocimientos y prácticas alineadas con el entorno escolar. En conclusión, se observó que, a pesar de las contradicciones curriculares, los movimientos a favor de la educación orientada a la escuela aparecieron de manera contundente en los relatos construidos en esta investigación.

Introduction

Initial training, in the context of degrees in Physical Education (PE), constitutes a fundamental research locus for understanding the theoretical-methodological directions that guide future generations of teachers trained in the area. Furthermore, it points out the conceptions, practices and epistemological approaches that prevail or not in the current training process in PE (Castro et al., 2017; Castro; Silva; Lüdorf, 2019).

In this context, the teacher trainer has a decisive role in encouraging reflection on fundamental elements for performance, in PE, at school, such as: the school curriculum, pedagogical planning, the didactic dimension of teaching and professional teaching knowledge as a support theoretical-practical practice of the PE teacher (Marcon; Graça; Nascimento, 2010, 2011a, 2011b, 2013; Cruz; Castro, 2019).

The reviewed literature on the subject has revealed disputes about what should or should not prevail in this space. The need to bring undergraduate students closer to professional teaching practice during initial training, the break with a training process focused solely on sporting know-how and the mobilization of a curricular axis referring to teaching in basic education challenge the tales of the field (Ferraz; Correia, 2012; Metzner, 2014; Cruz; Castro, 2019). Furthermore, teaching practices and supervised curricular internships seem to constitute central – or unique – moments of bringing the course closer to the school context, which undermines the main objective of a degree course: the training of teachers to work at school. (Gariglio, 2010; Oliveira, 2015; Cauduro, 2016).

When looking at the teacher trainer, the literature, with regard to PE, points out a frequent lack of intentionality and planning in relation to their performance (Madela, 2016; Cauduro, 2016), gaps, at the stricto sensu postgraduate level, regarding training for teaching in undergraduate courses (Machado Silva, 2008; Pacheco, 2011) and little difference in performance in undergraduate and bachelor's degrees in PE (Oliveira, 2015). However, Pacheco (2011) and Cruz and Castro (2019) point to initiatives by teacher trainers and initial training courses that present a path focused on the school environment and with significant practices of university teachers.

It is within this scenario that this research report is located. To better understand the convergences and tensions presented, a higher-level university institution at the federal level, a pioneer in the field of PE, located in the city of Rio de Janeiro, was selected. The problematization of the research was mobilized based on the research questions: What are the teaching concepts that guide the work of the teacher trainer at the institution in question? How
do they reveal the different knowledge and knowledge necessary for teaching intervention? What behaviors and strategies for training the future teacher have appeared in the pedagogical intervention, in the daily classes, of the teacher trainer, based on what he himself declares?

Thus, the objective of the research reported here was to analyze the teaching concepts that guide the teaching of teacher trainers of the PE degree course at the selected institution.

**Methodological path**

The university selected as the empirical field of research is a constitutive representative of the field of PE teacher education. Its creation dates back to the beginning of the 20th century and its degree course in Physical Education dates back to 1939. It is also a pioneer in the creation of *stricto sensu* postgraduate courses and scientific journals in PE.

The PE course analyzed has a duration of eight semesters, with an annual offer of 200 vacancies. To complete the course, the student needs to fulfill, in addition to the mandatory curricular subjects and free choice, the workload of supervised internship, course completion works and complementary activities.

The curricular path has some thematic axes, which are distributed throughout the eight periods of the course. There is a concentration of sports-related disciplines, especially in the early academic periods. Another thematic core is the area of health, worked in disciplines that focus on anatomy, physiology and kinesiology. It also contains disciplines shared with the Faculty of Education, which are dedicated to educational foundations, with emphasis on psychology, philosophy and sociology of education, in addition to didactics, specific didactics, teaching practices and internship. Finally, from the middle to the end of the course, the emphasis prevails on specific training to work in the school context, evidenced, especially, in the disciplines that deal with physical education in early childhood education, elementary school and high school, in addition to the specific didactics of physical education I and II, already mentioned.

In order to analyze the conceptions of teaching that guide the teaching of teacher trainers of this course, the production of empirical data around their declared practices, that is, the view of their own training practices, was prioritized. In this sense, four teachers who work there were
interviewed, in particular, with the disciplines that train the PE teacher to work in basic education. This definition was guided by the following criteria:

1. Teach as an effective teacher trainer;

2. Work with the disciplines, under the responsibility of Physical Education, which have a direct link with the training of the licentiate for school performance: PE in early childhood education (6th period of the course); PE in elementary school (7th period of the course); and, PE in high school (8th period of the course).

Regarding the interviews, we opted for the semi-structured model, with open questions or topics, as Goldenberg (2004) points out, seeking to deduce the conceptions of teacher education of the teacher trainers of the disciplines in question, in the same perspective used in the study by Cruz and André (2014).

Thus, four teachers (AL, A, H and S) participated in the study and were in charge of the three selected disciplines. Due to the quarantine context faced by the COVID-19 pandemic, all interviews were conducted through a digital platform with access to video and audio images, respecting the privacy of the interviewee.

Proceeding with the guiding questions of the research, we sought to conduct the interview in such a way that the teacher trainer was stimulated, with a triggering question, to narrate his teaching, how he understands it and performs it in an institutional context aimed at training future teachers. How is your understanding of PE teacher education revealed, the role of your discipline for the future teacher's performance, the way and strategies you use in your daily life with the undergraduates, and also your view in relation to the contents you choose to teach?

In the interview, we sought to allocate a significant part of the testimony so that the teacher trainer could describe his practice – through reports of classes, activities he develops and, mainly, concrete examples about a class held in his discipline. The orientation thus occurred because, to the extent that the teacher narrates his practice, he exposes the representations he makes about his teaching activity, but not only, since, as Altet (2017) argues:
The declared practices relate to what the subjects say they do; Your statements are collected from questionnaires and/or interviews. The teachers' discourse about their activity, especially in the classroom, is rich because it includes, in addition to their representations, the awareness part of their own activity, a part of what the subjects incorporated in relation to what should be done (Altet, 2017, p. 1199-1200, our translation).

It should also be noted that the reported investigation was approved by the Research Ethics Committee of the authors' institution, under registration number 07867319.9.0000.5582, opinion 3.177.796.

School, teaching and training: what do teacher trainers say?

Among the four teacher trainers, we can observe key milestones of PE in Rio de Janeiro and Brazil, such as the first teacher hired by the participating institution – Teacher AL. The implementation of the disciplines taught by these teachers and the target of this article, are, in their words, the result of the mobilization to expand school PE in the curriculum of the institution in question. All teachers are linked to the first stricto sensu graduate programs in PE in Brazil. Therefore, a group of research teachers is made up who represent a substantive part of what is thought, done and done, in the scenario of Rio de Janeiro, about the training of teachers within the scope of the PE degree.

Asked about the importance of their discipline for the formation of PE graduates, the participating teacher trainers showed conceptions that converged in reaffirming the importance of the specific training axis for school performance – physical education in early childhood education, elementary and high school – and, also, as from a historical point of view, this axis represents an achievement for the institution. A's speech emphasizes:

Look, I think it's fundamental. Why am I putting this? Because before we only had one subject, which was TPGE: theory and practice of school gymnastics, it was 60 hours. And from the very name of the discipline, it is clear that it was a limited vision, "theory and practice of school gymnastics"... [Teacher A, our translation].

From Baptista (2017) and Silva and Lopes (2017), what A mentions finds an echo. The PE training aims at the knowledge that is sometimes biomedical, sometimes technical-practical, linked, at first, to gymnastics and at another to sports. However, A's speech unveils the tensions and new conformations that, over time, contribute to enable the emergence of other tendencies.

AL, H and S also reveal their views on the role of their disciplines in the formation of PE graduates. Teacher AL highlights:

This discipline came to occupy the space that, until then, had not been treated.
I was a teacher of the psychomotor discipline before, it is very important, it gives a basis to work with young children, including in early childhood education. But it's not exclusively school-oriented. It is a discipline that works on the child, his body, movement, sewing, body discoveries, etc., but it does not take into account the requirements of a school physical education aimed at this level [Teacher AL, our translation].

The view on the need for training with emphasis on school physical education, in the context of basic education, is also present in the speech of teacher S:

[...] I understand the importance of these disciplines as a space to systematize a production in the field of school physical education. Because it turns out that the other components are focused on their specificities and this perspective of pedagogical theory, I realize that there was a bit of a gap. We saw this and perhaps still see in the T.C.C.s themselves, the lack of clarity that students have in relation to this theoretical basis that supports the performance of school physical education, although it does not originate, we do not talk about a theoretical basis, the field is there with different matrices and there each teacher, according to his vision of education, of the world, he gets closer to his projects. But I see these disciplines in the sense of organizing this pedagogical field that supports teaching praxis. [Teacher S, our translation].

There are two major points that emerge from the statements of S and AL: the specificity of the basic education school and pedagogically oriented teaching. What AL argues is a dialogue with the understanding of the unique characteristics of the teaching function expressed in Roldão (2005, 2007). In this sense, training a teacher to work in basic education – in the context of PE – requires structuring a training path that approaches, experiences and reflects on the school and its peculiarities.

What Marcon, Graça and Nascimento (2010 and 2011b) propose in their studies, more specifically about the presence of professional teaching knowledge and its insertion in the initial training of PE teachers, takes shape in the speech of S. The teacher establishes, therefore, teaching strengthened by pedagogical foundations, in an articulated way, which allows the student to structure his knowledge and teaching practices beyond a reproducing and uncritical character.

Teacher H adds a fundamental component to the previous contributions: practice and its alignment with the discipline she teaches. Although he considers his discipline to be of fundamental importance for the training of the undergraduate, he advances in the following direction:

So we divided it in this sense, and also, strategically, that we thought it would be more productive to put [the disciplines of the training axis for school] further to the end of the curriculum, because it would be a way for you to
synthesize the theoretical disciplines, the techniques and practices applied to a pedagogical process. But, as the process progressed, there was a very large gap in its intentionality [...] Well, anyway, when it came to kindergarten, elementary school and high school, we were already saying this: we had to put the kids into practice, which would only make sense if this thing had practice. It was our great difficulty because we did not have the availability of teachers to take classes, distribute them in schools to attend to each cycle that is a subject, how was I going to be at the same time in several groups, in several teaching units. It didn't work. So, in reality, it would have to have an internship character as well. To achieve that, that's our purpose and we get out of it. But then things didn't happen. [The projects that we had thought of, especially within my discipline, I had thought of making a link with high school in state schools, I was not succeeding. [Teacher H, our translation].

Teacher H, like Formosinho (2009), has a focus on the professional training of teachers. Aspects such as the moment in which the discipline appears in the curriculum, what precedes and succeeds it, and also its interlocution with professional practice, through the internship, emerge strongly during his speech.

Teacher H argues emphatically about how important it would be to link the institution with the school of basic education, in the sense of favoring that the teacher in training does not only experience an academic look (Formosinho, 2009) on his teaching knowledge base (Shulman, 1986, 1987), but that contextualizes them with the issues faced and practiced by the school curriculum. It goes further, as it mentions a powerful triad: discipline, internship and school. What can be seen is a movement of relationship that would allow the student to establish a professional experience, still in initial training, subsidized by the monitoring and supervision of the mandatory curricular internship and, also, dialogued with the knowledge and proposals of the discipline of the training axis for basic education that he was attending in the period.

The setback, according to H, is due to the fact that there are not enough teacher trainers to monitor these graduates, compromising the feasibility of the proposal. In a broader context, it can be said that Silva, Iaochite and Azzi (2010), Gariglio (2010), Ferraz and Correia (2012), Lacerda and Costa (2012), Marcon, Graça and Nascimento (2013), Metzner (2014), in different contexts of the national territory, note the same difficulties.

Seeking to know how each teacher perceived the discipline he taught/taught – physical education in early childhood education, elementary or high school – in the middle of the curriculum of the undergraduate, it was asked if the contact with the stage of basic education only in this discipline was considered sufficient and, also, how he understood the relationship with the other disciplines.

Teacher A, in his statement, made a point of emphasizing the importance of his discipline – physical education in elementary school – mainly from the perspective of diversity
of content and adequacy to the age group. He mobilized his experience as a teacher of basic education to describe the difficulties he had when teaching some contents, especially dance, because he did not have this formative reference when he graduated.

In the wake of this reasoning, teacher A demonstrates that her discipline aimed to allow the student to create these referents for a performance with diverse contents – beyond sports and the reproduction of technical gestures – and also advancing in the conceptual and attitudinal dimensions that such contents allow to be explored by the student of basic education. Nunes (2004), Pacheco (2011), Lapis (2011) and Ferraz and Correia (2012) ratify A's impetus, since, without these other referents of action, the graduate tends, when entering basic education as a teacher, to reproduce what was historically imprinted in the pedagogical signature (Shulman, 2005) of school PE: the reproduction of the motor gesture linked to sport.

On the other hand, the AL teacher, in view of the conduction of the physical education discipline in early childhood education, explains a specific characteristic, from which some challenges arise:

But I think it would be interesting to discuss the fundamentals of the discipline in another moment of practice, it would not even have to be a discipline of many credits, very broad, but that would give the possibility of dialoguing theory and practice more with the students. [...] Every end of the semester I apply an evaluation questionnaire to my students, and then I see a tabulation not with research criteria, but as an instrument, and many students show interest in delving into the topics and experiencing practice [Teacher AL, our translation].

And he adds:

I notice that there are colleagues who do a job with physical education in elementary school or high school, in which sometimes they do some practice in which the students of the discipline themselves teach their colleagues. I would tell you that this is a long way off in the case of children's physical education. The behaviors of a child of 2, 3, 4 years old, no university student is able to get close to the things that happen within the space of early childhood education, because it is very different from the one you can try with your students, which is why I think it would be nice if there was a discipline focused a little on practice in a dialogue between theory and practice [Teacher AL, our translation].

Teacher AL's report brings up what Teacher H mentioned earlier: the need for a closer, more organic and articulated connection between the university and the school of basic education. The triad proposed here between discipline, supervised internship and professional intervention is a demand that appears in the teacher's speech. In addition, AL is in line with
Lacerda and Costa (2012) when reflecting on the need for a greater presence of early childhood education in the PE degree curriculum.

Teacher S, who works in all three disciplines, sees the presence of her offer in the curricular path of the participating institution as follows:

[...] I look at the entire curriculum in such a way that the curricular components have this articulation. Not only internally, in its internal content, but this articulation necessarily with other fields, this partnership with the school or with other learning spaces that do not only take place in the school, even if we are talking about licentiate. [...] Because in this way, this fabric builds a sense of teacher education, and when this is already there, when the students who locate this from the 5th period in the Faculty of Education or in these 3 disciplines, this already points to a very fragmentation that, finally, puts the teaching project on the ground. [Teacher S, our translation].

Teacher S reiterates the view of the other teachers interviewed and advances the idea of a common training project. More than expanding the curricular workload of specific disciplines for basic education, what S proposes is an articulation between the disciplines and curricular components that aim at the effective training of the graduate. It is in this sense that Formosinho (2009) lays the foundations of a professional teacher education: the understanding that each discipline and that each teacher trainer are mobilized there to train the future teacher who will work in the school; not the specialist in a specific discipline who, in turn, is not able to articulate the knowledge of the content learned with his future professional practice.

The absence of the common project mentioned by teacher S is justified in the testimony of teacher H as follows:

We have a characteristic in the [participating institution] that the teacher is so autonomous, so independent that he disregards the time he understands the curricular matrix well. So, anyone who knows me at school knows that I've always said the same thing: what is the physical education course project at [participating institution]? [...] They don't know what the idealization matrix is, how it was thought. Most don't know how to discuss it. They discuss the ghettos, the departments, how many hours. "Don't put more discipline, I don't want more workload" [...]. It's not thinking about who this is that we're training and we're going to give resources and tools to face the people out there, unfortunately, it never was [Teacher H, our translation].

And H is emphatic in stating that:
So unfortunately, these disciplines, these 3 disciplines unfortunately don't talk to the other disciplines. They talk in the sense that the four of us, AL, me, S and AP [names redacted] try to rescue this bridge that they don't do with us, unfortunately. That's why I say that this total autonomy gets in the way. Because for you to have autonomy, you need to have maturity, that's where the personal training thing comes in. It's giving up my ego for the sake of a collective, and that takes maturity. [Teacher H, our translation].

Teacher H evokes a fundamental trait to understand how the training of PE teachers is structured in the institution. Although he notices a frank dialogue between the teachers of the disciplines of specific training for the school, he does not notice the same movement with the other departments and, consequently, disciplines. To a certain extent, the notion of curricular convergence arranged in Formosinho (2009) seems to occur, in the participating institution, between groups of thematic affinity, by disciplinary approximation. Therefore, there does not seem to be a greater disciplinary articulation that allows us to envision a common curricular pedagogical project that mobilizes the different disciplines, departments and training spaces towards a common goal.

In this regard, Therrien and Dias (2016), Cruz (2017), Cruz and Castro (2019) and Castro and Baptista (2022) contribute to thinking about the teacher educator, their training and the locus of their performance. The lack of projects and public policies that establish a clear and contextualized training to work in higher education may be at the bases of this demobilized behavior. When the teacher trainer – the one who is used to spending at least six years, between master's and doctorate, in the solitude of his dissertation/thesis research – is not trained to see himself as part of a whole, of a context, of an integrated network in favor of an objective, it becomes difficult for this behavior to be born of a spontaneous movement.

It is also important to highlight that H does not seem to criticize excessive teacher autonomy in the sense of curtailing their freedoms as teachers, but of an autonomous action that does not perceive the central objective of the course: to train PE teachers who will work in basic education.

When asked about what knowledge they consider important for teachers to teach, the trainers interviewed developed reflections that, in analysis, denote the mobilization of knowledge from the professional teaching knowledge base proposed in Shulman (1987). Teacher A contributes in the following sense:

[... ] Because I think that Physical Education sins a lot because it enters a space where there is a planning, all disciplines have a planning. And more than that: it has a central plan [... ] it tries to make physical education a technical discipline, solely and exclusively. "We're going to learn the technique of
volleyball, athletics, dance.” No, it's more than that. It's you, in addition to knowing a little of the technique, you understand the spirit of leisure of playing volleyball, you throw yourself to catch a ball, you dribble basketball, you participate in a race with friends, you do somersaults. [...] I think that planning, for me, is the most important thing, I always start with planning and I say throughout the period: plan [Teacher A, our translation].

Knowledge aligned with planning is what seems to mobilize the interviewed teacher the most. Her speech allows dialogue with the findings of Cruz and Castro (2019), who signaled the theme of planning as one of the points most addressed by the graduates of the same course analyzed in this research. Teacher A provides clues about a conception of teaching and knowledge for teaching that escapes the traditional stereotype pointed out by Roldão (2005; 2007): the good teacher is the one who best masters the specific content of the discipline he teaches.

From this perspective, the AL teacher addresses other knowledge dear to the teacher. The first of these is knowledge about the school's political-pedagogical project:

Well, first of all, I would tell you that it is essential that he knows where this teaching is located, what are the characteristics of this teaching in relation to the legislation that governs it, to the pedagogical political project to which it will be inserted, this can be from the school, from a unit, it can be from a network. He needs to know about this political-pedagogical project. And, coming to be a teacher, he is aware that this project is a plan that works with a reality, which gives guidelines that will influence the experiences within the school [...]. It is a document that the teacher needs to have access to, handle, and above all participate in its construction, evaluation, periodic reformulation as necessary [Teacher AL, our translation].

The report of the AL teacher is substantively close to the general pedagogical knowledge proposed in the knowledge base for teaching (Shulman, 1987). But he goes further, and adds:

From the point of view of our specific contribution in terms of body, I work, I have always worked with the students based on the study of the characteristics that are specific to the age group they are working with. [...] What happens to those children physically, not just physically, psychologically, socially, culturally? In what context do these children live? What are their families? This is all part of the body of knowledge the teacher needs to have in order to get to know those children. [Teacher AL, our translation].

AL reveals another knowledge that is dear to the teacher to perform his function: the knowledge of the educational contexts and the knowledge about the students and their characteristics (Shulman, 1987). AL also contributes:
I would also say that it is important for him to know some references of the didactic work. Have a good foundation of how to conduct your classes, how to plan, conduct, evaluate your classes, build your work environment, make use of materials, create ways of working [Teacher AL, our translation].

In this excerpt from his statement, AL addresses another point dear to what Shulman (1987) establishes as general pedagogical knowledge, the pedagogical knowledge of the content and also of the knowledge of the curriculum. In short, what AL shows in his speech refers to a complex, contextualized teaching, endowed with a broad base of knowledge and which requires intentionality for its exercise.

Teacher H argues as follows:

Our curriculum doesn't have motor learning, it doesn't have motor development, so how are we going to prepare? So how do you argue, at school, that the most expert person in school who knows how to teach movement is me a physical education teacher? He doesn't, because he didn't have it in training, he doesn't know the importance of the relationship between the physiological aspect and the neurophysiological aspect, related to the pedagogical and the sociological. [Teacher H, our translation].

In her speech, Teacher H highlights the need for PE teachers – in the context of training and in their work in basic education – not to abdicate their original function: to teach movement. Therefore, from the teacher's perspective, knowledge of the specific content of the subject to be taught (Shulman, 1987; Mizukami, 2011) is vital for the composite of professional knowledge for teaching. It is necessary to contextualize this point with the other contributions of H's interview, which does not allow us to infer that the teaching of movement takes place from a technical-reproducing perspective, but, on the contrary, in the teacher's speech, movement appears as the student's right to access a language of interaction with the world; not mere reproduction of technical gestures.

Teacher S makes a statement that is in line with what teacher H explored and other statements by teachers AL and A: there seems to be a markedly strong implicit dimension (Shulman, 2005) in relation to the concern with the human dimension of the student and the teacher, as well as with their affective relationships and insertion in the professional context. Different from what the revised literature has shown, the axis of work with the disciplines of specific training for the basic education curriculum points to a humanized pedagogical mark, contextualized with the teaching knowledge dear to teaching and, mainly, distant from an uncritical socialization centered on the reproduction of sports motor gestures.

Regarding the role of the teacher trainer in a formative path that is outlined in this way,
the speeches of the four teachers converged to the extent that they saw themselves as the one who acts in the collaboration of knowledge construction on the part of both the undergraduate student and the student of basic education. On this, Teacher H states:

He is a facilitator, mediator of the construction of this knowledge for this future professional. I go back to personal training, can you just be a facilitator or a dictator, an authoritarian? [Teacher H, our translation].

To some extent, the archetype of the higher education teacher, the one who holds the knowledge, the enlightened knowledge about the content, was not registered in the argumentation of the teachers interviewed here. In fact, repeatedly and substantively, in unison, the teachers reported looking at the student, the future teacher, as a being under construction and who needs to be stimulated to elaborate his knowledge base.

What is clearly demarcated, on the part of the trainers, is the notion that the university teacher who works in teacher education is someone fundamental to the initial teacher education path. It has specific knowledge that is consistent with a notion of professional knowledge for teaching, in addition to being the one who adopts a posture of mediation, orientation for learning, amalgamating diverse knowledge that is fundamental to the process.

In the course of the interviews, we reflect on teaching as the focus of the PE degree course, contextualized with the school of basic education, not only as a conceptual framework, but as a daily practice of training the future teacher.

Regarding the teaching practice throughout the course, it was asked if the interviewee considered it important that the teacher in training be exposed to this type of experience. On this, teacher A states:

I think that our problem in physical education, in the university, in the training of the degree is to allow, to provide the student with a space for professional experience throughout his training, if he has this, I believe that we will have a modified physical education in 10 years, at least 1 generation of teachers who come to experience this [Teacher A, our translation].

And Teacher S contributes as follows:

I think this has to happen in the first period [...]. So, I think that works a lot, for me, it's worked a lot. And this process of construction, building praxis, reflecting on evaluating, which is something that in physical education is done very little in the tradition, of evaluating the practice both one's own and that of others. In other words, I think it's a kind of laboratory that I call a laboratory, because obviously we're not in the class, we're not in school, there's no daring to think that any kind of classroom situation is being reproduced there. So I speak clearly to them, so we are in a laboratory of pedagogical practices, we
are simulating a class, understanding in this class where theory moves away or closer, what appropriations we can make, where the method enters, leaves, in short. [Teacher S, our translation].

As can be seen, a clear demarcation, in the reports of teacher S and teacher A, is the need for the exercise of teaching throughout the training path of the future teacher. Although in a context of creation/imagination, such as laboratory practice within the scope of each discipline, the position of the licentiate student as a teacher, dealing with the possibilities, anxieties, demands of planning, elaboration of teaching and evaluation strategies, in addition to all other issues that may appear in a class experience, seems to have a central contribution to the construction of teaching by the teacher in training.

The development of classes with colleagues, an idea close to what Marcon, Graça and Nascimento (2013) call the exercise of teaching in a micro context, needs to be interpreted in the light of the limitations that this experience imposes on the undergraduate. There are, undoubtedly, a number of variables that the experience in school brings to the teacher in training, which cannot necessarily be emulated in a simulated class to colleagues in higher education.

However, as the report of the four teachers shows, there is a strong contextualization with the training in practice, in which the school and the professional intervention appear present from the entrance of the student in the training course – at least in terms of the conceptions of teaching defended. And, in this context, the experiences articulated, both in a simulator character and in the locus of original intervention in the school environment, point to a powerful strategy for a teacher who is built in a broader perspective of teaching.

The pedagogical knowledge of the content (Shulman, 1987), then, is established as necessary from the moment the student enters the PE teacher education course. As S reports, it is from the first period that elements such as teaching, school and training itself should be in check as a target for reflection, construction, evaluation and re-elaboration. Teacher A is emphatic and his statement allows us to interpret that a convergent pedagogical project that mobilizes a professional education, as suggested by Formosinho (2009), together with the school of basic education, can catalyze substantial transformations for the panorama of teaching in PE.

In other words, the reports of teachers S and A, who also converge with those of H and AL, see teaching and the school of basic education as the founding axes of the PE degree course. Regardless of whether the discipline has specific content focused on sports, philosophy or biomechanics, the student enters there to build, re-elaborate and evaluate his teaching practice
– his professional knowledge base for teaching (Shulman, 1987) – with a view to the context of action in the school environment.

Teacher S mentions several evaluation strategies. It lists the use of the seminar, the practical class, the written test and the self-assessment. It is emphasized that the self-assessment process evidences a need for maturation on the part of the licentiate, to the extent that the attribution of his grade is – necessarily – accompanied by a justification. S addresses that, at this moment, the student is forced to launch a self-analysis that is also necessary for when he or she teaches in elementary school. However, Teacher S goes further:

And in high school, as it is already the last subject, then I do not have any type of evaluation in the form of a test, all evaluation is built throughout the semester based on the proposals that we list. [...] Our 1st discussion is about evaluation, a discussion that is very little present in their training. Some hadn't even had it. So we do a first seminar on evaluation, mapping articles on evaluation, doing a seminar on this, mapping theoretical currents, possibilities of evaluation, in short [...]. So, the idea was for us to build proposals or make syntheses of this evaluation in a different way. And it was really cool, because there was a group that made a funk talking about evaluation and danced, another did an artistic performance, as if they were trying to get out, making an analogy with a traditional evaluation and there was stand-up evaluation, look, it was like this, people, that had to be shown at the [participating institution] [Teacher S, our translation].

What teacher S describes is an assessment practice contextualized with the teaching-learning process, denoting a conception and teaching practice of training committed to the school reality. In fact, the logic and dynamics of evaluation are discussed and elaborated together with the student, the future teacher.

The experience stated by S seems to contradict the findings of Machado Silva (2008), Pacheco (2011), Madela (2016) and Cauduro (2016). Among other aspects, these authors demonstrated that teacher educators frequently, at least in terms of what they declared, were aligned with diverse, inclusive and student-focused evaluation proposals. But, in the practical exemplification, they denoted the reproduction of traditional evaluation methods and related to a classificatory logic, from the perspective of school exams, so contested by Luckesi (2011).

Teachers AL, A and H also mentioned a diversity of evaluation strategies used. Teacher A drew attention to the use of planned classes, individually or in groups. Namely:

The other thing: that they have a practical class, I always do it in a group, but I ask each one to direct a part of the practical class. What for? So, at a certain point, he has the voice of command, which is not a very easy thing. You planned it gets easier, but anyway you don't know if what you planned will actually happen when you work [Teacher A, our translation].
The fragment complements the view on the exercise of teaching throughout the initial training of PE teachers. A, therefore, invites reflection to the extent that, in addition to simulating the planning and conduction of activities, it is also important to evaluate this process, in order to subsidize the student and feedback his knowledge base for teaching (Shulman, 1987).

Repeatedly, the role of the teacher trainer assumes fundamental importance in terms of providing the student with moments of (re)elaboration of the pedagogical knowledge of the content (Shulman, 1987). When, like S, he invites the teacher in training to think about his evaluative practice, or, in the same way as A, offers an analysis of the student's experience as a teacher, what is being promoted is an incorporation of knowledge and practices that are intimately linked to the distinctiveness of the teaching function: the act of teaching (Roldão, 2005, 2007).

Finally, Teacher AL presents another point to think about evaluation:

> The issue of evaluation, the first day of class, I always presented to the students the syllabus of the course, the objective of the course, the specific objectives, the contents, the main authors, the authors that we would work with in class, who would help us as a reference and the evaluation [Teacher AL, our translation].

It can be seen that the intentionality of the teaching practice seems favored by the proposition of AL, since it adopts, in the scope of its course, an evaluative formatting capable of producing meaning on the part of the undergraduates, moving away from a bias of exclusive reproduction without pedagogical reflection.

In this context, the interviewees were encouraged to mention the teaching-learning strategies they usually used. In addition, they were asked about experiences that marked them positively, in the context of the classroom, within the subjects they taught at the institution. What teaching-learning strategies did you usually use and consider successful? It is important, at first, to list the experiences in a sequential way. The declared practices allowed us to construct the following list of strategies:

- Construction of lesson plans, pedagogical projects of course, pedagogical projects of discipline and experiences of interdisciplinary projects;
- Debate with teachers working in basic education, observation – structured by script – of PE classes in the context of the school, experience with teachers who are experts in certain contents, such as dance and fights;
- Mediation of simulated classes and evaluation by peer students and by the
teacher trainer, use of problem situations based on concrete cases, self-evaluation of the classes conducted;

- Discussion with the students for the re-elaboration of the teaching program proposed for the discipline by the trainer, openness to the proposition of evaluation methods elaborated by the undergraduates, adoption of the evaluation proposals produced;
- Elaboration and realization of cooperative competitions with participants outside the discipline, assembly of thematic games with gender and race issues, and propositional debates on the work with the themes in basic education.

In short, the diversity of practices declared by the four teacher trainers, in agreement with Cruz and Castro (2019), reveal what Roldão (2005, 2007) calls double-transitivities. The systematic examples of the student as the protagonist, the center of the teaching-learning process, who builds, experiences and analyzes his own pedagogical practice, show, to some extent, the concern not only in prophesying knowledge, but in making someone learn something. This someone, the licentiate, seems to be stimulated to carry out his learning through various paths, breaking, in this sense, with a transmissive class in which he is seen only as a passive subject of knowledge.

Each point of experiences declared by the teacher trainers gives clues that the entire process of pedagogical reasoning (Shulman, 1987) is being fostered to a greater or lesser extent. Comprehension, transformation, instruction, evaluation, reflection and new understanding appear in these different strategies listed: sometimes in the discussion to understand a content and transformation of this understanding to become knowable to the future student, sometimes in the instruction and evaluation of its negative and positive points, and, mainly, in the reflection on the process experienced with a view to a new understanding of what was experienced there.

A point to be highlighted, the teacher trainer does not form only with the content he works with, but, mainly, from the didactic-pedagogical strategies that he mobilizes so that learning occurs. Therefore, when the university teacher adopts a pedagogical strategy in which he exposes and debates, as in the example of AL, the objectives, contents, class path and evaluation to be used, he is, to some extent, becoming a reference for the student to incorporate or reject such experience.
Final remarks

Conducted by the objective of analyzing conceptions and teaching practices that guide the teaching of teacher trainers of a degree course in Physical Education, the research, theoretically supported by contributions from the areas of Physical Education and Teacher Education, operated methodologically with testimonies of four teacher trainers. This bet was based on the understanding, built on the basis of Altet (2017), that declared practices, more than referring to what the subject says they do, express senses and meanings resulting from their awareness of what they do, thus configuring a given conception. Thus, the testimonies of the teacher educators participating in the research not only describe their view on how the course in question contributes to the training of teachers in the area, but also express their conceptions and practices in this regard.

In this direction, the study followed a path of scrutinization of issues related to the initial training of Physical Education teachers, from the point of view of teacher trainers, and in the context of a given institution, whose path and point of arrival converge in favor of the intrinsic relationship between school, teaching and training. By discussing different knowledge and knowledge necessary for school teaching practice, it was possible to gather findings that indicate the importance and need for a formative axis on and with the school, encompassing all stages and modalities of basic education – physical education in early childhood education and in elementary and secondary education – not restricted to the supervised internship phase and transversal training from the beginning of the course.

Thus, the idea that the professional teacher education in school Physical Education requires the design of a training path that approaches, experiences and reflects on the school and its peculiarities is confirmed and affirmed. In view of this, the training institution needs to be increasingly linked to the school of basic education, in a horizontal partnership, recognizing its indispensability in training, in order to ensure the development of theoretically grounded and methodologically experienced teaching professional knowledge, both in the university and in the school.

In this journey, the teacher educator emerges as a strategic subject for the professional preparation of teachers, constituting a central figure for curricular articulation and mediation. In addition, the curricular path, marked by tensions and disputes, permeates the actions of the teachers in question, but, at the same time, offers porosities for other pedagogical possibilities and training paths.
Thus, it is concluded that, despite the inherent curricular contradictions, the movements in favor of a more organic and articulated connection between school, teaching and training constitute the central idea of the conceptions and teaching practices that guide the teaching of trainers of future Physical Education teachers in the context of the school of basic education.

Regarding the limits of the present research, the need to expand the universe studied is highlighted. In addition, studies that can be directed to a propositional and not just an analytical bias are recommended.

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