

Original article (short paper)

# Significance of assessment experiences during initial teacher training in physical education

Wagner dos Santos
Francine de Lima Maximiano
Juliana Martins Cassani Matos
André da Silva Mello
Omar Schneider
Amarílio Ferreira Neto
Universidade Federal do Espírito Santo, Vitória, ES, Brasil

Abstract—This study investigates how students in the final semester of their teacher training program (licensure) at the Center of Physical Education and Sports (CEFD), Espírito Santo Federal University, Brazil, (re)interpret their assessment experiences, an integral component of their teacher training. It employs the narrative as a theoretical and methodological perspective, and it utilizes student portfolios, as well as focus groups and semi-structured individual interviews as inputs for data generation. Ten students in their eighth, or final, semester participated in this study. These were the total respondents to a "call for volunteers" among the 2014 graduating class. The results suggest that the students believe the assessment processes of their teaching practices in physical education are disjointed. They feel that the disciplines that allow them to review their own performance during teacher training are more efficient and play a stronger role in their education.

Keywords: assessment, physical education, teacher training, narratives.

#### Introduction

How does teacher training in physical education affect debates about the value of self-assessment in teaching? Do future teachers in the field of physical education possess the appropriate knowledge of self-assessment to (re)interpret their assessment experiences?

These issues motivate this study, which aims to understand how college students in the final semester of their teacher training program (licensure) at the Center of Physical Education and Sports, Espírito Santo Federal University (CEFD/UFES), Brazil, (re)interpret their assessments of the teaching and learning process during their teacher training program in physical education. It is an investigation of what they think of assessment as a teaching/learning tool, and also examines how they might change their thinking over time about the teaching and learning process, as reflected in their self-assessments.

Recent studies have increased the visibility of students' assessment experiences during their completion of teacher training programs in physical education, and have focused on teacher practices (Lund & Veal, 2008), supervised internships (Santos, Souza, & Barbosa, 2013), and gymnastics (Gorini & Souza, 2007). Educators have used numerous approaches to investigate student-teachers' assessment experiences. These include debates related to student perceptions of assessment and their implications for teacher interventions (Goc-Karp & Woods, 2008), investigations of the assessment practices experienced by physical education teachers during their graduate programs

(Mendes, Nascimento, & Mendes, 2007), and dialogues with students attending initial teacher training programs (Santos & Maximiano, 2013).<sup>1</sup>

Our investigation takes a different approach. It employs a narrative perspective (Perez, 2003) to analyze students in their final semester of an undergraduate program in teacher training in physical education. We understand that the students produce new meanings by reinterpreting their *lived* academic experiences, often changing their initial impressions of their experiences (Larrosa Bondía, 2001).<sup>2</sup> According to Sobrinho (2003), assessment is a complex topic that needs to be explored from different perspectives:

It is not a self-limited process that is enough by itself. Designed to make the daily life of an institution more visible and comprehensible, the assessment exceeds the most stringent levels of the object to evaluate and launches its effects on the higher education system and its role in relation to building society. It (offers a foundation) for educational reforms, from the change in

In a bibliographic survey of international journals and books on the subject, López-Pastor (2013) identifies ten articles, from a group of 47, about assessment and initial training. This study, similar to that by López-Pastor, Kirk, Lorrente-Catalán, MacPhail and Macdonald (2013), does not include an analysis of Brazilian production. However, we have mapped Brazilian production during the 1930-2014 period, resulting in 57 publications in physical education journals, with 15 publications on the topic studied here.

<sup>2</sup> The transformation of an event into a long experience is linked to one's lived context. In the context of possessing knowledge of a long experience, what is most important is not the truth of the facts, but the meanings that we assign to our events.

curricula, ways for organizing courses and management, to new system structures. (p. 95)

We observe that assessment—both *internal* (learning, teacher's action, programs, management) and *external* (large-scale assessments such as the Provinha Brasil, the Exame Nacional do Ensino Médio-National Secondary Education Examination, and the Exame Nacional de Desempenho dos Estudantes)—is part of a broader context of debate. Considering both this complexity and the issues raised in this study, we have opted to center our analysis on internal factors: the student-teacher's assessment of the training institution, with a focus on what the student-teachers learn, on the actions of the training institution's educators, and of the program itself. Student-teachers' actions have implications in the relationship between assessment practices and learning processes, and as an object of study within the program's disciplines, can tell the professor about the student-teacher's progress.

For Hoffmann (2001), the process of knowledge construction for teachers or future teachers is produced in the relationships that they establish with their interlocutors, who also produce their assessment interpretations. Thus, both educator and student "assimilate concepts already set on assessment, formulated on different degrees of systematization by everyday knowledge, which are translated or not into assessment practices" (Hoffmann, 2001, pp. 69-70).

In this case, the students must review their assessment experiences during initial training in order to (re)interpret their knowledge and to indicate concrete alternatives that might be needed to produce the successful practice of a particular curricular component. Simultaneously, our approach permits us to raise issues related to how initial teacher training in physical education has addressed the debate on assessing the process of teaching-learning and the implications for teaching practices futures. Simultaneously, our approach permits us to see tensions and disputes that arise in the teaching-learning process during initial teacher training and what their implications are for future practices.

#### Method

The narratives contain a form of language that redefines the student-teachers' manner of being and living, and allows them to revisit stories in *memory-fragments* (Perez, 2003). That is, these are the scraps of a life that are chosen to be remembered, in which we search for "history-making," and that break the linearity of space and time, and link past, present, and future.

For Gagnebin (1997), the relationship between image and memory, created through the observer's action of imagining likeness, relies on the concept, "that which we know that soon we will not have before us becomes an image" (p. 139). For Le Goff, memory is an essential element of *identity*, whether individual or collective. The memory is individual because it considers the memories of an individual. But, simultaneously, memory can be collective, because memories are the heritage of

a community or a group whose quest is a fundamental activity of individuals who seek to "save the past to serve the present and the future" (Le Goff, 1990, p. 412).

We present narratives of the assessment experiences of ten eighth-term students (three men and seven women), who were enrolled in the teacher training course in physical education at UFES.<sup>3</sup> This period was selected because the students were completing their course of study, and our goal was to examine their assessment experiences that occurred during the course of their training program. Members of the class were invited to participate as volunteers in our survey, which took place from Oct. 21, 2011 to Nov. 25, 2011.

Three sources were used to obtain the data: portfolios,<sup>4</sup> a focus group, and individual semi-structured interviews. First, the portfolios were reviewed to analyze the students' recorded assessment experiences during their physical education teacher preparation program and to formulate questions for the focus group and semi-structured interviews.

The focus group was configured to produce both collective and individual recollections. The following questions guided the focus group: What were your assessment experiences during the physical education teacher preparation program? Were there courses about school assessment during the physical education teacher preparation program? Did your initial training help you think about assessment? Based on your studies during this program, how can you design actions for teaching practice?

We begin from the assumption that sharing experiences contributes to participant recall. Because such sharing is a collective process, hearing others' experiences increases the recognition and identification of different events that contribute to remembering. Although an experience is a "private, subjective, relative, contingent, and personal knowledge . . . the event is common" (Larrosa Bondía, 2001, p. 27). Finally, the semi-structured interviews deepen the narratives, raising new questions based on both the portfolio and the focus-group participation. The narratives produced by these different instruments were discussed not only as data, but also as *products* (Certeau, 2002). That is, they are the result of student cultural activity in the formative institution's place/space.

#### Results and discussion

We organized two central axes of analysis, based on student narratives about the meanings of their assessment experiences. The first renders visible those experiences that decoupled from professional practice. The second is based on the initial training narratives that are integrated into professional future practices.

<sup>3</sup> To preserve the identity of the research participants, we use fictitious names.

We use the portfolios produced in the students' knowledge-articulating seminars. These seminars occur every semester and aim to help the students articulate their growing knowledge underlying the pedagogical role of the physical education teacher.

### Initial teacher training, or the student's place?

The initial data analysis indicates that students' reinterpretation of their assessment experiences is related to their status as students, despite being in the final year of a teacher training program in physical education. The narratives that stand out are those in which students understand assessment to be a mediator of the relationships with their peers, but also it addresses value judgments related to the studying and learning process:

I think there is a big problem in physical education, and I ask myself: "What type of professional wants to be certified?" Because we look at our own class and think, "Why is this person here? How did she pass the class and will become certified with me?" It does not make sense! Some things are not fair. (Fernanda, focus group)

We have discussions in Didactics and Policies for Primary Education. Some schools pass students to get rid of them. I think that the CEFD assessments, somehow, discourage some students because you study the entire period, and at the end, those who are not dedicated pass. I cannot understand this disparity! (Carlos, focus group)

Carlos's and Fernanda's dissatisfaction with the assessment criteria is related to the assessment's failure to differentiate among students, which transforms the assessment into a way to recognize an individual's work, permitting subjects to be valued regardless of how their grades identify them. Here, we observe that appreciation can be expressed not only by a number, or grade, but also through the social prestige that an evaluation can confer on the teachers and students, distinguishing them from their peers.

The meanings that Carlos and Fernanda attributed to the assessment practice is characterized by their certification power as a type of knowledge, expressed by the possession of cultural capital and values, and validating their peers' selectivity and ranking. This type of recognition is closer to power and control, where they begin "diverging from the process of teaching and learning, emphasizing its [their] function of social control mediated by pedagogical practice" (Esteban, 2002a, p.102).

On the other hand, as discussed by Pereira and Flores (2012), students' understanding of the role of assessment determines how they engage in the learning process. What students "learn" largely depends on how they think they will be assessed; that is, the more rigorous they believe their assessment will be, the more they will commit to studying. In this case, worrying about their grades could reflect Carlos' and Fernanda's attitude of favoring a final product that will make their performance concrete. Therefore, we must ask the following question: Does this perspective make the tensions cited by Carlos and Fernanda depend on how they understand their certification process and what its relationship is to learning? How has the program offered by CEFD addressed such issues as a way for them to think about assessment throughout their initial training?

These analyses are magnified when we center the debate on how Carlos and Fernanda understand the scope of self-assessment practices in the teacher training program in physical education. Their dichotomous reading, which polarizes passing and failing, could weaken the contribution of assessment as a practice that enables a teacher to analyze his or her own actions, as well as their students' learning process, while at the same time permitting the student-teachers to assess themselves throughout the process and/or at its conclusion.

Thus, it is necessary to understand two important issues. First, an assessment can be aimed at determining a learner's progress, but grades aren't necessarily a guarantee of the *knowledge* gained by the student. Instead, the assessment might reflect the student's *process*. Similar issues are also raised by Mendes *et al.* (2007) in that students sometimes understand their grades as an exclusively quantitative final product. Indeed, it is important to generate grades because they determine classification and rank. However, a true assessment occurs only when a teacher analyzes and understands the meaning of grades.

Carlos and Fernanda also refer to how future teachers analyze the assessment in the physical education curriculum. The injustice and disparity highlighted by Carlos and Fernanda reflect an assessment that does not differentiate between participants in the process, which can become demotivating for some students.

Another issue that arises through the focus group is that is necessary to reconcile assessment practices throughout the program, as highlighted by Renato. He says, "There are different objectives, and assessment is about disciplinary objectives. I'm not defending closed standards, but it is necessary to reconcile assessment issues at the Center." This tension is noted by Rafael and Fernanda, who question a "disconnect" among the disciplines offered:

Whatever the method is, there is a need for articulating the knowledge we will gain in the semesters. We feel something is missing. I think this is missing, so that we can see an assessment style that allows the student to establish a connection. (Rafael, focus group)

The question of assessment involves the question of content. We had a class where the disciplines were completely disconnected from one another and often repetitive. That resulted in me not having a set of standards and continuity, a cohesive knowledge. (Fernanda, interview)

Within their narratives, Rafael and Fernanda indicate the need for a dialogue amongst the different courses in the program. They suggest that their contents should reinforce the importance of a curriculum that broadens and articulates school knowledge, emphasizing the role of the assessment in the process of connecting this knowledge. In this context, assessment as an action must continue to interpret the signals, tracks, and vestiges of the professors' processes and actions, of the curriculum, and of student learning. It has the objective of giving visibility to the knowledge that is learned (or not learned) and is under construction, as well as to the practices that are produced in the constant motion of conscious value judgments and decision-making (Santos, 2005, 2008).

Another problem posed by the students refers to how assessment is discussed in the courses of the teacher training program

in physical education, especially those offered by the Education Center. Bruna questions the methodology utilized in the courses that seek to deepen the discussions about teaching and learning processes in relation to planning, objectives, content, methodologies, and assessment:

We had Didactics with a professor from the Education Center. She asked for work from several groups; each group was responsible for a subject, and one group talked about assessment. However, she did not work with the class to demonstrate how we can conduct the assessment process. She just assigned a group to it. For me, it was not worth anything because I could not extract an assessment process in physical education from a presentation. (Bruna, focus group)

Beyond the critique of how assessment is approached in Didactics, Bruna highlights that not showing "how the process of assessment is conducted" can generate distance between the theory and the assessment practice, as well as can result in studying a theme that is generally connected to education, but without considering the specificities of physical education at school. We also observe the complexity of the assessment processes to the degree that, when students narrate their experiences, they also assess their peers, their professors' actions, and the professors' disciplines.

We call attention to Eduarda's narrative, in which she claimed "there is little time for a lot of content, and, in one discipline alone, the teacher wants to perform a miracle. It [content] has to be better distributed" (focus group). This student considers the need for curricular organization, emphasizing that a single discipline cannot cover the complexity of the contents addressed in Didactics. She also stresses the role of the curriculum in offering disciplines that aim to discuss assessment that take into account physical education's specificities as a curricular component.

Charlot's (2000) studies of the relationship between knowledge and learning figures help us understand the nature of the knowledge through which physical education both operates and confers specificity. According to this author,

The relationship with knowledge is the set of relations that the subject has with an object, a "thought content," an activity, an interpersonal relationship, a place, a person, a situation, an occasion, one obligation, etc., attached to a certain way of learning and knowing; and, therefore, it is also the relation with language, relation with time, relation with the action in the world and on the world, relation with others and relation with oneself as more or less able to learn such a thing in such a situation. (Charlot, 2000, p.81)

In accordance with Charlot's considerations (2000), we can say that physical education has a relationship with knowledge that is embodied in practices. Thus, it is different from the knowledge generally incorporated in an object.

School is a place of words, languages, or other symbols of the world, such as text, and, systematized knowledge, whose mode of existence is language, especially writing, reading, and logical-mathematical thinking. Physical education, in privileging *practice-making*, creates other possibilities to broaden the school's form. We depart from physical experiences to produce a dialogue between these experiences and *domain-knowledge* (i.e., the capacity to master an activity), *relational-knowledge* (i.e., the relationship between oneself and another), and *object-knowledge*, which is the appropriation of concepts, formulas, or abstractions produced by humans that constitute a symbolic capital of humanity (Charlot, 2000).

For Schneider and Bueno (2005), a child learns not only when reading, writing, and speaking, but also through the mastery of the knowledge that occurs in the body, such as with physical education. By contrast, we observe the search for adapting and matching the physical education curriculum to other components, without increasing their specificity. An example of this movement is using the same assessment instruments in physical education as in other disciplines, such as the written exam.

Thus, the presence in an initial teacher training course indicates that a school is a knowledge-producing space that recognizes the need for practices that approximate reality, with a narrow relationship between theory and teaching. Indeed, the practical dimension (Certeau, 2002) is rooted in physical education because of its epistemic status, as noted by Santos and Maximiano (2013) in their discussions about assessment in basic education.

Thus, Fernanda and Bia, recognizing these particularities of physical education, indicate a need to use different assessment instruments for pedagogical practices, both in initial teacher training and in the area of professional exercise:

I see physical education as a too large field to be restricted to written assessment and multiple choices; then, do not even mention it! In the same semester and in the same discipline, we can have various opportunities for assessment, and I think that we are limited to one thing only. This blames the student, but he has other capabilities. (Fernanda, focus group)

I think that the subjects that used multiple means of assessment were more significant because they privileged the capabilities of each student, and I believe in this bias of offering multiple assessments because we obtain so many good characteristics, that is, the practice. We go into the labor market and do not follow the practice. This is no good. We will not be in the classroom for one year with the kids. (Bia, focus group)

Fernanda's and Bia's narratives also focus on the need for the assessment to address the particularities of the subjects who are being assessed, and of the assessment's objectives. The students refer to the assessment's important role: It permits an analysis of the different potentials of, and difficulties encountered by, students during initial teacher training. Bia linked her assessment experience in the teacher training program with a future professional exercise and points to the importance of an individualized view of student experiences, and their relationships with practices. Her narrative offers us elements to help us think about assessment as an investigatory practice, one that reveals

the various types of knowledge produced in physical education, thus recognizing the specificity of this curricular component.

To the extent that different instruments are used, assessment can identify the appropriate actions for teaching and learning processes, while holding the student accountable for his or her own training. In this way the student transitions from passivity to responsibility during the process of becoming a teacher, and understands that assessment is a political act related to teaching and learning processes. The assessment becomes a permanent exercise in understanding vestiges and signs (Santos, 2005, 2008), which both the teacher and student can interpret and incorporate into the teaching and learning process.

An analysis of our data reveals that, because the topic of assessment is infrequently discussed during their initial teacher training, it is more important for the students to know how they are assessed rather than to consider what implications the assessments might have with regard to their professional teaching careers in the future. Although the students note that assessment was mentioned in the Didactics discipline, they also question the methodology used to teach it. A similar discussion was noted by Fuzii, Souza Neto, and Benites (2009), who analyze the political pedagogical project in the teacher training program in physical education that does not offer a specific discipline related to assessment in school physical education. This situation suggests to the authors that the assessment processes in this teacher training program are primarily quantitative, and do not include debates with the students during their initial training process.

The students in this study claim to have had few conceptual discussions about the topic of assessment. However, they say they think it would make sense to discuss this topic in other classes, such as Theory and Individual Sports Practice, Supervised Internships, and Knowledge and Methodology of Game Teaching. While these disciplines do not specifically include discussions about assessment, students believe they would provide a good venue for such discussions – especially about the relationship between theory and practice, because they are places in which teaching practice is projected. The students' narratives also make reference to the classes that allowed them to think about and experience assessment, placing them in the teacher's role. This topic is addressed in the next section of this article.

# *Initial teacher training: implications for the teaching practice*

The narratives that articulate assessment experiences in the context of future professional practice are broad, especially when students recall their experiences as teachers during their supervised internships. For example, Rafael, playing the role of teacher, privileges the younger school students' participation as an assessment criterion while referencing his experiences in elementary education:<sup>5</sup>

We made lesson plans, and the assessment in the internship was on the involvement of students. We assessed but did not disclose, we did not provide assessment results to the students, we did not give feedback to them. This could have been an error on our part. We made the assessment in relation to our performance: if our students participated because our class was good, then we achieved our goals. (Rafael, focus group)

This will be repeated in our experiments because it seems that teachers did not have a clear objective of what they wanted to transmit to us. . . . I do not even know what I was assessed on. I think that the teacher assesses us for involvement and student participation. At the end of the year, grades were given, and we did not discuss them. (Rafael, focus group)

The narratives highlight the unsystematic method of assessment in which no record is produced and the logic of the examination is based only on the mandatory grading of the student. The knowledge valued in physical education is expressed through the body, which is perhaps why participation is the main criterion. However, if we assess what we teach, might we think that physical education teaches only values and attitudes?

It seems reasonable to assume that assessment is conducted not to assess values and attitudes in physical education but rather to increase the visibility of the meanings that students assign to them. Charlot (2000) signals the need for an epistemological reversal in the teaching and learning process that considers the relationship that the subject/student establishes, using knowledge as a reference.

According to Charlot (2000), "there is no knowledge that is not inscribed in knowledge relations" (p. 63). Knowledge is a form of representation of an activity, of the subject's relations with the world, with himself, and with others. Knowledge is a relationship with the world as a set of meanings. Thus, there is no relationship with knowledge except for that of a subject that desires it. The author argues, "a knowledge only has meaning and value by reference to the relations that presuppose and produce with the world, with himself, with others" (Charlot, 2000, p. 64).

Another issue that emerges in the students' narratives refers to the assessment present in the Supervised Internship. Although trainees assess elementary school students, they themselves are assessed by the internship teachers. In both cases, Carlos highlights the use of dialogue and reflection as a means of assessment: "[It] was made through discussion, with the internship teacher, regarding student participation and what was proposed for the class. We paid attention to the number of students who participated and their disposition in teaching the class" (Carlos, interview).

The supervised internship allowed the students to become familiar with the school setting and to experience the practice of assessment in elementary physical education. What should be questioned is how the supervised internship has provoked an analysis of these practices. Have internships, as well as other disciplines in the program (i.e., Didactics, Pedagogical Thought in Education and and Physical Education, and Physical Education in Early Childhood Education) assumed the assessment of teaching and learning processes as an object of study?

<sup>5</sup> Santos and Maximiano (2013) observe that initial teacher training students assess their internship students using the same criteria that their basic education teachers used to assess them.

In the narratives, we did not observe reflection on the assessment practices performed at school. The students reinforced a culture of assessment through participation and involvement without discussing its meaning. In this case,

Participation, like a mere methodological adjectivation of the act of assessing, generally assumes an instrumental role, in that the decision-making power continues to be concentrated on the evaluator who, as a maximum agent, grants it to others in some moments of the process. (Waiselfisz, 1998, p. 59)

The narratives show that some students appropriate the study of assessment in the program and how assessment has been addressed in the students' courses, for example, in Didactics and their supervised internship. The issue is not simply defining how to assess, that is, choosing the instruments to be used, but rather in understanding that the potential of assessment lies in "promoting a reflection that draws from the experience of teaching with and learning with" (Esteban, 2003, p. 35).

The student narratives stress that discussions of school assessment also occurred in other courses, such as Pedagogical Thinking. Patrícia highlights lesson plans and experiences in micro-classes with colleagues that produce concrete possibilities for her professional practice:<sup>6</sup>

On assessment, a subject that is dealing with it is Pedagogical Thinking, which I'm doing now. In this subject, we're working with the lesson plan as a whole, and it is part of the assessment. The cool thing is that we do thinking in the practice, making the assessment in the practice, trying to connect with the objectives but not specifically the assessment. (Patrícia, focus group)

The debate about assessment again converges on the tensions present in the relationship between theory and practice. In concordance with Certeau (2002), we understand that this relationship is inseparable: Theories are produced by articulation with practices, and practices are intertwined with theories. Through an epistemological reversion, we begin from practice and move to theory, thus returning to practice for (re)interpretation. This perspective has implications for thinking and creating in the classroom, which diverge from the idea that "acting exempts thinking" (Zaccur & Esteban, 2002, p. 17).

Theory functions as a lens, helping us to see what we were not able to see before. Theories are instruments that help us interpret and propose alternatives to the problems revealed by everyday practice; they are not didactic, nor are they pedagogical outlines or prescriptions for teachers' actions. From this perspective, practice is the place of questioning and is always mediated by theory. To understand the importance of this relationship, Renato (interview) notes his positive experiences with the assessment process as those in which he can "combine the culture of the discipline with the culture of pedagogical practice, especially in elementary school." Similarly, Rafael makes the following claim: "This method of assessment, which prompts

us to join theory and practice, is going to help us when we are in the school" (focus group).

Patricia and Rafael also highlight how disciplines that created teaching and learning practices, those that presented the possibility of future professional practice, were important in their initial training. In their narratives, they emphasize the role of teaching practice by offering such experiences during the initial training of physical education teachers:

The majority of students placed great importance on practical assessment, and brought many positive things, because the majority saw themselves as the teacher at the time of the practical assessment and also because, aside from doing, we are learning. (Patrícia, focus group)

I think that the courses at the intersection of theory and practice should be increased in the curriculum because they will help us in our pedagogical practice and in approaching the role of a physical education teacher in school. I remember I had a written test in Pedagogical Thinking, which is teaching methodology. In this subject, the teacher transmitted a few ways of assessing students, from the most qualitative participation to the quantitative: assessing what the student has learned in class from the records. (Rafael, interview)

Based on these narratives, we see a need for initial training that produces experiences that place and involve students in teaching exercises, in situations of teaching and learning that are shared with their peers, with other subjects, and in different spaces and stages of elementary education. In this case, as the students understand, there are two dimensions of the debate. The first, as Patricia realized, emphasizes the practical assessments offered by the disciplines that address teaching content in elementary physical education and how, in doing so, one learns to assess the knowledge taught in that process. The second, as narrated by Rafael, refers to the different items that the physical education teacher may evaluate (emphasizing documentation) in both the qualitative and quantitative dimensions.

The portfolio is another instrument compiled by the students during their initial training that records their formative process. Carlos provides the following criticism of this instrument:

First, I wanted to record my view of the portfolio. My class has been questioning the use of this instrument during our training. We still do not see plausible reasons for its continuity and importance. . . . In my case, the portfolio serves as a record of everything that happens during my teacher training and not solely as a reflection, because I see no reason in it, as I do at other times. I always compile my records at the end of the term as a kind of summary of everything. . . . I am not in the habit of making records during the period. (Carlos, portfolio)

For the teacher training program in physical education, the portfolio is used as an instrument that assists, or should assist, the process of the (re)interpretation of, and the reflection on, teaching practices during initial training. Carlos highlights

<sup>6</sup> At the time of the study, Patricia had no classes. She attended Pedagogical Thought, which was offered during the 3<sup>rd</sup> period.

and questions the characteristics that make the portfolio an assessment instrument that can help organize both the teachers' pedagogical work and student learning.

For Carlos, the portfolio is produced through the selection of descriptive texts without reflection. As noted by Miranda and Villas Boas (2008), this instrument presents other difficulties. In revealing the tendency to create portfolios with specific descriptions, the authors offer us a way of conceptualizing assessment as the practice of documentation in the portfolio, that is, an unsystematic action that does not take into account the role of self-assessment in the interpretation of learning processes.

Luis (2009), Melograno (1997, 2000), and Senne and Rikard (2002) claim that the production of this type of material permits, for example, the (re)interpretation of students' experiences in a procedural manner, which makes is possible to interpret the meaning that students attribute to their learning in physical education classes. This process occurs differently when compared to descriptive productions, in which students superficially record what they studied in initial training without reflecting on the process and how teachers are trained. This is evident in our analysis of the portfolios that are used as the sources for this study. For some, producing the portfolio simply becomes a mandatory requirement for passing the class.

In general, we observe that, despite the potentially positive aspects of assessment practices, students have difficulty understanding that the grade could be part of (but not all of) the process. As Bia notes:

When I was really assessed, it was in Basic Education I. This was the internship where I felt most like a teacher. He gave some assessment sheets that could be turned into grades later. The form had questions on motor development and questions on attitudinal aspects. I found it very interesting because we couwwwld see how the students progressed, and by using the forms, we managed to turn it into a grade. I see possibilities through these sheets; this is not becoming a mechanical thing, but I see it as a possibility to assess. (Bia, focus group)

Bia's narrative leads to the following questions: How is it possible to produce an assessment of body practices? Is it necessary to (re)define the concept of assessment, and, consequently, its role in the academic context? Historically, experiences of physical practices are neglected in movements that are not the goal of a particular type of learning. Thus, it is important to understand the meaning of what will become *practice*. Practical assessment does not intend to focus solely on motor aspects, such as the acquisition of motor skills. It should be understood as only one way of knowing among other possible ways, which must also be made visible.

In physical education classes, practices require assessments that take into consideration domain-knowledge and relations-knowledge, offering educators the possibility to confront challenges by giving visibility to meanings that subjects establish in their physical experiences. Charlot (2000) understands that there are also ways to learn that do not consist of appropriating object-knowledge, "the appropriation of a statement, no matter how comprehensive, is never the same as mastering the

activity" (p. 70). In other words, the learning of the mastery of an activity in relation to you and the "other" brings specificity to the practices of physical education. Thus, the learning of statements is not the same as the body's learning of an activity.

Beyond this, it is interesting to note the salient issues of the assessment instruments, as described by the students. We understand, similar to Esteban (2003), that, "It is necessary to redefine the assessment methodology to accompany the epistemological transformation" (p. 31). An assessment involves an epistemological transformation that offers meaning to methodological definitions, which means that the definition of record types should be based on a larger analysis in which the meaning of assessment itself is discussed and analyzed. Questions such as why assess, for what purpose, and for whom are critical for thinking about the ethical and political actions of assessment. Assessment is inherent to the concept of education – in our specific case, to physical education, and, therefore, it is not isolated from the epistemological perspective of training that underlies the teaching practice. Therefore,

Assessment is a meaningful process for reflection on social practice, school practice, and the interaction between these areas. Its ability to reconstruct the process aids in reflection on pedagogical practice, enabling the development of a process for assessment of the teaching practice itself. Assessment as an act of reconstruction is a formative process for teachers, dialectically articulating reflection and action; theory and practice; school context and social context; teaching and learning; process and product; singularity and multiplicity; knowing and not knowing; dilemmas and perspectives. (Esteban, 2002b, p. 12)

Renato also observes the relevance of producing records, although his observation is incorporated into a process of reflection on his practice and the processes of student learning:

I see the record as an important action in sharing my practice because I can have an idea of what had meaning for the student, and I did not have that experience in college. I can check if the student understood the content and assessed my practice. This is one way to assess whether the content worked and to assess myself. It is my duty to clarify for my students. (Renato, interview)

A student reiterates the importance of using records for the teacher's assessment practice in an exercise that permits not only the observation of student learning, but also a self-assessment of his practice. Records are made as the teacher reflects on and self-assesses his teaching practice to become aware of student difficulties and to trace both individual and collective goals. Records help a teacher achieve both his own objectives and those of the students. Students produce records that provide evidence of their learning process, allowing the teacher to identify the trajectories of students in knowledge production and training.

We understand that assessment is structured as a process of reflection and action, in which the teacher and student become capable of investigating their training processes, while continuing to focus on domain-knowledge, relations-knowledge, and the production of object-knowledge. The assessment refines the meanings of the teaching and learning process, and develops diverse forms of knowledge, with the aim of acting in accordance to the needs of those involved, both individually and collectively (Santos, 2005). Assuming this perspective, assessment operates in the service of an action as a process, supplementing and redirecting the student's learning path and the teacher's teaching. Assessment does not mean conducting "an assessment," but instead it represents a set of assessments that mark the path of the student, the teachers, and the curricula of educational institutions in the learning, teaching, and training process.

Analysis of the narratives and portfolios produced by the students during their training permits us to conclude that, when students find themselves in the practice of teaching (in different courses, such as their supervised internships and Pedagogical Thinking), the curriculum of the teacher training program in physical education at CEFD enables assessment experiences that are considered to have a positive effect on students' training. In this case, the students recognize through assessment instruments how to think about many of the complexities related to the objectives of teaching in physical education. However, the students lack clear epistemological perspectives that support their actions.

In the absence of certain assessment experiences, students forge their teaching identities by using those assessments that make the most sense during their training. It is those experiences that permit the students to appropriate and (re)interpret their experiences as practices that produce new learning, as Fernanda narrates:

I think that I had other assessments that we learned at the time of assessment. When we combined all of the knowledge to create something to present, there was not one assessment process, there was a process of learning, and utilizing assessment as a learning process is also important. (Fernanda, focus group)

Based on Fernanda's narrative, we cannot disregard the potential of assessment in the process of learning and teaching, in which learning occurs *during* the assessment at the same time that a student is learning *how* to assess. However, we should emphasize that, to produce knowledge about assessment practices, it is necessary to discuss the epistemological perspectives that offer support. If we value an instrumental knowledge or an "assessment method," as Rafael claims, then we can create methods of producing numbers or concepts without understanding the meaning of the act of assessing and its implications for the process of training and teaching practice.

#### Final considerations

Through the student narratives, it was possible to present two significant periods for the students in their initial training assessment experiences. In the first, the graduating students view their experiences with assessment in the teacher training program in physical education in a manner that is decoupled from teaching practice. In these narratives the students focus on their teachers' practices and on how they, the students, will be assessed.

In the second period of analysis, the students talk about assessment experiences that could be linked to teaching practice. Their narratives show the difficulty in producing assessment practices that address the particularities of physical education, the curricular component, for example. In this context, the narratives stress the importance of classes that offer possibilities for professional action by allowing the students to experiment with different instruments.

The role of teacher training is to create opportunities for students to engage in practical experiences (Certeau, 2002), thus encouraging them to (re)interpret their academic and teaching performance. Students' understanding of their assessment processes during their initial training also reveals the need to specifically and permanently include assessment processes in the curricular program, in a manner that is not fixated on instrumentalization and on a single methodology.

Although students indicate the need for assessment in elementary education that helps them examine the specificities of physical education, they cannot identify an epistemological perspective that offers support for such assessments. These issues are reinforced when the students discuss their experiences during their supervised internships, which utilize the same assessment criteria that the elementary education curriculum uses.

The initial training program is an important space in which the knowledge construction of future teachers occurs. However, in initial training, the debates about assessment are often away from "or disjointed from the reality of the educational context, reduced to the superficial study of theoretical models of assessment and the critical analysis of their character" (Hoffmann, 1998, p. 65).

Thus, the current study suggests that future research is necessary in order to highlight the assessment practices undertaken during initial training, continuing education, and teacher action. As a result of such research, perhaps, educators and students can learn to use assessment as an active and ongoing process. They can incorporate it into the curricula as a set of activities rather than thinking of it as a singular event.

#### References

Certeau, M. de (2002). A invenção do cotidiano: artes de fazer. *The practice of everyday Life: arts of doing.* (15th edition.). Petrópolis: Vozes.

Charlot, B. (2000). *Da relação com o saber: elementos para uma teoria* (Relation with knowledge: elements for a theory). Porto Alegre: Artes Médicas Sul.

Esteban, M.T. (2002a). O que sabe quem erra? Reflexões sobre avaliação e fracasso escolar (Who knows what is wrong? Reflections

- about assessment and school failure) (3th edition.). Rio de Janeiro: DP&A.
- Esteban, M.T. (2002b). A avaliação no cotidiano escolar (The assessment in everyday school life). In M. T. Esteban (Ed.), *Avaliação: uma prática em busca de novos sentidos* (Assessment: a practice looking for new directions) (pp. 7-28). Rio de Janeiro: DP&A.
- Esteban, M.T. (2003). Ser professora: avaliar e ser avaliada (Being a teacher: evaluate and be evaluated). In M. T. Esteban (Ed.), *Escola, currículo e avaliação* (School, curriculum and assessment) (pp. 13-37). São Paulo: Cortez.
- Fuzii, F.T., Souza Neto, S., & Benites, L. C. (2009). Teoria da formação e avaliação no currículo de educação física (Formation theory and evaluation in the physical education curriculum). *Motriz*, 15(1), 13-24. Retrieved from http://www.periodicos.rc.biblioteca.unesp. br/index.php/motriz/index
- Gagnebin, J.M. (1997). Baudelaire, Benjamin e o moderno (Baudelaire, Benjamin and modern). In J. M. Gagnebin (Ed.), Sete aulas sobre linguagem, memória e história (Seven classes about language, memory and history) (pp. 139-154). Rio de Janeiro: Imago.
- Goc-Karp, G., & Woods, M. (2008). Preservice teachers' perceptions about assessment and its implementation. *Journal of Teaching* in *Physical Education*, 27(3), 327-346. Retrieved from: http:// journals.humankinetics.com/jtpe
- Gorini, M.A.G., & Souza, N. A. (2007). Avaliação da aprendizagem: a construção de uma proposta em educação física (Learning assessment: the construction of a proposal in physical education). *Estudos em Avaliação Educacional*, 18(36), 181-193. doi: 10.18222/ eae183620072106
- Hoffmann, J. (1998). *Pontos & contrapontos: do pensar ao agir em avaliação* (Points and counterpoints: from thinking to acting in assessment) (6th edition.). Porto Alegre, Mediação.
- Hoffmann, J. (2001). Avaliar para promover: as setas do caminho (Evaluate to promote: the directions on the path). Porto Alegre: Mediação.
- Larrosa Bondía, J. (2001). Notas sobre a experiência e o saber da experiência (Notes on experience and the knowledge of experience). Revista Brasileira de Educação, 19, 20-28. doi: 10.1590/ S1413-24782002000100003
- Le Goff, J. (1990). *História e memória* (History and memory). Campinas: Unicamp.
- López-Pastor, V.M. (2013). Nuevas perspectivas sobre evaluación en educación física (New topics about assessment in physical education). Revista de Educación Física: Renovar la Teoria y Practica, 29(3), 4-13. Retrieved from http://dialnet.unirioja.es/servlet/revista?codigo=1162
- López-Pastor, V.M., Kirk, D., Lorrente-Catalán, E., MacPhail, A., & Macdonald, D. (2013). Alternative assessment in physical education: a review of international literature. Sport, Education and Society, 18(1), 57-76. DOI: 10.1080/13573322.2012.713860
- Luis, S.M.B. (2009). De que avaliação precisamos em arte e educação física? (What assessment do we need in art and physical education?). In J. F. Silva, J. Hoffmann, & M.T. Esteban (Eds.), *Práticas avaliativas e aprendizagens significativas em diferentes áreas do currículo* (Assessment practices and meaningful learning in different areas of the curriculum) (pp. 35-46). Porto Alegre: Mediação.

- Lund, J.L., & Veal, M.L. (2008). Measuring pupil learning: how do student teachers assess within instructional models? *Journal of Teaching in Physical Education*, *27*, 487-511. Retrieved from http://journals.humankinetics.com/jtpe
- Melograno, V.J. (1997). Itegrating assessment into physical education teaching. *Journal of Physical Education, Recreation and Dance*, 68(7), 34-37. doi: 10.1080/07303084.1997.10604981
- Melograno, V.J. (2000). Designing a portfolio system for K-12 physical education: a step-by-step process. *Measurement in Physical Education and Exercise Science*, 4(2), 97-115. doi: 10.1207/S15327841Mpee0402\_5
- Mendes, E.H., Nascimento, J.V. do, & Mendes, J.C. (2007).
  Metamorfoses na avaliação em educação física: da formação inicial à prática pedagógica escolar (Metamorphoses in the evaluation in physical education: from the initial formation to the school pedagogic practice). *Movimento*, 13(1), 13-37. Retrieved from http://www.seer.ufrgs.br/Movimento
- Miranda, C.Q., & Villas Boas, B.M. de F. (2008). A releitura de portfólios para a construção do trabalho de conclusão de curso de pedagogia (A new look at portfolios in constructing the pedagogy course final paper). Educação e Sociedade, 29(102), 215-229. doi: 10.1590/S0101-73302008000100011
- Pereira, D.R., & Flores, M.A. (2012). Percepções dos estudantes universitários sobre a avaliação das aprendizagens: um estudo exploratório (Perceptions and experiences on assessment: a study with higher education students). Avaliação, 17(2), 529-556. doi: 10.1590/S1414-40772012000200012
- Perez, C.L.V. (2003). Histórias de escola e narrativas de professoras: a experiência do GEPEMC. Memória e cotidiano (School stories and teachers' narratives: the experience of GEPEMC. Memory and everyday life). In E.C. Souza (Ed.), *Autobiografias, histórias de vida e formação: pesquisa e ensino* (Autobiographies, life stories and formation: research and teaching) (pp. 177-188). Porto Alegre: EDIPUCRS.
- Santos, W. dos (2005). *Currículo e avaliação na educação física: do mergulho à intervenção* (Curriculum and assessment in physical education: a dive into intervention). Vitória: Proteoria.
- Santos, W. dos (2008). Currículo e avaliação na educação física: práticas e saberes (Curriculum and assessment in physical education: practices and knowledge). In O. Schneider, J.T. Grunennvaldt, R. Kuhn, & S.D.D. Ribeiro (Eds.), Educação física esporte e sociedade: temas emergentes (Physical education, sport and society: emerging issues) (Vol. 2, pp. 87-106). São Cristóvão: UFS.
- Santos, W.dos, & Maximiano, F.de L. (2013). Memórias discentes em educação física na educação básica: práticas avaliativas (Student memories in physical education within elementary education: evaluation practices). *Movimento*, 19(2), 79-101. Retrieved from http://www.seer.ufrgs.br/Movimento
- Santos, R.G., Souza, A.L., & Barbosa, F.N.M. (2013). Estágio supervisionado I: o desafio da avaliação nas aulas de educação física escolar (Supervised intership I: the challenge of evaluation in school physical education classes). *Pensar a Prática*, 16(2), 501-518. doi: 10.5216/rpp.v16i2.17384
- Schneider, O., & Bueno, J.G.S. (2005). A relação dos alunos com os saberes compartilhados nas aulas de educação física (Students' relation with shared knowledge during physical education classes).

- Movimento, 11(1), 23-46. Retrieved from http://www.seer.ufrgs.br/Movimento
- Senne, T.A., & Rikard, G.L. (2002). Experiencing the portfolio process during the internship: a comparative analysis of two PETE Portfolio Models. *Journal of Teaching in Physical Education*, *21*(3), 309-336. Retrieved from http://journals.humankinetics.com/jtpe
- Sobrinho, J.D. (2003). Avaliação: políticas educacionais e reformas da educação superior (Assessment: educational policies and higher education reforms). São Paulo: Cortez.
- Waiselfisz, J. (1998). Avaliação participativa (Participative assessment). *Idéias*, (8), 59-66.
- Zaccur, E.G. dos S., & Esteban, M.T. (2002). *Professora pesquisadora:* a construção de uma práxis (Teacher researcher: the construction of a práxis). Rio de Janeiro: Cortez.

#### Authors' note

Wagner dos Santos (Ph. D., Education), André da Silva Mello (Ph. D., Physical Education), Omar Schneider (Ph. D., Education) and Amarílio Ferreira Neto (Ph. D., Education) are affiliated with the Institute of Research in Education and Physical Education (Proteoria), Espírito Santo Federal University, Brazil.

Francine de Lima Maximiano (M.S., Physical Education) and Juliana Martins Cassani Matos (M.S., Physical Education), are affiliated with the Institute of Research in Education and Physical Education (Proteoria), Espírito Santo Federal University, Brazil

## Acknowledgments

The authors wish to acknowledge CNPq (481424/2013-0) and CAPES for their financial support.

# Corresponding author

Wagner dos Santos

Instituto de Pesquisa em Educação e Educação Física – Federal University of Espírito Santo, 514, Fernando Ferrari Avenue, Vitória, ES, 2907-5810, Brazil.

Email: wagnercefd@gmail.com

Manuscript received on July 10, 2014 Manuscript accepted on July 23, 2015



Motriz. The Journal of Physical Education. UNESP. Rio Claro, SP, Brazil - eISSN: 1980-6574 – under a license Creative Commons - Version 3.0