DOI: 10.4025/jphyseduc.v36i1.3624

Original Article

ANALYSIS OF PRACTICES, *HABITUS* TRANSFORMATION AND REFLECTIVE PROCESSES IN THE FIELD OF PHYSICAL EDUCATION

ANÁLISE DAS PRÁTICAS, TRANSFORMAÇÃO DO HABITUS E PROCESSOS REFLEXIVOS NO CAMPO DA EDUCAÇÃO FÍSICA

Luiz Gustavo Bonatto Rufino[1], Samuel de Souza Neto[2]

[1]University of Campinas, Campinas-SP, Brazil.
[2]São Paulo State University,, Rio Claro-SP, Brazil.

ABSTRACT
The aim was to investigate the development of reflective processes among Physical Education teachers to identify and transform practices and knowledge developed in and through work. A set of Analysis of Practice procedures was conducted using Simple Self-Confrontation with six teachers. The results were divided into categories: 1) Unveiling the *modus operandi:* possibilities for transforming *habitus* through variations in propositions and perception of actions", with three subcategories; 2) The creation of stratagems and the search for ways to reinvent oneself throughout pedagogical practice, with two subcategories. It is concluded that making circumscribed knowledge public is essential, promoting reflective processes for understanding and transforming the *habitus* in the field of teacher education and professional development in Physical Education.
Keywords: Professional Training. Educational Status. Physical Education and Training. Faculty. Staff Development.

RESUMO
Objetivou-se investigar o desenvolvimento de processos reflexivos na Educação Física como forma de identificar e transformar práticas e saberes desenvolvidos no e pelo trabalho. Para isso, realizou-se um conjunto de procedimentos no campo da Análise das Práticas, envolvendo acompanhamento e gravação de aulas, seleção de episódios, apresentação e análise dos processos por meio da técnica de Autoconfrontação Simples e transcrição dos dados para análise. Participaram do estudo seis professores de Educação Física do Estado de São Paulo. Os resultados foram divididos em duas categorias: 1) Desvelando o *modus operandi:* possibilidades de transformação do *habitus* a partir da variação de proposições e da percepção das ações, com três subcategorias; 2) A criação de estratagemas e a busca por formas de se reinventar ao longo da prática pedagógica, com duas subcategorias. Conclui-se que é fundamental tornar público os saberes circunscritos na prática, fomentando processos reflexivos para a compreensão e transformação do *habitus* no campo da formação e do desenvolvimento profissional na Educação Física.
Palavras-chave: Formação Profissional. Escolaridade. Educação Física e Treinamento. Docentes. Desenvolvimento de Pessoal.

Introduction

This study, derived from a doctoral dissertation[1], focuses on the educational field by exploring and developing strategies for the analysis and reflection of pedagogical practice within school settings. More specifically, it investigates the development of strategies related to what has been termed "Analysis of Practice" (AP), with a specific focus on the pedagogical practices of Physical Education in schools.

Teaching is widely regarded as a complex, multifaceted activity, characterized by a *sui generis* nature[2-5]. Its uniqueness is grounded in particular foundations, as teaching can be considered a profession centered on human interactions[1]. Thus: "teachers work with groups of students, with a public collectivity, shaped by two primary needs: equitable treatment among those involved in the relationships and group control through various strategies"[2,35].

The complexity of teaching lies in the need to mobilize a range of elements—often tacit knowledge that is difficult to articulate—and the demand to act in urgent, uncertain, and unpredictable contexts[6].

Shulman has emphatically stated that teaching is one of the most complex human undertakings. He further explains:

> [...] teaching in classrooms — particularly at the elementary and secondary levels — is perhaps the most complex, most challenging, and most demanding, subtle, nuanced, and frightening activity that our species has ever invented. In fact, when I compare the complexity of teaching to that of a far more highly rewarded profession — 'medical practice' — I conclude that the only time medicine approaches the complexity of an average day in the classroom is during a natural disaster in an emergency room [...]. When 30 patients demand your attention at the same time, you may begin to approximate the complexity of a typical classroom day[;383].

Understanding this complexity requires the development and mobilization of knowledge related to the professional dynamics of teaching. As emphasized by Tardif[4], such knowledge is temporal, plural, heterogeneous, personalized, situated, and marked by human experience. Recognizing and analyzing this knowledge contributes to the professionalization of teaching. As many have pointed out: teaching is a craft composed of knowledge[8].

Tardif and Lessard[2] emphasize the heterogeneity of teaching work, which combines elements of regulation, organization, routinization, and structure — referred to as "codified work" — with other aspects marked by improvisation, uncertainty, and unpredictability — described as "non-codified" or flexible work. Teachers do not have full control over all variables or total mastery over their actions.

According to Schön[9], practical situations in professional work can be divided into two groups. The first involves "familiar situations," which can be addressed using routine procedures derived from professional knowledge. The second comprises "unfamiliar situations," which involve problems without clear solutions, encompassing value conflicts, dilemmas, and challenges that require reflection and critical thinking.

In the context of teaching, a significant portion of the work involves mediating between routinized and unpredictable actions. From a sociological perspective, Gariglio[3] identifies two key approaches to understanding the nature and development of teachers' professional knowledge:

> In the sociological analysis of teaching, two predominant perspectives are currently observable: one that views teacher knowledge as routines, habitus, or internalized cognitive schemas—dispositions embedded within the individual—and another that sees such knowledge as a reflective construction, in which teachers are capable of critically and analytically explaining what they do in schools, why they do it, and how they do it[3;29].

According to Gariglio[3], both perspectives are influenced by Donald Schön's studies and are intertwined with the *sui generis* nature of teaching and its intelligibility processes, including the capacity for reflection. Teacher knowledge is not always verbalized or articulated in coherent discourse; rather, its coherence is often pragmatic in nature.

The concept of *habitus* contributes significantly to understanding teachers' professional actions. According to Bourdieu[11;60], *habitus* functions as a "generative grammar of practices" — an internalization of external social structures and an externalization of internal dispositions. Much of what teachers do is embedded in embodied routines, gestures, postures, actions, and attitudes that reflect both broader social representations of what it means to be a teacher and the individual nuances of those who inhabit the school field[12].

Perrenoud[13] draws on the concept of *habitus* to describe the internal structures that shape teachers' dispositions within a specific social field. These are built through the incorporation of social dispositions, formed by the accumulation of capital and the agent's position within the social field. Bourdieu explains:

> By considering habitus as a subjective but not individual system of internalized structures—schemas of perception, conception, and action—that are shared by all members of a group or class and constitute the condition for all objectification and perception, we establish the objective coordination of practices and the shared worldview through the impersonality and interchangeability of individual practices and perspectives[11;79;80].

A group's *habitus* is expressed through its *modus operandi*—a relatively stable way of acting, enacted through automated conduct with pragmatic coherence. As Bourdieu states[11;72], individuals reproduce objective meanings not because they are consciously aware of them, but because their actions stem from a *modus operandi* they neither fully produce nor control. He writes:

> To avoid the realism of structure—which hypostatizes systems of objective relations, turning them into pre-constituted totalities existing outside the history of individuals and groups—it is necessary and sufficient to shift from *opus operatum* to *modus operandi*, from static regularities or algebraic structures to the principle of generation of observed order, and to construct a theory of practice, or more precisely, of the mode of generation of practices—an essential step toward building an experimental science of the dialectic between interiority and exteriority[11;60].

The *modus operandi* thus manifests the *habitus* of a given social group through relatively stable behavioral patterns and actions. It results from structured and structuring schemas that guide practices either consciously or unconsciously. Teachers, as a professional group, exhibit a specific *modus operandi* that must be understood by teacher education institutions, as it forms the foundation for comprehending, transforming, and re-signifying professional practices. Notably, there has been growing use of Bourdieu's theory of practice in the field of Physical Education, as highlighted in recent literature[14].

Understanding the *modus operandi* and the *habitus* of agents in the educational field requires strategies that recognize them as knowledge producers with unique understandings of their work. In this context, it becomes essential to develop formative strategies that enable reflection on *habitus*.

One such strategy is Analysis of Practice (AP), which consists of a set of activities aimed at professional development through context-based reflection[15,16]. The main goal of AP is to support the transformation of professional practices by enabling a broader and more systematic understanding of teaching[17].

Among the AP techniques is Self-Confrontation, an analytical procedure in which a worker is confronted — by a mediator — with video recordings of their own actions[18]. There are two modalities: Simple Self-Confrontation, in which individuals analyze themselves, and Crossed Self-Confrontation, in which two participants analyze each other. In this study, we employed Simple Self-Confrontation procedures.

In the field of Physical Education, Rufino, Benites, and Souza Neto[19] argue that little attention has been given to the implementation of PA-related strategies, indicating the need for expanded investigations to ground reflective processes. Godoi, Benites, and Borges[20], for instance, found that both Simple and Crossed Self-Confrontation techniques support teachers in analyzing their practices and contribute to their professional and reflective development.

Thus, the aim of this study was to investigate the development of reflective processes among Physical Education teachers as a means of identifying and transforming the practices and knowledge developed in and through their work.

Methods

This study employed a qualitative approach with a descriptive and interpretative nature[21-23]. Accordingly, the objective was to understand the phenomena in a contextual and process-oriented manner.

The first stage involved selecting participants from a group of Physical Education teachers engaged in a continuing professional development program, all of whom voluntarily consented to participate in the study. A total of six teachers from public schools in the state of São Paulo were selected — two men and four women — with an average age of 36 years and 10 months and an average of 12 years and 2 months of experience in Basic Education. The following inclusion criteria were considered: being a Physical Education teacher working in a public school; holding a permanent teaching position; and having agreed to participate in the study.

The first research procedure consisted of classroom observations and the recording of teaching episodes. Observation is a technique that enables immersion in a specific context[21-24]. We followed the observation framework proposed by Gil[25]. Although we did not intend to intervene directly in the observed reality, we also did not remain detached from it, acknowledging that even a non-participant observer inevitably influences the observation setting. Each teacher was observed during 30 class sessions to allow sufficient immersion into their teaching contexts, totaling 180 observed classes.

The second procedure involved video-recording selected lessons, capturing both visual and audio data. These recordings served as the primary material for the Self-Confrontation process. The total duration of footage ranged from five to six hours per teacher, which was later reviewed and analyzed to identify the episodes used in subsequent phases.

According to Altet[15], video recording in Analysis of Practice is essential for producing data that help elucidate the logic underpinning teaching and learning processes. The development of knowledge and competencies in recorded teaching practices can be facilitated through various formative processes, as the author explains.

Once the footage was collected, we curated and selected specific teaching episodes for each participant. As Altet[16] notes, an episode is defined as an action with a discernible beginning, middle, and end — something that can be fully understood even if it lasts only a few seconds or a few minutes, depending on the context. The selected episodes were intended to capture routine moments, critical incidents, or specific interactions between teacher and students. Each participant had eight selected episodes representing distinct moments: two from the beginning of class sessions, two from the end, two from the middle of lessons (during class development), and two involving unexpected or unusual situations. In total, 48 episodes were analyzed. Chart 1 provides a detailed overview of each recorded episode.

Teacher	Episode 1	Episode 2	Episode 3	Episode 4	Episode 5	Episode 6	Episode 7	Episode 8
P1	On the court, students are standing in a circle along with the teacher, who is leading stretching movements. She then asks the students to come closer so she can give instructions	In the classroom, students are seated while the teacher stands in front with a notebook, explaining how she evaluated the projects presented in the previous class.	Students are paired on the court, standing face-to-face and trying to touch each other's fingers (non-implement fencing activity).	In the classroom, the teacher explains a review activity on the board while students are seated at their desks (the court was unavailable).	On the court, students are split into two teams with bibs, each on one side of the space (it was raining, but the court was covered).	On the court, students are standing in a circle with the teacher explaining a tag game. She randomly calls out names to pair up students for the activity.	In the classroom, students are seated while the teacher recalls a previous assignment on cultural manifestations (hip hop, forró, axé).	On the court, some students are blindfolded while others are not. The teacher calls roll numbers to form pairs, with one guiding the other through the space.

	for a partner-based combat activity.							
P2	On the court, the teacher is at the center while students line up along the fence. He explains the upcoming "capture the flag" activity.	On the court, same initial setup. The teacher calls students to come forward and pick team members for the next activity.	In the courtyard, students are divided into groups and seated at tables. The teacher walks around asking about their progress.	On the court, students are in groups with cardboard boxes marking running lanes (part of the day's activity).	In the classroom, students are seated while the teacher explains the concept of combat sports. He distinguishes fights from sports and highlights the importance of rules.	On the court, students work in groups creating an activity related to speed. The teacher blows the whistle to call attention to a specific group.	On the court, students run and jump over cardboard boxes and a rope used for marking—a physically demanding activity.	In the courtyard, female university interns lead a hip hop dance session with a group of girls from the class.
P3	In the classroom, students are seated at desks. The teacher is standing and explaining an activity while wearing a sheet of paper on her torso to demonstrate a "shield" the students will use.	In the gym, students sit on the bleachers while the teacher, standing, tries to quiet the group. She plans to divide them by gender for two separate activities—not a competition.	In the gym, gymnastics class. Students practice rolling on mats while the teacher moves among them. She engages with a student who uses a wheelchair.	In the courtyard, students practice paired fencing while the teacher coordinates. She invites a boy and a girl to demonstrate in front of the others.	In the classroom, students sit on the floor while the teacher, seated with a laptop, introduces volleyball using a previously shown educational video.	On the court, students are in two lines—girls with hoops, boys with balls. The teacher stands in the middle, throwing equipment and demonstrating actions.	In the auditorium, the teacher divides the class into two groups and stands in the middle with a whistle and gymnastics information sheets.	On the court, students play a warm-up tag game with adapted gymnastics movements while the teacher interacts with them.
P4	On the court, students are spread out and positioned for the "Base 4" activity. The teacher signals the start—students must kick a soccer ball.	In the covered area beside the court, boys sit on one side, girls on the other, and the teacher in the middle explaining gymnastics safety, especially neck positioning during rolls.	On the court, a group of girls listens as the teacher instructs them to create a sequence of gymnastics movements.	In the same covered area, the teacher works with girls on headstands, explaining how to use mats for safety.	On the court, students are in mixed-gender groups, divided by a volleyball net. The teacher discusses the role of striking techniques in different activities.	In the classroom, students are seated with official curriculum notebooks while the teacher, standing at the board, compares rhythmic gymnastics and circus skills using a table.	In the covered area, each girl has a volleyball. The teacher demonstrates the underhand serve using one ball while explaining the technique.	On the court, students in mixed groups are divided by a net. The teacher explains volleyball rules, such as the number of allowed touches.
P5	On the court, students are split into two teams for an adapted dodgeball game. The teacher coordinates from the center.	On the court, students work in small groups—some around the volleyball net, others farther away in circles with one ball per group. The teacher walks between them.	Students are divided into two groups for a "rock, paper, scissors" relay at the court lines. The teacher observes closely.	On the court, students are again in two teams playing volleyball. The teacher balances teams for gender and number.	On the court, another dodgeball session. The teacher modifies the rule: now hands can be hit ("hot" zone), previously exempt ("cold" zone).	On the court, students form a circle near the center. The teacher, seated with them, discusses why the "cemetery" area also exists on the side, prompting student responses.	On the court, students form relay lines to reach cones placed at the end of a marked area. The teacher asks them to circle the cones before returning.	On the court, students run a relay carrying a ball toward cones. The teacher demonstrates the path with the help of a student.

P6	On the court, students in two teams with different colored bibs attempt to knock down the opposing team's bottles using various balls.	On the court, students sit in three groups. The teacher gives each group-colored bibs and assigns them to different activity stations.	On the court, students and teacher form a standing circle. One student outside the circle tries to tag a student inside while the others and the teacher prevent it by holding hands. The teacher whistles to start.	In the media room, students sit on the floor while the teacher explains they must simulate a javelin throw using a video game—mimicking approach, throw, and follow-through.	On the court, students sit in a circle at the center. The teacher joins them and reviews the previous class content, encouraging discussion.	On the court, students walk around the space while music plays. The teacher calls them over and instructs them to dance to the rhythm.	On the court, students and teacher form a circle. The task is to pass a hoop around the circle without letting go of hands. Music plays during the activity.	On the court, students line up on one side; hoops are on the other. They run to grab hoops, but there are fewer hoops than students. When two students share a hoop, the teacher resolves it with a "rock, paper, scissors" game.

Chart 1. Brief description of each episode recorded and analyzed by the participants. **Source:** The authors.

The episodes were analyzed using the Simple Self-Confrontation technique. According to Clot, Fäita, Fernandez, and Scheller[26], there are several key possibilities developed through Self-Confrontation techniques, which aim to provide reflective conditions that enhance the worker's protagonism in analyzing their own activity. These authors argue that this strategy supports a deeper understanding of professional activity and its formative implications.

Each participant was invited to analyze their own video-recorded scenes and describe them through free association, guided by the researcher. Both the episode descriptions and the dialogic reflections were recorded, transcribed, and analyzed through Content Analysis, based on Bardin's methodological framework[27]. NVivo software, version 12.0, was used to support the data analysis procedures.

All ethical procedures were strictly followed. The study was approved by the authors' home institution under approval number: 34549014.400005465. Participants voluntarily agreed to take part in the study and signed the Informed Consent Form (ICF).

Results and Discussion

Based on the analysis, two main categories emerged. The first, *"Unveiling the* modus operandi: *possibilities for transforming* habitus *through variations in propositions and perception of actions"*, was subdivided into three subcategories: 1) *"Reflective strategies before and after action and the individual nature of this process"*; 2) *"Reflective strategies during action, captured and analyzed throughout the process"*; 3) *"Development of experiential knowledge and 'intuition' during pedagogical practice."* The second category, *"The creation of stratagems and the search for ways to reinvent oneself throughout pedagogical practice"*, was divided into two subcategories: 1) *"Creating and developing stratagems as a way of consolidating the* modus operandi *of pedagogical practice"*; 2) *"The pursuit of innovation and diversification of practices as a form of self-reinvention."*

Unveiling the *modus operandi:* possibilities for transforming habitus through variations in propositions and perception of actions

This category addressed the possibilities identified by the participants regarding the recognition of the manifestation of *habitus* and the perception of their own actions—that is, the unveiling of the *modus operandi*, in line with the adopted theoretical framework. From this

process, various strategies emerged that represent distinct forms of reflection and self-identification.

Reflective strategies before and after action and the individual nature of this process

Numerous authors have emphasized the importance of reflective processes throughout pedagogical practice[9;13]. However, factors such as the daily routines of teaching work[2], the high workload, and the lack of clearly structured opportunities for reflection often hinder the development of such practices.

In this context, the Simple Self-Confrontation process proved to be a significant moment, as it enabled participants to engage in systematic reflection on their pedagogical practices—an action that, according to them, was not common in their everyday professional lives. The analysis of participants' accounts revealed that a substantial portion of their reflections occurred both before and after pedagogical actions[9]. This perspective aligns with the understanding that teachers' *habitus* is structured through forms of reflection and planning regarding their practice, even when such processes are often unsystematic.

An illustrative example of this form of reflection was provided by participant P3, who described her engagement with teaching work as driven by a constant effort to reflect on her actions and act differently. This process is based on a non-systematized and individualized approach, yet it is clearly oriented toward the development of her professional practice:

> There are days when you keep thinking, and the idea doesn't come to you right away... So sometimes, with this kind of activity, if I know that tomorrow I'll be working on a certain topic with the students, I find myself at home thinking about what I could do differently—to change things up a bit, so it doesn't get too monotonous and keeps them more engaged. I really have this thing about needing to see the kids motivated—if I don't, I feel uneasy. I want to change things, and then I reflect on it. Sometimes the ideas don't come in the moment, but later I think about what went wrong—or what almost went wrong—or what didn't go as planned, so I can change it for the next class or even for the following year. I spend a lot of time reflecting at those moments—before class, after class (P3).

The analysis shared by P3 highlights her individual process of reflection-on-action[9]. With a focus on her professional development, this participant—as well as the others—indicated that she seeks to reflect individually on her actions in order to improve the way she carries out her teaching practices. This process of transforming one's *habitus*[11] is far from simple and demands considerable effort. As Perrenoud[13] (p. 164) states: "an individual or collective reflective practice, or one that occurs within a practice analysis group, should help all of us become aware of how difficult it is to change on our own."

In line with this perspective, such individual reflective processes should also be fostered within interactive group dynamics, through the development of collaborative cultures[28,29]. In this sense, we may understand that the participants' *modus operandi* is to some extent shaped by individualized reflective routines, in which their embodied schemas (*habitus*) structure their practices in ways that are often "automatic" or only partially reflected upon before and after actions.

However, given the working conditions to which the teachers were subjected, individualism appears to be the most prominent logic underpinning their reflective processes. As a result, the analysis of their own work and the transformation of practices tend to remain within the private domain of each teacher's actions[8,30], with only a few occasional, spontaneous, and unsystematic exceptions.

Reflective strategies during action, captured and analyzed throughout the process

In addition to indicating that much of their reflection on practice occurs before and after professional actions, participants also expressed, during the Self-Confrontation process, reflective attitudes that emerged in the course of action itself[9]. These findings are particularly significant, as they may represent manifestations of *habitus* within the singularity and specificity of teaching practice. For instance, modifications from one lesson to another, or between different student groups—such as choosing to explain an activity inside or outside the classroom—can reflect how *habitus* manifests through adjustments and interventions that take place during instruction. These include elements such as contextual reading and spontaneous adaptation, often occurring without the teacher's full awareness. In Bourdieusian terms, these are examples of the "incorporated social."

This was clearly illustrated in a statement by participant P2, who described how his interpretation of the proposed activity and the perceived need for specific interventions were crucial for transforming his practice. He noted that upon realizing students were having difficulty performing a choreography as proposed, he felt compelled to intervene. The teacher made the following comment:

> Yeah, so… here's the thing. Sometimes you explain something in the classroom and it seems easy—as if everyone understood. But then, when you're actually out there, on the court, dividing them into groups, each one is supposed to do their part… like, each student has to come up with eight movements. So, if I clap here, I have to clap there too; if I sway twice to the right, then I have to do it to the left too… and each of these counts as a separate movement. And then you look—how many girls are there? More than ten! And you think: 'Is this really that hard?' But then you see it's just not working… That's when it comes back to this: I feel like I have to step in, to try to make something happen. So, I went over and gave them a few ideas… and then something finally came out of it. […] This class has been with me for about three years now… so I can tell when a question is asked just for fun, and when it's because they really don't understand. I can tell when they're doing something just because they have to, or when they're genuinely interested—and I try to explain that to them. I tell them, 'Look folks, you're here to learn.' (P2)

The participant's perceived need to intervene in order to support the development of the activity reveals a range of professional dispositions—such as the importance placed on content delivery, commitment to student learning, and concern for student motivation. The sense of being "obliged" to intervene illustrates how the manifestation of *habitus*, that is, the "incorporated social"[9], operates through ongoing monitoring of classroom dynamics and potential adjustments in procedures as contextual interpretation demands. This requires the ability to read and make sense of the teaching environment, along with a readiness to adapt.

According to Wittorski[17], Analysis of Practice (AP) tools tend to operate by fostering reflection *on* and *through* action. In this regard, such strategies initially aim to transform practices into individual knowledge. However, through collective exchanges—whether facilitated by researchers or specialists or not—it becomes possible to generate shared and collaborative forms of professional knowledge, pointing toward a promising path for professionalization[17].

Within this logic, the variation of activity proposals also emerged as a strategy aimed at transforming practices, often enacted during teaching itself. Participant P1 described how she adjusts her approach when she is able to complete the required content. In these situations, she reported feeling greater freedom to create activities with students, fostering an interactive dynamic and diversified teaching strategies:

> It's in the circle that I explain everything… I always do that… I break the content down. Sometimes I work with games and play activities—usually when I run into situations like… oh, I finished my content earlier than planned… I got ahead. So, if I

> get ahead, I stop and work with games and play activities, and I problematize them. For example, if we played a game of tag… we're going to learn another version of tag. Then I build on those games—I create variations. And I ask them to give me suggestions: how can we make tag different? So, when I use the circle, it's because I want to talk with them. When we do games and play activities, I leave the class a bit more open. But when I'm working with the planned content for the term—what's in my curriculum—I teach that content and talk with them about it. Because that's how my class works: I use pedagogical sequences. One lesson connects to the next. There's no point in teaching a class on combat sports and then—what? Doing dodgeball in the next one? I'd be 'burning' my lesson." (P1)

The description of this episode reveals several important aspects: on the one hand, a certain pragmatism in meeting specific curricular requirements, and on the other, a degree of procedural flexibility at particular moments. The idea of "creating games during the lesson," for instance, reflects a reflective stance that is not rigidly imposed on practice but instead depends on it to evolve—that is, the lesson itself takes shape through its own unfolding. Some teachers demonstrated greater procedural flexibility, while others showed more rigidity in adhering to plans and routines. However, these small changes and variations are a constant feature of pedagogical practice and occur continuously, even when they do not require major adjustments in planning. As such, they can be understood as part of the *modus operandi* manifested by teachers. These minor interventions and adaptations enacted by the participants reflect the internalization of social dispositions specific to the teaching field and, simultaneously, their potential transformation.

Development of experiential knowledge and 'intuition' during pedagogical practice

Another way to understand the teachers' perspectives regarding the transformation of their actions—particularly in terms of the development of professional knowledge and conduct—concerns their own interpretations of the roles they play during pedagogical practice. According to the participants, much of the process of modifying their practices is related to how they understand their roles within the professional field. In this sense, "intuition" or "feeling" may be interpreted as a pragmatic manifestation of *habitus*, one that contributes to the continuity and adaptability of teaching practices. An illustrative example was offered by participant P5, who highlighted how she tends to act when a student appears disengaged or does not actively participate in class. While observing an episode in which such a situation occurred, she explained that she tries to understand the student's physical and emotional state and seeks to adjust her own actions accordingly, in order to respond to that kind of unforeseen circumstance:

> I think you can't expose them, you know… sometimes the child ends up alone and can't do things on their own. If they've fallen behind, if they're downcast, feeling sad—nothing works better than showing some affection, so they feel like participating… and then they do. So sometimes I say—jokingly—that a good teacher can make a student 'fly,' but one bad move from a teacher can destroy a child's interest… it can create trauma, you know? That's why I always try to do better. I don't manage all the time, but in practice, over the years, I've improved a lot in terms of being attentive to them, to the ones who are left out… sometimes it slips by… so it's always like that. I think it's a bit of a 'feeling' thing (P5).

This participant referred to her concern with students' active participation using the term "feeling," invoking an intuitive perspective on discerning the most appropriate way to act within a given context. As Tardif[4] points out, many teachers are unable to verbalize the experiential knowledge or the ways in which they understand their own practices, often using expressions such as "feeling" or "improvisation" to describe them. Wittorski[17] refers to these as "tricks of

the trade." This feeling can be understood as the capacity to analyze a situation and respond with an action that, although not easily verbalized, would not have occurred without reflective engagement. Thus, experiential knowledge is closely linked to the structuring of *habitus*, in such a way that recognizing reflective practice may lead to either innovation or the reproduction of pedagogical routines. A similar perspective was presented by participant P4 while analyzing a negotiation process with students during an activity:

> Yeah, sure, but sometimes you just can't do it! Sometimes you can't... Sometimes you end up in a conflict with a student—and by conflict I mean saying something like, 'Look, if you don't do it, everyone's going back inside'... and then everyone *does* go back inside because the task didn't get done, right? So, you know... there are lots of tools and ways to handle things, but we don't always get it right—and not everything we try goes wrong either. Sometimes you can make up for it, like I said: 'Now you'll do this, and then you get to play ball' (P4).

The ability to negotiate with students, in this context, emerges as another form of *habitus* manifestation in teaching practice—in other words, it may be considered a component of the teacher's *modus operandi*. Negotiation involves engaging in various forms of bargaining so that, at least partially, the teacher's intended actions can be carried out with students' acceptance and engagement. Interests and rewards (such as offering free time at the end of a lesson) are commonly used strategies in this regard.

Based on the procedures employed in this study, we argue that analyzing reflective processes aimed at transforming pedagogical practice is essential for teachers to become aware of their own actions. This awareness enables them to reconsider the underlying structures that shape their behavior and potentially reconfigure them into ways of acting that are more consistent with their personal perceptions and more suitable to the contexts in which they intervene. In this sense, the very act of intending to act differently may lead to a reconfiguration of perspectives. The transformation of practice begins with reflection and analysis that lead teachers to recognize the existence of alternative ways of acting. As a foundational premise, we contend that without the perception that alternative actions are possible, there is little chance for deep and effective transformation of professional practice.

According to Clot[31,32], part of the worker's reflection is directly related to the task at hand. This understanding encompasses the prescribed work—what was planned—the actual activity—that is, what was actually done—and the "real of the activity," referring to what was left undone or could have been done differently, as well as the reasons why it was not carried out. This last dimension involves the realm of subjectivity: intentions, goals, frustrations—in short, all the representations of practices that, for various reasons, could not be realized.

The creation of stratagems and the search for ways to reinvent oneself throughout pedagogical practice

The second category encompassed participants' reflections concerning the development of *stratagems*—that is, strategies of varying durability aimed at addressing problems and contingencies arising from pedagogical practice. It also highlighted creative approaches adopted by teachers, including efforts to innovate their teaching and reinvent themselves within this context.

Creating and developing stratagems as a way of consolidating the modus operandi *of pedagogical practice*

The act of providing explanations to students as a way of modifying pedagogical practice was not the only strategic approach reported by participants. Another form of action concerned how teachers presented the work they carried out. Participant P6 stated that

explaining activities to parents and guardians, beyond serving as a justification of her work, also helps to legitimize Physical Education within the broader professional field in the eyes of these collaborators. This action is driven by the intention to transform pre-established practices, as illustrated in the following analysis:

> I don't like to 'break up' the lessons. When I do that—well, I have students in fourth grade now, and we're working with paddles… and they came up with a manipulation game… and they remembered a class we did back in second grade: 'Oh teacher, we worked on this before the holidays!' So, they remember… When I go to parent-teacher meetings, I walk into the room and write all the content on the board beforehand—first term: this, second term: that, third: this, fourth: that! And I bring it up—I explain that this is what I'm working on now, and I talk about everything we worked on last year too… So, the parents are already used to it. Since they've seen that I'm actually teaching, that there's content, there's planning—they support me. So, I bring them in—I bring the parents to help me (P6).

This process of transforming professional actions moves between more assertive perspectives and those grounded in a sense of conformity and awareness of the limitations imposed by the social realities that constrain pedagogical practices. As such, according to participant P4, there exists a paradoxical perspective regarding the possibility of altering certain elements of one's teaching. In his words:

> There are some things that are really wrong in the school system… I think the government and the universities are doing their part—which is to motivate, to push things forward, to demand more… and sometimes I even think they're not doing enough. When people say, 'the teacher taught, but the student didn't learn'—that's a false statement. If the student didn't learn, it means they weren't actually taught… it's a half-truth. Now they're talking about changing things, like encouraging high school students to pursue areas that interest them more—I support that. And just like that, I also believe Physical Education should be for everyone, but from a different perspective… I'm aware that, within my work, I fulfill my responsibilities, but I also know that it won't reach many students—because of interest, because of maturity… for different reasons (P4).

According to Franco[33], teaching practice operates along a spectrum ranging from transformative perspectives to the reinforcement and crystallization of beliefs and ways of acting that hinder the reflective process. This paradoxical understanding relates to the very polysemy of the term "practice," as well as to the different approaches used to analyze actions within the field of education. In this more restricted view, one may understand that "teachers do not always enact in practice what they think, say, or theorize. In other words, mechanized, non-reflective practice seems to function as a 'shield' that prevents the new from destabilizing the 'minimal doing' the teacher manages to achieve"[34,115].

According to Franco[33], this gap between teachers' representations, beliefs, and rationalization processes and their actual modes of action is partially due to longstanding challenges within educational research itself. Educational theories, in many cases, fail to capture the implicit meanings embedded in everyday practice, and therefore, do not always manage to inform or enrich the *know-how* of teachers. Consequently, there is a persistent disconnect in using theoretical frameworks as meaningful support for practice, as teachers often struggle to appropriate and internalize such theoretical contributions[34].

The data from this study suggest that teachers, as a rule, develop *stratagems*—that is, relatively stable and lasting ways of organizing their professional actions in the day-to-day of pedagogical practice. A *stratagem* relates to strategies consolidated through the teachers' *habitus*, reflecting both a sense of conformity and a desire to modify their pedagogical practices.

In this framework, the routinization of practices and behaviors can lead to a degree of automatization—exacerbated in contexts that are not conducive to reflection, marked by heavy workloads, limited planning time, and other structural constraints. This, in turn, may result in the reproduction of actions to such an extent that even the practitioners themselves may no longer perceive them. In Bourdieu's terms [10,11], this is the process of *habitus* internalization, which generates the automatization of practices and behaviors. Figuratively speaking, it can be said that, in many moments of their work, teachers end up switching on "autopilot."

As Bourdieu[10] states:

> As a generative principle durably augmented by regulated improvisations, *habitus*, as practical sense, operates the reactivation of the meaning objectified in institutions: it is the product of inculcation and appropriation work necessary for those products of collective history—which are objective structures—to reproduce themselves in the form of durable and attuned dispositions, which are the condition for their functioning. *Habitus* [...] is what allows one to inhabit institutions, to appropriate them in practice, and thus keep them active, alive, in force—to continuously rescue them from the state of a dead letter, of a dead language—reviving the meaning deposited within them, but doing so through the revisions and transformations that are both the counterpart and the condition of that reactivation[10;94-95].

In this sense, strategies such as those related to Analysis of Practices (AP) enable a gradual recovery of deeper understandings of teaching practice. This analytical process allows for the identification and interpretation of actions and procedures carried out by teachers that are often not perceived by them. Such awareness is essential to fostering reflection on these actions, which may lead either to the transformation or to the reinforcement of existing dispositions.

To transform the *modus operandi*, in this perspective, means to comprehend it in its manifestation—imbuing it with meaning and intention as a basis for its re-signification. In short, the reflective process, which may emerge from various approaches, has the potential to reveal implicit patterns and to catalyze significant changes in the *modus operandi*.

The pursuit of innovation and diversification of practices as a form of self-reinvention

A final set of data addressed how teachers conceive possibilities for modifying and diversifying their own practice. Throughout the process of analyzing their actions, teachers become capable of recognizing alternative ways of acting and, as a result, are able to articulate these possibilities as part of the development of their professional work.

One such approach relates to opportunities for innovation in teaching practices. Within this perspective, innovative initiatives represent moments of partial rupture with an already consolidated *habitus*, allowing teachers, to some extent, to reinvent their practices. An illustrative example was provided by participant P6, who described how she seeks to innovate her content in order to engage with students' interests and increase their motivation.

> And I try to tap into the students' interests… I have a student who says, 'Teacher, I really wish we could play *bets* [a Brazilian bat-and-ball game]'… and then I start thinking, 'How am I going to teach *bets*?'… So, I came up with an idea: I'll create a project for the term called 'Bats and Rackets.' That way, I can include *bets*, but also cricket and baseball. 'Oh, but I don't have the equipment for that'… So, I ask the parents—I ask for broomsticks and leave them at school. Then I ask the coordinator, the principal, or I look for partnerships… It's not something that happens overnight—you have to go after it; you have to earn it (P6).

The focus on innovation also emerged in the account of participant P3, who described her efforts to make content more attractive and engaging. In explaining her use of pedagogical

proposals that incorporate videos, she noted: *"Oh, it's really just to try and diversify the way I work with concepts in a more playful, more stimulating way for them. Sometimes I try to do that, but ideas don't always come up"* (P3).

In this same perspective, participant P6 also described another innovative proposal involving the use of technological resources—specifically, the integration of video content:

> I do this using video, so they can see… for example, when teaching capoeira, after we've practiced it, I created short videos—I recorded elderly people playing capoeira, children doing capoeira, and people with disabilities practicing capoeira, and they watched them. Then I asked, 'Who here can play capoeira?' and they said, 'Everyone!' Then I introduced discussions about Africa and Black history… because they need to know that too. There were students who didn't know about slavery, and there were students who saw what happened to Black people and cried… and I explained that today it can't happen anymore. That lesson turned into a conversation about human rights […] I run one project each term… I don't do more than that because it would interfere with the rest of the curriculum (P6).

Based on the analyses, we can conclude that although numerous challenges arise from the constraints embedded in school-based professional practice, participants described and analyzed different ways of innovating and transforming their actions. These were interpreted through the observed episodes and shaped by the *real of the activity* present in their reflections[30,31]. In this sense, while not all actions could be implemented—many remaining within the realm of participants' ideals—various forms of pedagogical transformation became visible through the Analysis of Practice (AP) strategy.

Within this dynamic, we observe that pedagogical practice gives rise to a series of tensions between the reproduction of consolidated dispositions and the search for more diverse forms and procedures of action. According to the data, such behaviors constitute a dialectical process inherent to professional development.

More broadly, Perrenoud[13,34] emphasizes the importance of reflexive practice in the field of teacher education. Therefore, reflective processes must also be integrated into teachers' everyday professional lives throughout their journey of Professional Development, allowing them to comprehend their professional *habitus* and to engage in transformative processes when necessary.

Still drawing on Perrenoud[13], reflexive practice should allow teachers to become aware of their internal schemas—that is, their *habitus*—and, from there, seek to develop them in connection with their everyday teaching practice. For the author, this process requires mechanisms that enable teachers to understand their own actions in light of the concrete work performed within the educational process. He further asserts:

> In general, a professional's reflection on their action schemas originates from concrete cases; however, the goal is to go beyond these cases to identify the stable dispositions that explain how they arrived at their current approach […]. Reflection on one or several singular actions—though sharing the same structure—can, perhaps unpredictably, lead to an awareness of a stable, and sometimes rigid, way of being, thinking, and acting that ultimately works against the actor's own interests[13;40].

Elucidating the *modus operandi* of teachers requires a broad and in-depth set of perspectives aimed at systematizing reflective processes. Such processes may stem from wider frameworks—linked to students' sociocultural realities, social and political issues, organizational structures, among others. However, a substantial part of reflective practice emerges from the everyday— from the routine of professional activity.

In this construct, analyzing and understanding one's own work actions can serve as a key element in mobilizing knowledge that enables the transformation of practice—even though such practices should never be viewed in isolation from the broader contexts that constrain and challenge teaching within the school setting.

Conclusion

The objective of this study was to investigate the development of reflective processes among Physical Education teachers as a means to identify and transform practices and knowledge developed in and through their professional work. To this end, a set of data collection procedures was employed, including classroom observations, lesson recordings, episode selection, the application of the Simple Self-Confrontation technique with each participant, and subsequent data analysis based on this process.

The data revealed numerous elements embedded within pedagogical practices that, in light of the theoretical framework, comprise the *modus operandi* of the Physical Education teachers analyzed. More specifically, the analyses showed that part of the reflective process occurs before and after action, while another part emerges during the unfolding of practice itself—through real-time reflection and small adjustments. It was also possible to identify manifestations of experiential knowledge, expressed through terms such as "feeling" and "improvisational flair" (*to have a lot of tact*). From this perspective, it can be inferred that teachers gradually develop *stratagems* to distinguish what "works" and what "doesn't," what is "effective" and what is "ineffective," and so on. Part of this process involves the pursuit of innovation and diversification of pedagogical practices, while another part involves the routinization and naturalization of procedures that gradually become crystallized.

The AP strategy employed allowed teachers to analyze their own practice. This self-reflective process often triggered a sense of estrangement. Teachers frequently expressed surprise at their own voices (tone, use of slang, etc.), as well as at their gestures, expressions, and bodily postures (bodily *hexis*, in Bourdieu's terms), among others. This suggests that self-analysis is a markedly different and impactful experience compared to other reflective procedures.

Nevertheless, this strategy also presents some challenges, such as the significant volume of procedures required—recording classes, conducting observations, transcribing dialogues, and so on. Hybrid approaches involving shorter video clips and more focused analyses may offer promising avenues for enhancing reflective practice.

It is also important to emphasize that these findings cannot be generalized beyond the specific contexts investigated. Instead, the aim was to identify elements and procedures that may be adopted both in educational research and as formative tools. Making the knowledge embedded in each teacher's reality visible and public may contribute to a better understanding of the *modus operandi* of pedagogical practice.

In this regard, further studies and research employing different strategies related to Analysis of Practice (AP) should be encouraged. As a body of knowledge on the school context continues to be developed, new understandings of everyday teaching realities can emerge.

While AP does not aim to "solve" the many challenges inherent in pedagogical practice—since these are often tied to broader social and political structures—it can contribute to deepening our understanding of teaching and the knowledge actually mobilized in professional practice. Given the complex and *sui generis* nature of teaching, such understandings may support the mobilization of knowledge, the processes of teacher

education and professional development, and ultimately, the professionalization of teaching itself.

References

1. Rufino LGB. Entre a escola e a universidade: análise do processo de fundamentação e sistematização da epistemologia da prática profissional de professores de Educação Física [tese]. Rio Claro: Universidade Estadual Paulista; 2018. 795f.
2. Tardif M, Lessard C. O trabalho docente: elementos para uma teoria da docência como profissão de interações humanas. Petrópolis: Vozes; 2014.
3. Gariglio JA. Fazeres e saberes pedagógicos de professores de Educação Física. Ijuí: Unijuí; 2013.
4. Tardif M. Saberes docentes e formação profissional. 13. ed. Petrópolis: Vozes; 2012.
5. Borges CMF. O professor de educação básica e seus saberes profissionais. Araraquara: JM Editora; 2004.
6. Perrenoud P. Ensinar: agir na urgência, decidir na incerteza. Porto Alegre: Artmed; 2001.
7. Shulman L. The wisdom of practice: managing complexity in medicine and teaching. In: Berliner DC, Rosenshine BV, organizadores. Talks to teachers: a festschrift for N. L. Gage. New York: Random House; 1987. p. 369–87.
8. Gauthier C, et al. Por uma teoria da pedagogia: pesquisas contemporâneas sobre o saber docente. Ijuí: Unijuí; 2013.
9. Schön DA. Educando o profissional reflexivo: um novo design para o ensino e a aprendizagem. Porto Alegre: Artmed; 2000.
10. Bourdieu P. O senso prático. Petrópolis: Vozes; 2009.
11. Bourdieu P. Esboço de uma teoria da prática. In: Ortiz R, organizador. Pierre Bourdieu: sociologia. São Paulo: Ática; 1983.
12. Bourdieu P. A distinção: crítica social do julgamento. São Paulo: Edusp; 2007.
13. Perrenoud P. A prática reflexiva no ofício de professor: profissionalização e razão pedagógica. Porto Alegre: Artmed; 2002.
14. Costa BR, Neves RLR, Nogueira JAD. The uses of Pierre Bourdieu's theory to study body and health in the academic-scientific field of physical education. J Phys Educ. 2024;35(1):e3553. DOI: https://doi.org/10.4025/jphyseduc.v35i1.3553
15. Altet M. As competências do professor profissional: entre conhecimentos, esquemas de ação e adaptação, saber analisar. In: Perrenoud P, organizador. Formando professores profissionais: quais estratégias? Quais competências? Porto Alegre: Artmed; 2001. p. 23–35.
16. Altet M. Análise das práticas dos professores e das situações pedagógicas. Porto: Editora Porto; 2000.
17. Wittorski R. A contribuição da análise das práticas para a profissionalização dos professores. Cad Pesqui. 2014;44(154):894–911. DOI: https://doi.org/10.1590/198053143039
18. Faïta D, Vieira M. Réflexions méthodologiques sur l'autoconfrontation croisée. DELTA. 2003;19(1):123–54. DOI : https://doi.org/10.1590/S0102-44502003000100005
19. Rufino LGB, Benites LC, Souza Neto S. Análise das práticas e o processo de formação de professores de Educação Física: implicações para a fundamentação da epistemologia da prática profissional. Movimento. 2017;23(1):393–406. DOI: https://doi.org/10.22456/1982-8918.62108
20. Godoi M, Benites LC, Borges C. O uso da autoconfrontação simples e cruzada para analisar o ensino em Educação Física. Movimento. 2019;25(1):1–14. DOI: https://doi.org/10.22456/1982-8918.88272
21. Alves-Mazzotti AJ, Gewandsznadjder F. O método nas ciências naturais e sociais: pesquisa quantitativa e qualitativa. São Paulo: Pioneira; 2002.
22. Miles MB, Huberman M. Qualitative data analysis. Thousand Oaks: Sage; 1994.
23. Lüdke M, André MEDA. Pesquisa em educação: abordagens qualitativas. São Paulo: EPU; 1986.
24. Marconi MA, Lakatos EM. Técnicas de pesquisa. São Paulo: Atlas; 1982.
25. Gil AC. Métodos e técnicas de pesquisa social. 6. ed. São Paulo: Atlas; 2008.
26. Clot Y, Faïta D, Fernandez G, Scheller L. Entretiens en autoconfrontation croisée: une méthode en clinique de l'activité. Perspect Interdiscip Trav Santé. 2000;2(1):1–9. DOI: https://doi.org/10.4000/pistes.3833
27. Bardin L. Análise de conteúdo. Lisboa: LDA; 1991.
28. Hargreaves A, Fullan M. Professional capital: transforming teaching in every school. New York: Teachers College Press; 2012.
29. Cochran-Smith M, Lytle SL. Relationships of knowledge and practice: teacher learning in communities. In: Iran-Nejad A, Pearson P, organizadores. Rev Res Educ. 1999;24(1):249–305. DOI: https://doi.org/10.3102/0091732X024001249

30. Cochran-Smith M. A tale of two teachers: learning to teach over time. Kappa Delta Pi Rec. 2012;48(3):108–22. DOI: https://doi.org/10.1080/00228958.2012.707501
31. Clot Y. Trabalho e poder de agir. Belo Horizonte: Fabrecatum; 2010.
32. Clot Y. A função psicológica do trabalho. 2. ed. Petrópolis: Vozes; 2007.
33. Franco MAS. Entre a lógica da formação e a lógica das práticas: a mediação dos saberes pedagógicos. Educ Pesqui. 2008;34(1):109–26. DOI: https://doi.org/10.1590/S1517-97022008000100008
34. Perrenoud P. Práticas pedagógicas, profissão docente e formação: perspectivas sociológicas. Lisboa: Dom Quixote; 1997.

Aknowledgements: This study was carried out with the support of the Coordination for the Improvement of Higher Education Personnel – Brazil (CAPES) – Funding Code 001.

CRediT author statement

Author1: conceptualization; data curation; formal analysis; funding acquisition; investigation; methodology; project administration; resources; validation; visualization; writing – original draft; writing – review & editing.
Author2: conceptualization; data curation; methodology; validation; visualization; writing – review & editing.

ORCID

Luiz Gustavo Bonatto Rufino: https://orcid.org/0000-0003-2567-9104
Samuel de Souza Neto: https://orcid.org/0000-0002-8991-7039

Editor: Carlos Herold Junior
Received Oct 10, 2024.
Reviewed Jan 16, 2025.
Accepted Jan 25, 2025.

Corresponding author: Luiz Gustavo Bonatto Rufino, rufinolg@unicamp.br.