DOI: 10.4025/jphyseduc.v29i1.2947

Original Article

TEACHING PROFILE: ANALYSIS OF PLANNING DECISIONS OF PHYSICAL EDUCATION TRAINEE TEACHERS

PERFIL DOCENTE: ANÁLISE DAS DECISÕES DE PLANEJAMENTO DE PROFESSORES ESTAGIÁRIOS DE EDUCAÇÃO FÍSICA

Francis Natally de Almeida Anacleto[1], Carlos Alberto Serrão dos Santos Januário[2], Gustavo da Motta Silva[3], Janaína da Silva Ferreira[4] and **José Henrique[5]**

[1]Universidade Federal do Vale do São Francisco, Petrolina-PE, Brasil.
[2]Faculdade de Motricidade Humana, Lisbon, Portugal.
[3]Pontifícia Universidade Católica do Rio de Janeiro, Rio de Janeiro-RJ, Brasil.
[4]Universidade do Estado do Rio de Janeiro, Rio de Janeiro-RJ, Brasil.
[5]Universidade Federal Rural do Rio de Janeiro, Seropédica-RJ, Brasil.

RESUMO

Inicia-se o estudo com as seguintes problemáticas: Existe estabilidade nos pensamentos e decisões de planejamento dos estagiários em sequências de aulas? Ou seja, é possível dizer que existe um perfil de planejamento típico de cada estagiário?; Quais as características dos pensamentos e decisões de planejamento dos estagiários de Educação Física? O *design* metodológico é qualitativo e quantitativo, de natureza descritiva, em que os instrumentos e técnicas objetivam identificar e analisar os processos de pensamento no planejamento de ensino. A amostra é constituída por 18 estagiários de Educação Física. Para coleta de dados utilizou-se uma entrevista estruturada. Os dados foram tratados com recurso ao programa estatístico SPSS 21, mediante o *One Sample T-Test* para verificar a estabilidade das decisões e *Cluster Analysis* para identificar grupos de estagiários baseado na comunalidade das decisões de planejamento. Verificou-se a estabilidade das decisões de planejamento em relação às três entrevistas pré-aula. Os resultados possibilitaram identificar quatro perfis de professores estagiários, com características típicas e atípicas segundo a literatura referendada.
Palavras-chave: Decisões de Planejamento. Professores Estagiários. Educação Física.

ABSTRACT

This study begins with the following questions: Is there stability in the planning thoughts and decisions of trainees during sequential classes? In other words, is it possible to say that every trainee fits a typical planning profile? What are the characteristics of Physical Education trainees' planning thoughts and decisions? The methodological design is qualitative and quantitative, of descriptive nature, in which the instruments and techniques aim to identify and analyze thought processes in teaching planning. The sample is composed of 18 Physical Education trainees. For data collection, a structured interview was used. Data were processed using the SPSS 21 statistical program, and the One Sample T-Test was used to verify stability of decisions, while Cluster Analysis identified groups of trainees based on the commonality of planning decisions. Stability of planning decisions was verified during three interviews before classes. Results allowed the identification of four profiles among the trainee teachers, with typical and atypical characteristics according to the referenced literature.
Keywords: Planning Decisions. Trainee Teachers. Physical Education.

Introduction

This paper presents partial results of a longitudinal research project whose main objective was to analyze and understand how the automatization process of planning and teaching decisions is triggered at different stages of professional development, in order to learn how and when these processes automatize, becoming routines in teaching practice. Specifically, the present article investigates the nature and characteristic of thought processes for planning in Physical Education trainees.

Pedagogical Traineeship is a space of meaningful learnings in the training process of teachers. It is a formation experience structured on theoretical disciplines that compose the academic curriculum, and a training stage responsible for constructing potential routine possibilities, contributing to the future teacher's professional activity[1].

The traineeship experience presents itself as a source of knowledge for one to *learn to teach*, preparing young teachers to enter the profession. It is an opportunity for them to come into contact with the school reality and to be closer to teaching models and practices[2]. However, it is at times valued for the sharing of experiences and enrichment in terms of learning, and at times seen with feelings of indifference for its bureaucratic aspects.

Although it is understood that innovative practice is also a product of knowledge acquired in traineeship[4], addressing the didactical and pedagogical structure of Traineeship is not the focus of this study. Nevertheless, it becomes inevitable for us to understand this training stage as a *teaching and learning process* with many subjective and hidden faces in pedagogical practice, especially how the latter is organized in thought processes during planning by trainees.

We will also dedicate this space to class planning from the *Teachers' Thought and Action* perspective[5]. Investigation programs in the context of this paradigm are fundamentally concerned about finding out what reasoning processes occur in a teacher's mind during the phases of educational activity[6,7].

The internal scenario of the *Teachers' Thought and Action* paradigm comprises three basic thought categories: *planning (pre-interactive and post-interactive thoughts); interactive thoughts and decisions (decision-making during didactical-pedagogical intervention); teachers' theories and beliefs*[5]. Thought and planning decisions guide a teacher's behavior in his or her routine actions in the classroom, in addition to attributing meanings to teaching contents and contexts[8].

Studying planning thoughts and decisions of trainees allows a better understanding of the teaching and learning process, about the boundary between the way of thinking and the utilized didactical method – *what to teach/how to teach*, unveiling to the very actors of the process all multiple faces of educational action.

Therefore, when it comes to this *paradigm,* two premises can be investigated. The first one configures the teacher as a reflexive subject that makes decisions, judges, has beliefs and develops teaching-specific routines. The second one defines that a teacher's attitude and behavior are determined by his or her thought processes, judgements and decision[9]. It is within the first context of investigation that we raised the questions and developed this study.

The availability of teachers to express their own thoughts and talk about their deepest conceptions and beliefs, as well as the idea that these thoughts survive immutable over time, are points that affect the temporal validity of studies, assuming some presentism in the teachers' conceptions and perspectives, although they may change as the person or the contexts in which they have arisen evolve.

From this perspective, this area of investigation presents a lack of and a need for *longitudinal studies* that investigate the evolution of this planning thought and the teaching processes of teachers in the course of their professional career. Understanding this *professional Evolution of teachers* is extremely important when it comes to reform processes in the Education System's curricular programs.

The investigation of thought and planning processes takes places from the perspective of the cognitive psychology, in which teachers are conceived as information processors, interacting with their environment in a unique and idiosyncratic way, and poses many challenges, being an object of analysis for teaching, as planning is a privileged window to understand teaching[10].

We aimed to analyze the nature and characteristics of thought processes of Physical Education trainees during planning, having as empirical support reports provided during interviews held before classes, in order to found analyses and reflections about the existence of characteristics of planning thoughts and decisions that define a *Typical Profile* of trainees.

Thus, we intend to elucidate in this study whether there is stability in the planning thoughts and decisions of each trainee in the course of many classes; whether it is possible to notice a trainee typical profile; and the characteristics of planning thoughts and decisions of these Physical Education trainees.

First, our purpose is to understand whether there are differences in the decision-making profile of trainees. Then, the study seeks to comprehend the (in)existence of profiles that share common characteristics as to the planning thoughts and decisions of these trainees.

To think about the pedagogical practice of trainees directly means to consider the root of the question, which is also linked to the *professionalization* process developed during *Pedagogical Traineeship.*

Methods

As for this study's design, we chose to use the two methodological approaches employed by research in the fields of Educational and Social Sciences – qualitative and quantitative. Thus, we are in line with the literature about the use of a *methodological hybridism* as a means to respond to the complexity of problems presented by investigations in these areas of knowledge, to the detriment of the paradigmatic perspective that promotes superiority, disjunction and incompatibility between different methods[8].

The sample is made up of 18 Physical Education teachers who, during traineeship, were attending a private Higher Education Institution located in the state of Minas Gerais and teaching 54 classes, 3 classes each. The Course Coordinator was requested to sign a Term of Acceptance authorizing the conduction of the study inside the institution. After the participants were made aware of the research objective, they were asked to sign an Informed Consent Form. The research was approved by the ethics committee of the Rural Federal University of Rio de Janeiro under COMEP No 23083.006714/2015-75 and legal opinion 655/2015.

For data collection, a structure interview was applied, using the Pre-Class Interview Script[6], already validated. Initially, it was necessary to verify the script's validity in the Brazilian reality, since it was first structured for Portugal's reality. Coding reliability was ensured as per the inter- and intra-rater method, by percentage of agreements and disagreements, based on Tuckwell's formula[6].

The interviews were recorded and then transcribed and analyzed. We adopted content analysis[11] to code categories referring to thoughts and decision processes present in the trainees' planning, using six analysis systems: Didactical Thoughts and Decisions, Student's Diagnosis, Teaching Differentiation, Practical Concerns, Legitimated Decisions and Alternative Decisions[6].

Subsequently, data were treated through the SPSS statistical program, version 21. We applied the One Sample T-Test to verify the stability of each teacher's data in the 3 classes and used descriptive statistics and Cluster Analysis, an automatic classification method, in order to identify homogeneous groups of trainees with common characteristics of planning thoughts and decisions.

Results

First, it was intended to verify, in each trainee, the stability of collected information – *18 trainees / three non-consecutive classes / 54 interviews*, using the One Sample T-Test statistics. This fact allowed us to consider more properly each trainee as the reference value

rather than class-by-class values.

Among the 23 planning variables coded from the trainees' thought characteristics, only two categories – *Decisions Legitimated by Preconceptions and Practical Concerns about Oneself* – presented a value higher than $p \leq .05$. This result is similar to that found by Santos[12], based on the analysis of reports by two teachers in four consecutive classes, decoded through the Florida Performance Measurement System (FPMS)[13]. By means of Chi-Squared statistics, it was verified that in five of the eight classes decoded by the FPMS there was stability in the teachers' planning thoughts and processes.

In a study, Januário[6] analyzed results referring to stability in two classes with 22 teachers, having found that of the 29 continuous pre-interactive/planning variables, only eight did not denote stability between both classes ($p \leq .05$)

Thus, given the obtained data, it is legitimate to think that there is considerable stability in the trainees' planning thoughts and decisions, leading us to believe that this well-defined cognitive structure can be formed by teachers in their early years of professional practice.

Data treatment by Cluster Analysis allowed identifying four trainee groups (Chart 1), of which we will describe relevant characteristics that shape the profiles of their components.

Groups	Trainees
Profile 1	14, 12, 8, 16, 9, 17, 11, 15, 5, 7, 2, 6, 10
Profile 2	3, 13
Profile 3	1, 4
Profile 4	18

Chart 1. Trainee Groups
Source: The authors

This result seems natural to us, since Profile 1 fits most of the trainee teachers (75%), presenting the same characteristics and conceptions from initial training.

Table 1 gathers frequency means of didactical thoughts and decisions of Profile 1 trainees and, as a reference, the overall mean of all investigated subjects, in order to allow the observation of group characteristics in relation to the total sample. The variables presented derive from the six abovementioned analysis systems.

Table 1. Didactical Thoughts and Decisions of Profile 1

Pre-Interactive Variables	Mean Profile 1	Mean Overall
Total Frequency of Didactical Thoughts	39.71	42.76
Content Didactical Thought	10.53	11.50
Management Didactical Thought	10.48	11.25
Climate Didactical Thought	3.82	4.25
Instruction Didactical Thought	2.86	3.21
Total Frequency of Diagnosis	10.73	11.90
Specific Diagnosis	5.04	5.63
Generic Diagnosis	5.80	6.56
Academic Diagnosis	3.46	4.23
Behavior Diagnosis	7.28	7.90
Decisions Legitimated by Experience	0.71	1.31
Decisions Legitimated by Preconceptions	0.42	0.80
Alternative Decisions	2.93	3.51
Practical Concerns about the Activity	1.75	1.65

Source: The authors

With these data, it is legitimate to think that Profile 1 is typical of beginners, presenting less complex thought characteristics during pedagogical action planning, being proper of a *Teaching Undifferentiation* attitude[7,8]. *Teaching Differentiation*, be it about objectives, exercise situations or strategies, requires experience and knowledge to deal with individual differences of students[6,8].

In general, they present low frequency of *Alternative Decisions*, indicating a lack of didactical options to anticipate possible issues in teaching and learning, limited capacity to deal with contingency factors and less plasticity in the planning process[6]. Consequently, they denote reduced readjustment ability at pedagogical intervention, which was expected, as they are going through a training process.

Low frequency was also found for *Decisions Legitimated by Preconceptions*, that is, these trainees show few educational conceptions of their own about the teaching of the discipline or in relation to other contents. For being still in training, they do not possess well-legitimated theoretical, personal references, thus resorting to conceptions provided by initial training[7].

As for the *Student's Diagnosis* dimension, there was low frequency of *Academic* and *Specific* nature, which evidences little knowledge related to the students' skills and needs referring to learning in Physical Education. The few diagnoses carried out are about difficulties in learning activities, about the students' successes and failures, and about characteristics of emotional and personal nature, which could influence the climate during classes. Concerning *Behavior and Generic Diagnosis*, they present significant values in general compared to the previous dimension, being excessively concerned with the students' behavior and privileging socialization processes to the detriment of specific academic learnings.

Limitations in providing diagnoses that are more in tune with the students' needs and skills consequently influences the few planning decisions related to the *organization and management time of the activity.*

This architecture of thoughts corroborates with the literature, because trainees tend to be more concerned about aspects of behavioral nature and participation in activities, making diagnosis more generalist and less specific in relation to students individually and as a whole[7,8]. The quality of planning is defined by the frequency of *Alternative Decisions*, some categories of *Didactical Thoughts*, *Practical Concerns*, as well as attitude of *Teaching Differentiation* and *Decisions Legitimated by Experience*[6].

Another common and important characteristic of these trainees' profile refers to *Practical Concerns about the Activity*, in which they evidence concerns about the teaching activity, whether related to the discipline itself or student participation. Lack of ability to handle and manage classes causes the trainees' focus of attention to be keeping students active and busy in order to avoid annoyances or create control problems during teaching development[7,8].

In short, Profile 1 is the *typical trainee*, both for accounting for 75% of this study's sample and due to the fact that its characteristics are corroborated by the literature describing beginner and/or trainee teachers. They present a pedagogical attitude of *Teaching Undifferentiation*, difficulties in anticipating contingency factors – low frequency of *Alternative Decisions* –, scarce theoretical knowledge of their own, which is proper of teachers in initial training, and limited ability to diagnose students, which reduces chances of attention to their needs. Consequently, these factors reflect a weak performance related to class management and control[6].

The ability to come up with a planning that meets the needs and skills of students solidifies with time, that is, with teaching practice. It actually happens when the teacher

acquires a background of experiences that will shape the practical, theoretical repertoire necessary to legitimize his or her decisions, later being automatized in the form of *thought routines* in the planning process. This conjecture reinforces the values of experiences in the real teaching environment during initial training and by means of supervised traineeship as a way of aggregating elements that will result in better planning and teaching capabilities and in harmony between these phases of the educational process.

Relatively to Profile 2, the nature and expression of didactical thoughts and decisions in the different categories evidence that the trainees that make up this group structure more pedagogically complex didactical scenarios, with significant density of planning thoughts and decisions, as can be seen in Table 2.

Table 2. Didactical Thoughts and Decisions of Profile 2

Pre-Interactive Variables	Mean Trainee 3	Mean Trainee 13	Mean Overall
Teaching Differentiation	2.67	1.67	1.55
Frequency of Didactical Thoughts	68.33	77.67	42.76
Content Didactical Thought	16.33	28.00	11.50
Management Didactical Thought	17.00	18.67	11.25
Climate Didactical Thought	7.00	10.33	4.25
Strategy Didactical Thought	8.00	5.67	3.33
Instruction Didactical Thought	6.00	3.67	3.21
Decisions Legitimated by Experience	1.67	0.33	1.31
Decisions Legitimated by Preconceptions	3.33	1.00	0.80
Alternative Decisions	6.33	10.33	3.51

Source: The authors

According to the literature, the thought categories that best identify thinking teachers are: Didactical Thoughts in almost all modalities, Decisions Legitimated by Experience and Preconceptions, and Teaching Differentiation, showing better management and control of the activity[6,8].

Regardless of being trainees, they reveal a teaching differentiation profile and this fact is corroborated in the literature[6] by linking the differentiating attitude of teaching to the highest frequency of didactical thoughts and decisions. Face its complexity, the differentiating attitude taken on by the teacher articulates with a greater demand of thoughts and decisions in other categories, as it is the case of didactical thoughts (in all variables), instruction, preconceptions and alternative decisions.

The complexity of planning thoughts and decisions is expressed in the differentiation quality of didactical options and in diagnosis, which are proper of teachers with some professional maturity[3].

The components of this group present high frequency of *Alternative Decisions*, a differentiating characteristic in relation to those trainees in the other groups; they predict contingency factors, arming themselves with strategies to control and manage the activity. Prediction of alternatives potentially boosts the teacher's action ability and thus contributes to pedagogical efficacy[2,6].

Another relevant characteristic refers to the frequencies of categories *Decisions Legitimated by Preconceptions and by Experience,* in which Trainee 3 presented higher frequencies in relation to Trainee 13. This pre-interactive attitude is justified by the journey of Trainee 3, who, during initial training, achieved excellent academic performance, building a rich theoretical foundation and, consequently, a complex and differentiating planning ability compared to the other trainees in the study.

Trainee 13 is over 35 years old and, despite never having taught before the Supervised

Traineeship, presented significant frequencies of *Alternative Decisions, and Content, Management and Climate Didactical Thoughts*. A profile focused on control and management of activities, showing a vast repertoire of didactical propositions to deal with the unpredictability of classes. This characteristic is justified by his personal maturity and sharp sense of responsibility for his students' education.

The intention is not to discern these trainees' thought characteristics, but to explain the fact that a well-founded theoretical framework in initial training and a Curricular Traineeship project that brings undergraduate students closer to the real world of professionalization can overcome implicit personal beliefs of teachers who hold on to their own experiences in life and as students in elementary school.

The frequency of *Didactical Thoughts* is associated with *personal experiences*, which condition the structuration of *one's theoretical references*, with an attitude of *teaching differentiation* and greater plasticity in pedagogical action. These characteristics are indicators of a quantity and quality coherence of previous didactical thoughts[14,15].

In summary, Profile 2 revealed characteristics of planning thoughts and decisions that define experienced teachers. They present more previous didactical thoughts, providing better teaching conditions. In planning, they show an attitude of differentiation – coming from their concerns about the students' learning and their own personal and academic experiences, attributing constructs that favor a positive learning climate, in addition to possessing alternatives for a better management and organization of time and of the class's context.

The results in Table 3 elucidate that the trainees that make up Profile 3 present high frequency of *Decisions Legitimated by Experience*, a behavior explained by them justifying their decisions based on their professional experiences.

Table 3. Didactical Thoughts and Decisions of Profile 3

Pre-Interactive Variables	Mean Trainee 1	Mean Trainee 4	Mean Overall
Decisions Legitimated by Experience	7.00	6.67	1.31
Total Frequency of Diagnosis	19.33	25.00	11.9
Specific Diagnosis	12.33	9.67	5.63
Generic Diagnosis	7.00	15.33	6.56
Academic Diagnosis	11.67	11.00	4.23
Behavior Diagnosis	7.67	14.00	7.90
Teaching Differentiation	1.00	1.00	1.55

Source: The authors

In fact, although both are trainees, they are older than 35, have teaching experience prior to entry in Teaching studies, and are attending the last semester of initial training for professional certification. This situation gives them greater security and autonomy in relation to the other trainees during teaching planning. Some studies describe socializing influences that are translated into images of the profession and pedagogical practice models internalized by trainees in previous academic experiences[15], attributing meanings to their planning thoughts and decisions based on *systems of values* represented by their implicit theories, beliefs and personal conceptions[14.]

Profile 3 was characterized by a higher frequency of diagnosis in relation to the other trainees. Face the range of previous professional experiences, they easily diagnose the students' most common traits, referencing physical, motor, emotional, social and cognitive aspects relative to development and learning, revealing an ability to predict difficulties face learning tasks. This diagnostic ability grants them a better understanding of students, allowing the structuration of teaching and learning situations that meet the students' real needs and

skills[6].

Trainee 4 presents significant frequency in categories *Behavior* and *Generic*, which are of a more simplistic nature, referring to aspects associated with participation and behavior of students individually and as a whole. He possesses more diagnoses referring to students' characteristics for having completed consecutively all phases of Pedagogical Traineeship at the same school.

Trainee 1 presents high frequencies in the *Specific* and *Academic* categories because he developed Pedagogical Traineeship at a Special Education school, which requires a more specific knowledge about children with special needs, who do not present behaviors of disciplinary nature, but relative to their learning limitations (cognitive, emotional social and motor).

Both trainees in Profile 3 manifest an attitude of *Teaching Undifferentiation*, contrasting with the literature referring that teachers with professional experience are more teaching differentiators[8]. However, although they denote personal maturity as trainees, while pedagogical interaction with students sharpens their diagnostic sense, it is a fact that professional experiences without due theoretical conceptualization of educational foundations, to which they have access in initial training, instigates in trainees the overvaluation of tactical knowledge acquired in free teaching practice (unsupervised), leading them to disregard the theorical, pedagogical principles of an education founded to provide possibilities of learning and access to knowledge for all students in a democratic way. Therefore, the differentiating profile would be related to an exacerbated valuation of practice without proper reflection and articulation with the theoretical foundations of education.

In short, these teachers, as trainees, frequently resorted to their professional memory to make planning decisions and presented a diagnosing profile, which is justified by experiences and personal maturity derived from their professional journeys before entry in Physical Education initial training. This experience becomes the basis for *pedagogical conceptions and personal beliefs* and start to be part of their planning and teaching routines resulting from their teaching experience.

Finally, Profile 4 denotes atypical trainee characteristics because, as Table 4 displays, it presents very low means in all categories.

Table 4. Didactical Thoughts and Decisions of Profile 4

Pre-Interactive Variables	Mean Trainee 18	Mean Overall
Frequency of Didactical Thoughts	16.00	42.76
Content Didactical Thought	5.00	11.50
Management Didactical Thought	2.67	11.25
Strategy Didactical Thought	1.00	3.33
Instruction Didactical Thought	0.33	3.21
Frequency of Diagnosis	5.00	11.90
Specific Diagnosis	1.00	5.63
Generic Diagnosis	4.00	6.56
Academic Diagnosis	0.00	4.23
Behavior Diagnosis	5.00	7.90
Decisions Legitimated by Preconceptions	0.00	0.80
Alternative Decisions	1.33	3.51

Source: The authors

A simplistic and uncommitted didactical thought process is typical of these trainees' profile. They have a limited capacity to deal with the diversity of the teaching-learning context. At first, they show lack of experience face a scarce legitimation system, little

plasticity in pedagogical action – *Alternative Decisions* –, revealing difficulties in dealing with contingencies of the learning process. Moreover, the low frequency of diagnoses and didactical thoughts leads one to believe in some inattention or lack of commitment to student learning.

Insufficient investment or lack of competence in planning, reflected on the little mobilization of didactical thoughts and decisions, indicates little capacity to anticipate the context and pedagogical interactions, in addition to promoting uncritically the reproduction of teaching experiences and models in which one has been socialized, whether in academic formation, or during his or her experience as a student[3].

Considering Pedagogical Traineeship as a space for construction of meaningful learnings in the training of teachers, Profile 4 can be taken as indifferent to this curricular activity, as it does not show a concern about adopting a committed and responsible academic attitude, proper of the future teacher's role.

Conclusions

This research allowed verifying stability in processes of didactical planning thoughts and decisions within the set of classes taught by these Physical Education trainees. The evidence reveals that these experiences can become long-lasting to the point of being incorporated by teachers in the beginning of their teaching career. For this reason, when it comes to Pedagogical Traineeship as a component of initial training, this architecture needs to be dully oriented and constituted so as to provide beginner teachers with the conditions necessary for them to start and develop their profession. This perspective allows the construction of a theoretical and practical repertoire that will be automatized with teaching experience, becoming planning and teaching routines.

The identifying profiles in this research comprise trainees that found their Pre-interactive constructions on initial training; on personal experiences, supported by a professional memory image (when they have opportunities before entry in an undergraduate course); or even on the reproduction of what they believe teaching is, based on their primary socialization experiences. The fact of different planning profiles being identified, among more and less effective and/or complex ones, allows understanding that trainees develop a variety of learnings derived from supervised traineeship experiences according to their maturity and personal experiences, previous knowledge accumulated, and greater or lesser interests in and valuation of these experiences. However, the identification of typical and advanced trainee profiles sheds light on possibilities for development and enhancement of planning capabilities during initial training, because traineeship works as a quality-promoting activity in the formation of teachers by boosting the articulation between theory and practice, in order to form reflexive individuals who are aware of their responsibilities with the democratization of learning possibilities for students.

Although planning is only part of the educational process, competence in its development allows stabilization of scenarios and decisions, better utilization of analysis and decision processes and, therefore, reduced unpredictability in teaching and learning. Experiences in school environment bring trainees closer to sensations and feelings experienced by teachers in the real teaching context, leading us to conceive it as an area of knowledge production. With respect to teaching planning, the practice and development of its conception allow mitigating uncertainties and qualifying the pedagogical practice of teaching students and teachers, freeing them from constraints that compromise their performance and professional development.

References

1. Lessard C. A universidade e a formação profissional dos docentes: novos questionamentos. Educ Soc 2006; (27)94: 201-227.
2. Neira MG. Desvelando Franknsteins: intepretações dos currículos de licenciatura em Educação Física. Rev Mack Ed Fís Esp 2010;(9)1:55-59.
3. Sanches, MFC, Jacinto M. Investigação sobre o pensamento dos professores: Multidimensionalidade, contributos e implicações. Rev Soc Port Cienc Educ 2004;(3)3:131-233.
4. Silva M, Bracht V. Na pista de práticas e professores inovadores na Educação Física escolar. Rev Kinesis 2012;(30)1:80-94.
5. Clark C, Peterson P. Teachers' thought processes. In: Wittrock M, editor. Handbook of Research on Teaching. 3rd ed. New York: Macmillan Publishing Company; 1986, p. 255-296.
6. Januário C. Do pensamento do professor à sala de aula. Coimbra: Livraria Almedina; 1996.
7. Anacleto F. O perfil decisional pré-interativo de professores de educação física nos primeiros anos de desenvolvimento profissional: Um estudo comparativo longitudinal [Tese de Doutorado em Ciências da Educação]. Lisboa: Universidade Técnica de Lisboa; 2013.
8. Henrique J. Processos mediadores do professor e do aluno: Uma abordagem quali-quantitativa do pensamento do professor, da interação pedagógica e das percepções pessoais do aluno na disciplina de Educação Física [Tese de Doutorado em Ciências da Educação]. Lisboa: Universidade Técnica de Lisboa; 2004.
9. Shavelson R, Stern P. Research on teachers' pedagogical thoughts, judments, decisions, and behavior. Rev Educ Res 1981;(51)4:455-498.
10. Graça A. Breve roteiro da investigação empírica na pedagogia do desporto: A investigação sobre o ensino da educação física. Rev Port Cien Desp 2001;(1)1:104-113.
11. Bardin L. Análise de conteúdo. Lisboa: Edições 70; 2009.
12. Santos J. A variabilidade das decisões pré-interactivas e pós-interactivas no processo de planeamento [Monografia de Licenciatura em Educação Fisica]. Lisboa: Universidade Técnica de Lisboa; 1990.
13. Twardy BM, Yerg BJ. The impact of planning on inclass interactive behaviors of preservice teachers. J Teach Phys Educ 1987;(6)6:136-148.
14. Freire ES. Preparação profissional em Educação Física: uma comparação entre ingressantes e concluintes. Rev Mack Ed Fís Esp 2007;(6)2:147-154.
15. Verenguer RCG. Graduação em Educação Física: refletindo sobre a docência universitária e as disciplinas do núcleo sócio-cultural. Rev Mack Ed Fís Esp 2007;(6)2:37-53.

Received on Apr, 21, 2017.
Reviewed on Oct, 01, 2017.
Accepted on Oct, 17, 2017.

Author address: Grupo de Pesquisa em Pedagogia da Educação Física e Esporte (GPPEFE). Universidade Federal Rural do Rio de Janeiro; BR 465, Km 07 - Campo Universitário, Seropédica - RJ, CEP: 23890-000. E-mail: francisnatally@yahoo.com.br