



**STRATEGIES USED IN THE PROCESS OF TEACHING AND LEARNING:
PLANNING OF STUDENTS AND TEACHERS OF PHYSICAL EDUCATION**

AS ESTRATÉGIAS UTILIZADAS NO PROCESSO DE ENSINO E APRENDIZAGEM:
CONCEPÇÕES DE ALUNOS E PROFESSORES DE EDUCAÇÃO FÍSICA

LAS ESTRATEGIAS UTILIZADAS EN EL PROCESO DE ENSEÑANZA APRENDIZAJE:
CONCEPCIONES DE ALUMNOS Y PROFESORES DE EDUCACIÓN FÍSICA

Fábio Thomaz Melo¹

ABSTRACT: This study aims to investigate teaching and learning strategies which are more meaningful from the conceptions of students and teachers of P.E. The research was carried out by a group of 7 (seven) professors and 180 (one hundred and eight) undergraduate students from the Physical Education program. For the analytic treatment a statistic analysis was made and the data was processed and developed through Microsoft Office Excel®2016 software. The most significant strategies for undergraduate and faculty are the diversified classes (theory and practice), and the teaching strategies which are mostly used by professors of the institution for students are the theoretical classes, and for professors, practical classes.

KEYWORDS: Learning strategies. Teachers. Students.

RESUMO: O presente estudo tem como objetivo “investigar as estratégias de ensino-aprendizagem mais significativas a partir das concepções dos alunos e professores de Educação Física. A pesquisa foi constituída por um grupo de 7 (sete) professores e 180 (cento e oitenta) graduandos do curso de Bacharelado de Educação Física. Para o tratamento analítico optou-se por uma análise estatística, tendo sido os dados processados e analisados por meio do programa Microsoft Office Excel®2016. As estratégias mais significativas tanto para os graduandos, quanto para os docentes é as aulas diversificadas (teoria e prática), e as estratégias de ensino mais utilizadas pelo os professores da instituição para o público discente é a aula teórica, sendo para os docentes as aulas práticas.

PALAVRAS-CHAVE: Estratégias de aprendizagem. Professores. Discentes.

RESUMEN: El presente estudio tiene como propósito "averiguar las estrategias de enseñanza-aprendizaje más significativas a partir de las concepciones de los alumnos y profesores de Educación Física. La investigación fue organizada por un equipo de 7 (siete) profesores y 180 (ciento ochenta) graduandos de curso de Bachillerato de Educación Física. Para el tratamiento analítico se optó por un análisis estadístico, siendo los datos procesados y analizados a través del programa Microsoft Office Excel®2016. Las estrategias más significativas tanto para los graduandos, como para los docentes, son las clases diversificadas (teoría y práctica), y las estrategias de enseñanza más utilizadas por los profesores de la institución para el público discente es la clase teórica, siendo para los docentes las clases Prácticas.

PALABRAS CLAVE: Estrategias de aprendizaje. Profesores. Estudiantes.

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INTRODUCTION

According to Petrucci e Bastiston (2006), the word “strategy” was part of planning, according to History, and its objective was to develop and carry out actions directed to the wars, and, at present the concept has been broadened to the business sector. The term means “the art of applying the means and resources available in order to achieve and a specific objective” (XIMENES, 2000, p. 405). According to Ximenes (2000) the word “teach” means a group of techniques used to teach someone. However, combining the meanings of both words, one can affirm that the professor, in order to achieve a specific goal, will need to assert a particular behavior using real means and grounds resultant from methods applied to guiding (MELO; MELO, 2016).

Therefore, the use of the expression “teaching strategy” refers to “the means through which professors link the contents to the expected results” (MELO; MELO, 2016, p. 308). Hence, Anastasiou and Alves (2004) point out that the teaching strategies should be present in the didactic planning and have clear objectives for subjects involved, since the latter have foremost importance and one cannot forget that the learning process must be transparent concerning its goals.

According to Petrucci and Bastiston (2006), learning strategies are tools that may be modified and adapted every time changes are necessary. It is believed that every learning strategy has its features according to the learning process, and the professor needs to be able to identify and use them properly, based on perceptions of each learning group.

Anastasiou and Alves (2004) affirm that parting from strategies and, obviously, considering favorable circumstances to carry out a work, one can investigate or apply the means and ways to emphasize thinking. For this reason, professor awareness of student’s knowledge and self-consciousness is essential for choosing and applying effective strategy according to its way of being, acting and personal dynamics (ANASTASIOU; ALVES, 2004).

Below we will present some teaching strategies to clarify some concepts in the perspective of Anastasiou and Alves.

Negotiated expository lesson consists in exposition of content, with active participation of students, whose previous knowledge must be considered and may serve as a starting point. The professor leads students to question, interpret and discuss the object of study parting from acknowledgement and confrontation with reality. It must favor critical analysis, resulting in production of new knowledge. It also proposes overcoming of students’ intellectual inertia. (ANASTASIOU; ALVES, 2004, p. 79).

Text analysis consists in exploration of ideas of the author based on critical study of a text and/or seeks information and exploration of ideas of the authors studied. A text analysis may be used for moments of mobilization, construction and elaboration

of synthesis. The definition of the text will depend on the objective of teachers and students for an specific study unit. (ANASTASIOU; ALVES, 2004, p. 80).

The portfolio consists in identification and construction of register, analysis, selection and reflection of most significant productions or identification of major challenges/difficulties related to the object of study as well as solutions for overcoming them. The portfolio strategy, quite new in Higher Education, allows following up of students' and professors' knowledge construction during the process, not only at the end of it. (ANASTASIOU; ALVES, 2004, p. 81).

Brainstorm consists in a possibility of stimulating creation of new ideas in a natural and spontaneous way, letting imagination work. There is no right or wrong. Everything will be considered, provided that, if possible, an explanation is given by the student. (ANASTASIOU; ALVES, 2004, p. 82).

Concept Map consists in construction of a diagram that indicates the relation of concepts in a two-dimensional perspective, aiming to show hierarchical relations between concepts pertinent to the structure of contents. It is a strategy lived by the class group, with individual participations, carried out in written oral modality. It may be established with different objectives and assessment should meet these objectives. (ANASTASIOU; ALVES, 2004, p. 83).

The guided study consists in the act of studying under orientation and supervision of the professor, aiming to solve specific difficulties. It is necessary to bear in mind questions such as what, what for and how the session is prepared. This strategy demands identification the students who need it to complement aspects of the intended learning program that are not mastered (ANASTASIOU; ALVES, 2004, p.84).

Problem solution consists in confronting a new situation that demands reflexive, critical and creative thinking based on specific data in the program description; It requires application of principles, laws that may or may not be expressed in mathematical formulas. (ANASTASIOU; ALVES, 2004, p. 86).

Verbalization and observation group (gv/go) consists in theme/problem analysis under coordination of the professor, who divides the students into two groups: one of verbalization (gv) and another of observation (go). It is a successful strategy applied during the process of knowledge construction, and, in that case, it requires reading, preliminary studies, in conclusion, an initial contact with the theme (ANASTASIOU; ALVES, 2004, p. 88).

Role play consists in a theatrical representation based on the focus of the problem, theme, etc. It may contain explanation of ideas, concepts, and arguments. It also may be a peculiar way to carry out case studies, since dramatization of a problem or situation for students is equivalent to showing them a case of human relations. (ANASTASIOU; ALVES, 2004, p. 89).

Seminar consists in a space where ideas must come up or be planted. Therefore, it is a space where a group shall discuss or debate themes or problems put to deliberation. Preparation of a seminar and the guarantee of success of its several stages are important assumptions for obtaining great results (ANASTASIOU; ALVES, 2004, p. 90).

Case study consists in detailed and objective analysis of a real situation that needs to be investigated and is challenging for the ones involved. The case study strategy allows elaboration of a great potential of argumentation for the students and it refers

to the moment of both knowledge construction and synthesis. (ANASTASIOU; ALVES, 2004, p. 91).

Mock Trial consists in simulation of a trial in which, parting from a problem, defense and accusation arguments are presented. It may lead the group to analysis and assessment of a proposed fact with objectiveness and realism, to constructive criticism and to group revitalization for studying a real theme deeper. (ANASTASIOU; ALVES, 2004, p.92).

A Symposium consists in a group of lectures and brief speeches presented by some people (2 to 5) about a subject or several aspects of a subject. It allows development of social skills; investigation; it increases experience about a specific subject and improves abilities of establishing relations. (ANASTASIOU; ALVES, 2004, p. 93).

A Panel consists in an informal discussion by a group of students selected by the teacher. Such students have already studied the subject to be discussed and are affected or interested in the problem, and shall present antagonistic points of views in the presence of others. Students from other grades, courses or even specialists may be invited. (ANASTASIOU; ALVES, 2004, p. 94).

A forum consists of a space such as a "Meeting", in which members of the group have the opportunity to participate of a debate about a theme or determined problem. It may be used after a theatrical presentation, lecture, exhibition of a movie, to discuss a book read by the group, a problem or a historical fact, a newspaper article, a visit or an excursion. (ANASTASIOU; ALVES, 2004, p. 95).

A workshop consists in the reunion of a small group of people with common interests, with the objective of studying and working for knowledge or further development of a theme, under supervision of a specialist. It allows learning how to make something better through application of concepts and knowledges previously acquired. (ANASTASIOU; ALVES, 2004, p. 96).

Environment study consists in a direct study of the natural context of which the student is part, aiming at a determined problem in an interdisciplinary way. It creates conditions for the contact with reality, promotes knowledge acquisition in a direct way through real life experience. (ANASTASIOU; ALVES, 2004, p. 97).

Teaching with research consists in the use of study principles associated with research principles: Concept of knowledge and science in which the doubt and criticism are fundamental elements; assuming the study as a constructive and meaningful situation, with focus and increasing autonomy; passing from simple reproduction to a balance between reproduction and analysis. (ANASTASIOU; ALVES, 2004, p. 98).

It is noticed that there are several teaching strategies the professor may use in class, besides theoretical class, the practice or diversified (theory/practice), considered, in this case, the traditional methods. Nonetheless, once there are several work strategies, why don't we, professors, use more than two strategies in the same meeting for the class to be more motivating? Why cannot we allow the student to experience strategies used on class? As an example, in a 40-hour program (Two classes a week) we can approach and make the student perceive the strategy used being them: Phillippes 66, created by Anastasiou and Alves, (2004) is an activity in which themes or problems are discussed and analyzed through the students'

point of view; and a computer-based discussion list which allows groups of people to make a distance debate session about a previously discussed subject, with the objective of deepening knowledge about it via electronic platform. The verb “perceive” is used because, in the concept of the teaching, it is very important for the student to identify the strategy used by the professor because, sometimes, neither students nor professors are able to understand how important it is to know further than content itself. In other words, it is important to know ways of teaching through strategies.

As such, the study brings the following question of investigation: Which teaching- learning strategy is more significant for students and professors, which is the most used by professors of the undergraduate program of Physical Education in Faculdade Nobre (Nobre College) in Feira de Santana according to students, and which one is more used according to professors themselves?

Considering the aforesaid, the research has as its objective: Investigating the most significant teaching and learning strategies parting from the point of view of both students and professors of Physical Education and the most used ones according to impression of students confronted with the those used by professors of the undergraduate program in P.E.

What characterizes teaching is the continuous challenge that education professionals face to consolidate interpersonal relations with students, articulating the teaching-learning so that the applied methods meet the objectives. (MAZZIONI, 2013).

Teaching has as main objective the consistency and guarantee of access to what is not reiterative in the students’ social life (BASSO, 1998). According to Mazzioni (2013), it is notorious that university students are always searching opportunities of upward mobility. Still according to the author, such pursue ends up making the student misunderstand the relevance of subjects of basic and complementary formation, giving greater importance to the specific formation ones.

Therefore, according to Mazzioni (2013), students expect distinctive action from professors of specific subjects and assume that transmission of knowledge and the methods used might make them stand out in the work market as a model professional. However, “the way the professor plans classroom activities determines how students react with minor or major interest and contributes to the way the class occurs”.(MAZZIONI, 2013, pg. 3). Above all, it is of utmost importance that the professor, during his/her classes and according to the specific subject, is capable of detecting the students’ needs in order to adopt more efficient educational parameters (OLISKOVICS; PIVA, 2012).

According to INEP (National Institute of Studies and Educational Research) (2003) higher education has registered continuous improvement concerning teachers qualification. Between

1991 and 2002, it was observed an increase of 155% in the number of masters and doctors; Such effect has been caused by LDB (Education Guidelines Law) demands for continuous teaching training. In 2014, in Brazil, still according to INEP, the total number of working professors, by academic organization and educational level, is 6,171 undergraduate, 28,851 experts, 66,920 masters and 102,371 doctors. The figures show how professors are concerned about qualification.

As noticed, the search for qualification comes in an increasing order, so it is the role of this study to investigate if the didactic updates of faculty have matched the current scenario. Therefore, the research will seek the answer by collecting data of professors and students of the Physical Education bachelor's degree program of Faculdade Nobre (Nobre College), in Feira de Santana, Bahia with the objective of comparing if the teaching strategies are in line with the students preference. In case they have not followed the pace of this new scenario, the teaching-learning process may be hampered due to the gap between teaching strategies used by professors and the students' profile.

Luckesi (1994) in his studies about teaching practice in academic environment makes several inquiries for the professors to reflect, such as: Do we, professors, articulate or at least ask ourselves if our pedagogical proposal is coherent when we use teaching techniques, when we build our class plan or when we decide what to do in class? Do the teaching practices we choose are in line with modern concepts due to the easiness they provide or to the fact that they minimize our work? Or, even worse, do we choose the practices without any specific criteria?

It is believed that these questions, if well analyzed, bring greater knowledge to professors, positively reflecting in a perspective of getting to know students profile better, providing them with improved learning opportunities. Hence, it is also believed that the Physical Education professional will be contributing for a more critic and conscious society, and better teaching quality, opening the discussion to professors, students and the whole scientific community allowing them to think their our pedagogic practice.

According to the increasing qualification required by MEC (Ministry of Education) for professors and educational institutions and in the face of the present action of teaching such level, do professionals articulate their teaching strategies pursuant to the students profile in order to combine their teaching practice with the required demands? From this inquiry, it is the role of the professor to choose, through his/her knowledge, adequate teaching strategies according to the target audience and, above all, make them flexible in order to develop individual and collective competence of students maintaining their focus. Especially because professors are mediators of multicompetent subject and facilitators of meaningful learning.

METHODOLOGY

This work consists of a field research, which, using information obtained from a questionnaire, allowed numerical data and statistic treatment collection in order to obtain meaningful results (GIL, 2002). The approach used in the research was qualitative and quantitative. Concerning its objective, it is characterized as a descriptive work. Taking into consideration the procedure, it is a survey. However, the development of activities in the field had the insertion of questions about teaching strategies, which provided enough information to find out the concept of the interviewees from data collection about the theme.

The study was carried out in Faculdade Nobre de Feira de Santana, Bahia, Brazil, in the Bachelor's degree program in Physical Education. According to the Pedagogical Project, the Program was authorized by Resolution n.1130, November 19th, 2008 and D.O.U. (Executive Power Official Journal) n.249 – 23/12/08 – MINISTRY OF EDUCATION.

The research was elaborated by a group of seven professors, mixed genders and varied ages, all of them holding a Bachelor of Arts degree in Physical Education. They have also been teaching in the Physical Education program for a year. Besides them, one hundred and eight undergraduate students, male and female, between the sixth and the eighth semesters have also taken part. As criteria of inclusion in the research, professors with Teaching and Bachelor of Arts degrees in Physical Education have participated likewise. They are part of the permanent board of professors of Faculdade Nobre of Feira de Santana, Bahia. As criteria of exclusion of the study, volunteer professors, tutors, and professors who taught the first year, as well as articles whose objective was not the same of the present study were refused.

Because the study is constituted by a great number of elements, data have been collected from a questionnaire with structured script submitted to Physical Education professors, according to Gil (2002), as well as to the students part of the target audience. Subjects were selected randomly.

To characterize the professors, a questionnaire composed by objective questions, such as: gender, age, title and work experience was answered. To approach the objectives of the study, it was created a questionnaire about more efficient teaching strategies and which of them are used in practice. To characterize the students, it was created a questionnaire about the most efficient teaching strategies when it comes to content acquisition and learning and which strategies are the most used by professors of the institution.

As for analytical treatment of data, a statistic analysis was made and such data were processed and analyzed by software Microsoft Office Excel®2016, through which averages with their respective standard deviation and percentage were obtained. The research has been submitted and approved by Ethics Committee on research of Faculdade Nobre (FAN) of Feira

de Santana, Bahia. It is worth mentioning that, according to Brasil (2013), all participants were informed about the procedures adopted in data collection and in personal information, registered and guaranteed by signature of Termo de Consentimento Livre e Esclarecimento (Free permission and clarification term).

As limiter of the research, we have the low number of studies with the same objective, despite the great number of colleges and universities in Brazil. Yet, literature about the theme is incipient, which implicates in the necessity of further longitudinal studies.

RESULTS AND DISCUSSION

CARACTERIZATION OF PROFESSORS AND STUDENTS OF FACULDADE NOBRE DE FEIRA DE SANTANA-BA

Table 1. Characteristics of students between the 2nd and 8th semesters of Faculdade Nobre de Feira de Santana-Ba by gender.

Male		Female	
Average	Standard Deviation	Average	Standard Deviation
24 years old	± 4.7	25 years old	± 5.3
Total	(n:111)		(n:69)

Source: The author

Table 2. Characteristics of professors of Faculdade Nobre de Feira de Santana-Ba

Both genders		
	Average	Standard deviation
Age	42.3	± 9.1
Graduate (<i>lato sensu</i>)	02	± 2,8
Graduate (<i>stricto sensu</i>)	0.2	± 1.01
Acting years	05	± 11.7
Total	(n:7)	

Source: The author

According to the tables above, we can notice that 111 male students participated of the research whose age average is 24 years old, standard deviation of ± 5.3. The professors age average is 42.3 years old, standard deviation of ±9.1. The graduate average (*lato sensu*) is

two, standard deviation of ± 2.8 , and graduate (*stricto sensu*) is 0.29, standard deviation ± 1.01 . Standard deviation of ± 11.7 for those with five-year experience in higher education, in total seven professors, according to table 2.

After previous knowledge of students and professors of the Physical Education Program of the research space, we will present the results of the questionnaires submitted to participants of the research. These participants indicated which kind of classes and teaching strategies are more efficient for both students and professors and which strategies are mostly used by professors, according to indications of both students and professors. A comparison follows the data.

RESEARCH WITH STUDENTS

Table 3 shows the most efficient kind of class for the student audience. In other words, which kind of class is considered the most appropriate to absorb, capture and transmit knowledge. Table 4 shows which teaching strategies are mostly used by professors if the institution. It is worth mentioning that tables 3 and 4 present the teaching strategies that were indicated.

Table 3. Most efficient kind of class

Most efficient kind of class	Absolut frequency	Relative Frequency
Diversified (theory and practice)	81	37%
Practice lessons	48	22%
Theoretical class	31	14%
Debates	19	9%
Research	16	7%
Exams	1	0.5%
Chat Wheel	1	0,5%
Seminars	13	6%
Guided study	5	2%
Explannatory Lessons	1	0.5%
Environment study	1	0.5%
Total	217	100%

Source: The author

According to table 3, students made 217 indications related to the most-efficient kinds of classes. Within this total, the diversified kind of class (theory and practice) had 37% of indications, followed by practice test with 22% and theoretical classes with 14%. These three kinds of strategies add up to 50% of indications. In other words, they represent a set of 73% of all related indications. As results, students reveal that the most effective teaching strategies are the diversified classes (theory and practice), different from what was found in the study of Mazzioni (2013). By interviewing professor of the Accounting undergraduate program, the preference is for answering exercises with 46.76% of citations in 157 indications, differing, in

its turn, from the results Adelino (2012), in the Bilingual Executive Secretary undergraduate Program of Universidade Federal da Paraíba. In his study, the students' preference was explanatory classes with 32.72% of 162 indications. It is worth mentioning that participants indicated more than one teaching strategy in total, yet their preference resulted in diversified class.

Table 4. Teaching Strategies used

Teaching Strategies used	Absolute frequency	Relative frequency
Diversified (theory and practice)	26	13%
Practice lessons	24	12%
Theoretical Classes	104	51%
Debates	2	1%
Research	13	6%
Exams	18	9%
Chat wheel	2	1%
Seminars	8	4%
Guided study	1	0.5%
Total	202	100%

Source: The Author

In table 4, students made 202 indications related to teaching strategies mostly used by professors. According to the former, the mostly used strategies are theoretical classes with 51% of indications, followed by diversified with 13% and practice classes with 12%. These three types of strategies used by professors of the institution represent 76% of all reported indications. As result, one can notice that the teaching and learning strategy mostly used by professors is the theoretical class according to students. Such result is different from the one of Mazzioni (2013), which, according to students of the Accounting program, professors use, mostly, explanatory lessons with 41.03%, similar to the preference obtained by the study of Adelino (2012) 21.79% of explanatory classes from 156 indications.

RESEARCH WITH PROFESSORS

Table 5 shows teaching and learning strategies used by professors and table 6 presents the most efficient ones as follows:

Table 5. Teaching and learning strategies used

Mostly used strategies	Absolute Frequency	Relative Frequency
Diversified (theory and practice)	1	5%
Workshops and labs	1	5%
Negotiated expository lessons	3	15%
Practice Lessons	5	25%

Debates	2	10%
Research	1	5%
Guided study	1	5%
Case study	2	10%
Exam	2	10%
Extra-class Academic work	2	10%
Total	20	100%

Source: The author

In table 5, professors made 20 indications related to the mostly-used strategies in their teaching practice. The mostly-used one was the practice class, with 25 % of indications, followed by negotiated expository lessons, with 15%. Those two kinds of strategies used by professors of the institution represent 40% of all reported indications. As a result, one can notice that the teaching and learning strategy mostly used is the practice class according to professors. This result is different from the one obtained by Mazzioni (2013), which shows explanatory lessons as the mostly used, and from Adelino (2012), which also presents explanatory lessons as the mostly used, with 25.81% of all indications. It is worth mentioning that participants, in total, indicated more than one teaching strategy, yet their preference indicated practice lessons.

Table 6. Most efficient kind of class

Most efficient strategy	Absolute Frequency	Relative Frequency
Practice lessons	2	13%
Diversified (theory and practice)	5	33%
Workshops and labs	1	7%
Debates	2	13%
Research	1	7%
Guided study	3	20%
Explanatory lessons	1	7%
Total	15	100%

Source: The author

In table 6, professors made 15 indications related to the most efficient teaching strategy in their teaching practice according to their conception. The mostly-used strategy is the diversified class, with 33% of indications, followed by guided study, with 20% of indications, and practice lessons and debates with 13%. Those kinds of strategies used by professors of the institution represent 79% of all related indications. As a result, one can notice that the most efficient teaching and learning strategy in their pedagogical practice is the diversified class, according to professors. Such result is different from the one obtained by Mazzioni (2013), which shows exercises as the most efficient for students' learning, and from the one obtained by Adelino (2012) which shows guided study as the most efficient one, representing

35.29% of indications. It is worth mentioning that participants, in total, indicated more than one teaching strategy, yet their preference was diversified class.

COMPARISON BETWEEN PROFESSORS AND STUDENTS

Table 7 presents a comparison among the most efficient kinds of classes for both groups of participants (students and professors). In table 8, there is a comparison between the teaching strategies mostly used by professors, according to students, and the ones related by professors themselves, as follows:

Table 7. Most efficient kind of class

Most efficient kind of class	Student		Professor	
	Absolute Frequency	Relative Frequency	Absolute Frequency	Relative Frequency
Diversified (theory and practice)	81	37%	5	33%
Practice lessons	48	22%	2	13%
Theoretical classes	31	14%	0	0,0%
Debates	19	9%	2	13%
Research	16	7%	1	7%
Exam	1	0.5%	0	0.0%
Chat wheel	1	0.5%	0	0.0%
Seminars	13	6%	0	0.0%
Guided Study	5	2%	3	20%
Negotiated explanatory lessons	1	0.5%	1	7%
Environment study	1	0.5%	0	0.0%
Worshops	0	0.0%	1	7%
Total	217	100%	15	100%

Source: The author

By comparing percentage data indicated by professor and students concerning the most efficient kind of class for students' learning, one can notice that both students and professors have the same conclusion that diversified classes (theory and practice) are of utmost importance and value for the student. Thus, they have the highest percentage among all other indications, corresponding to 37% of students' preference and 33% of professors' preference. In the study carried out by Mazzioni (2013), there is also the same alignment between participants concerning the most efficient kind of class for enhancing the learning process: exercises. However, with the undergraduate students of the study carried out by Adelino

(2012) there is no coherence between participants. For the students, explanatory lessons are the most efficient, and for the professors, the guided study.

Considering only practice lessons as the most efficient when it comes to undergraduate learning, one can notice that some professor and students believe in this kind of class because they consider that, despite the fact that it is completely practical, it is impossible to be completely silent. Above all, concepts, attitudes and procedures must be discussed. When it comes to fully theoretical classes, 14% of indications point out that this kind of strategy also has effective power. However, for professors, this kind of strategy, if applied alone, has no significant effect on learning. Considering the debate kind of strategy, it is notorious a greater percentage of professors compared to students. For professors it is also a kind of strategy valid for teaching and learning processes of students. In relation to Exam/tests, chat wheels, environment study and seminars, one can notice that, for some students, these strategies have the power to generate learning, different from the professors' opinion.

On the other hand, considering the workshops, the result was inverse. No indication was made by students. According to 1 (one) professor, the strategy is valid whereas for students they seem to have no importance compared to other kinds of strategies. If compared to the kind of class guided study between the two concepts, one can understand that for both professors and students, this strategy is among the most efficient ones for the learning process. The students' answers are not very different when it comes to negotiated explanatory lessons. When compared to the number of indications, it seems several students do not agree that this kind of class is more efficient to improve their learning. It is also noticed that a small number of professors believe that this is kind of class is more efficient.

Table 8. Teaching strategies used

Teaching strategies used	Student		Professor	
	Absolute Frequency	Relative Frequency	Absolute Frequency	Relative Frequency
Diversified Class	26	13%	1	5%
Practice Class	24	12%	5	25%
Theoretical Classes	104	51%	0	0.0%
Debates	2	1%	2	10%
Research	13	6%	1	5%
Exams	18	9%	2	10%
Chat Wheels	2	1%	0	0.0%
Seminars	8	4%	0	0.0%
Negotiated explanatory lessons	0	0.0%	3	15%
Guided Study	1	0.5%	1	5%
Oficinas (laboratórios ou workshops and labs)	0	0.0%	1	5%
Case study	0	0.0%	2	10%
Extra-class Academic work	0	0.0%	2	10%

Total	202	100%	20	100%
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Source: The author

Compared to teaching strategies related by students, which professors of the institutions use, to promote learning, with indication of students themselves, one can notice that, in the diversified class, (theory and practice), even though students' indications (13%) are higher than professors' (5%), the former affirm that there are professors who approach this kind of strategy. Yet, if we analyze table 7, and broaden the comparative, students make it clear that the most efficient kind of class is the diversified class, with 37% of indications, showing that professors failure to understand their audience. On the other hand, in the study carried out by Mazionni (2013), as well as the one carried out by Adelino (2012), there is perceptive coherence between the groups that participated in the research. In practice lessons, the results show that students notice a smaller quantity of professors using this kind of strategy if compared to the quantity of indications pointed out by Physical Education professors.

This result reflects directly in the teaching strategy (theoretical class), since more than 50% of indications made by students show that theoretical class is still the most used by professors. Analyzing table 7, it is possible to notice that there isn't any indication of theoretical class by professors, which reveals discrepancy. However, one may conclude that, for students, theoretical class has highest preference rate among professors, but according to professors themselves, it is not the most efficient. Also according to table 7, for professors, the most efficient would be practice lessons. The results provoke a question for reflection: Why do professors indicate that the most efficient strategy is the practice lesson, if, for most students, professors in general use more the theoretical class?

By comparing the teaching strategies used such as Debate, guided study, research and exams, one can notice that professors use these kinds of strategies, according to students, and there is confirmation by part of professors in the use of such strategies. As for chat wheels and seminars, professors indicate they do not use them, but students disagree, which shows a clash of ideas among participants. Analyzing tables 7 and 8, we can notice that professors not only do not believe that these strategies are not the most efficient, but also they do not use them in their practice. Yet, despite professors' defense of their idea, students notice this practice. However, reflection must be made: Aren't students able to notice the difference or they do not know the teaching strategies?

When it comes to negotiated explanatory lessons, workshops, guided study and extra-class academic work, students do not perceive applicability by professors whereas the latter disagree with that. Therefore, the question remains: Don't students, future professionals, know teaching strategies or professors do not care about teaching? According to Godoy (1998) cited by Costa, Pfeuti e Nova (2013), it is believed that the teaching subject may help practice and reflections about effectuation of these proposals.

CONCLUSION

One can conclude that the most significant strategies for undergraduate students as well as for professor of Physical education of Faculdade Nobre de Feira de Santana are the diversified classes (theory and practice) confirming synchrony in the preference of participants. Such synchrony is also present among participants of the Accounting program, despite being different strategies chosen by participants of the Physical Education Program. The choice coincides with the preference between the two programs and solving exercises was considered the strategy that helps the most when it comes to learning. Considering the Executive Secretary undergraduate program in Universidade Federal da Paraíba, there has been divergence among participants choice: for students, it was explanatory lessons and, for professors, guided study.

As for the teaching strategies mostly used by professors of Physical Education, from the students' point of view, are the theoretical classes whereas for professors, its greatest applicability and emphasis are on practice lessons, fact which reveals disagreement between students' and professors' perception. Considering the Accounting and Executive Secretary programs in Universidade Federal da Paraíba, the mostly used by professors are explanatory lessons, this time revealing synchrony between professors and students.

It is believed that electing the most efficient strategy is unnecessary, once each of them has its peculiarity. Also unnecessary is a comparison among programs for their competence and content are specific. Yet, worth mentioning is to affirm that teaching strategies established by writers are general, and professors are free to choose and apply them the best way.

According to results, in the Accounting program, professors perceive and match target audience needs, stimulating intellectual activity in the teaching process. As for the Executive Secretary program of Universidade Federal da Paraíba, despite the presence of divergence among participants in relation to the most significant strategy, professors have the perception of the most efficient kind of class for their audience and adopt satisfactory attitude. When it comes to the Physical Education program, the preferred teaching strategy for both students and professors match, but differ considering the mostly used in class.

Considering their particularities, there is neither better nor worse strategy, yet there is a concern when students indicate greater learning through determined strategy (or strategies) which does not coincide with the one (or ones) used by professor. However, professors must recognize their audience and know how to work with multiple teaching strategies in order to facilitate students learning since each strategy has its peculiarity. Such characteristic helps and makes it easier for students to learn and develop their competence since the professor is an important figure for having constructed in the historical process mobilizing elements for the teaching technique.

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About the Author

¹ *Fábio Thomaz Melo*

E-mail: fabiomello_fsa@hotmail.com ORCID: <https://orcid.org/0000-0001-5106-7350>

Faculdade Nobre de Feira de Santana - Brazil

Expert in Physical Education by Pró- Saber Institute[IPS]