

THE ROLE OF INTERACTIVE DIDACTIC STRATEGIES IN IMPROVING PHYSICAL EDUCATION CLASSES IN HIGHER EDUCATION

*Associate Professor PhD Mihaela Ganciu
Romania - University of Bucharest*

University of Bucharest, Faculty of Psychology and Scientific Education, Department of Physical Education and Sport, Bucharest, Romania

Phone :0733 695 015

E-mail: mihaelaganciu26@yahoo.ro

Abstract

Our research aimed to verify the following hypotheses: "It is assumed that the growth potential quality of training students enrolled in the physical education is influenced by forms of training in the principles and methods of teaching and learning with high efficiency. "

In the pedagogical experiment conducted, assessing the effectiveness degree of assimilation of knowledge gained by students was based on the rule applied docimologic normal evaluation.

Therefore within the groups of students did not operate any selection in predictive assessments. Subjects provided for summative assessments were made based on the curriculum prescribed for physical education, noting maintaining objective character.

Efficacy assessments properties of specific elements was done by grades.

Frequency graph notaries specific record of the marks obtained by students in support of the control samples and illustrates the qualitative leap and efficient pathway in the experimental group instruction.

The frequency of good grades recorded, confirm current modern theories of learning (mastery learning) who argue that in the educational use of the most appropriate ways and means, about 90% of students can effectively learn what they were taught. These conclusions explain our notaries argument that turns the famous curve of normal distribution of the Gauss-Laplace in a curve corresponding to inflections notes 8 and 9.

The process of acquiring skills and motor skills targeted objective referencerespectively aerobics designing structures that can be practiced independently after completion of the course of physical education.

The figure 2 shows the grades obtained by students in the final assessment, as compared graphically. There is an efficiency properties of physical education course in the experimental group compared to the control group, the experimental group having a larger range of students with grades 8, 9 and 10.

The experienced teaching project which predicted the transition from frontal training to group and individual training was more effective than that which has been prepared by the control group subjects.

An important role in achieving superior results by the experimental group had the application of the differentiation and awareness of the activity. In this respect, each subject was aware of the shortcomings of order motility that she has, the goals and purposes they have to perform, according to which were established operational structures (systems of exercises and methods) that were practiced systematically in their free time.

Keywords: efficiency, physical education, higher education

Introduction

In the academic environment, physical education is a prerequisite for optimizing health and achieving superior results in training. It is, therefore, necessary to increase the effort of inducing to studious youth the habit of systematic and continuous exercise.

Thus, physical education, object of study in higher education syllabus, fully justifies itself regarding its inclusion in the student's schedule.

The term of "efficiency" is regularly encountered within all spheres of social activity. Placing it within the physical education lesson's content, we specify some of the most important basic requirements, which must be met in order to conduct an effective physical education lesson.

1. Providing continuous educational content of lessons. Knowing the fact that physical education is an integral part of business training and youth education, teachers are required to permanently schedule, through lessons, means and methods that ensure the fulfillment of training tasks, as well as those of educational degree.

Analyzing physical education tasks as part of education, we can state that its efficiency can not be achieved only through the realization of tasks aiming to specific skills' training, harmonious physical development and health strengthening. It must also ensure, by whatever means available, a comprehensive educational influence on the entire team.

To achieve this objective it is necessary for the teacher to know what are the elements of educational degree which can be influenced by means of the lesson, which are the most effective and at which moment of the lesson can they be programmed.

Selection and systematization of means represents the main concern of the teacher in order to provide educational content during lesson: This requires knowledge relative to educational valences of each used exercise.

When choosing the means of action, we must take into account the fact that some simple exercises can have influence on the educational aspect of the lesson even at the stage of learning, while other exercises must first be consolidated.

For a clearer understanding of the problem below illustrate the educational guide some of the educational elements that can have an influence, during the time of physical education class, even on some means of action.

a) Development of the sense of punctuality, order and discipline.

This educational aspect must be permanently provided throughout the lesson, as it has a direct and continuous influence on its conduction and quality; since the beginning of the class, the teacher will establish high requirement for students' punctuality. It must be mentioned that, adjusting a consistent and demanding attitude, the teacher will create a real working style, reinforcing this skill in both sportive activity and life.

b) Determination of active participation, perseverance and dedication of all students over the course of the class.

The problem of active participation in class is a requirement applicable to all disciplines; however, unlike other objects, physical education is offered more opportunities for its realization in large mass scale, depending largely on the organizational set up, on the existence of consistent sport equipment and on the use of highly attractive means.

In the content establishment of certain moments of the lesson, the teacher will consider setting specific and easily measurable requirements, to encourage the students to persevere with executions until the predetermined parameters, devoting himself to it with all the physical and psychological available potential.

A good example in this direction consists of the system control rules, with the setting of individual requirements, and assessment of each student's progress.

An important role in determining students to achieve active participation is played by the extent to which the teacher has managed to be aware of the students in his teaching process. Adopting a conscious attitude, the student will expand the sphere of its concerns, and will conduct an intense activity in both classes and outside the scholar schedule.

c) Development of the confidence to act in accordance with the maximum possibilities available to each student.

It is known that some students, especially girls (especially when carrying out lessons with combines effective), express doubts, evading the execution of exercises with a higher degree of difficulty;

Students need to know precisely the available possibilities, while the teacher must ensure that the proper acquirement of the respective movement's basis, offering differentiated support, which will gradually decrease, as students gain the necessary confidence, thus removing any risk of injury.

d) Development of reciprocal mutual aid. Through the specific of the activity, in physical education classes several moments are met, in which the collective spirit finds a wide field of manifestation.

On the occasion of organizing various relays, dynamic games and sports tours, group work and other forms of collective practice, the teacher will insist on the subordination of personal interests to the collective ones, thus training the team spirit, reciprocal aid, fairplay and mutual respect in dealing with opponents, conjugating individual forces to obtain superior results from the team.

2. Full realization, through lessons, at a higher qualitative level, of all program requirements, cast, mostly, by obtaining appropriate physical development and implementation of quality indicators with uninterrupted growth regarding evidence and rules designed to control both the development of the basic sportive skills and the correct acquirement of motoric skills specific to various branches of sport.

3. Lesson design and methodological expert as required, respecting its structure and links at the moment. In the creative work design, the teacher has an obligation to know in detail the objectives, tasks and means of exploiting every moment of the lesson structure, as well as prioritizing certain moments, knowing that not all classes have the same structure, in terms of number and type of moments.

There are further illustrated some solutions for achieving, in the spirit of efficiency, the main requirements for each point of the lesson:

Link I. Organizing the team

Activity for about 5 min. In this link, the teacher focuses on specific actions at the beginning of the lesson.

Link II. Selective locomotor influence and preparing the body for exercise. Activity for about 12 minutes.

The purpose of this link is just as evident from its name, selectively influencing the musculoskeletal system, preparing the body for exercise and creating an as high as possible emotional state. Selective influence is achieved through exercises that provide analytical processing of the body, having an influence on the precise joints and large muscle groups of the body functions (breathing, circulation). Exercises to be used in this link must be selected so that they achieve the overall preparation of the body for exercise and its specific preparation for the tasks to be performed under the theme of lesson. Some of the exercises conducted in this link will correctly address or prevent characteristic attitude defects .

This time the lesson is characterized by dynamism and variety of means, constantly stimulating the spirit of self and race. For links to increase the efficiency, it is recommended for some of the exercises to be made using an object (scarf, stick, jumping rope, ball, etc.), and background music.

Third link. Learning activities, knowledge, skills and new motor skills. Activity for 15 minutes. This link, in principle, alternates with a fourth link, consolidating the knowledge.

In the process of learning basic motor skills and specific tools, the teacher will consider the following:

- Ensure proper explanation and demonstration of proper skill acquirement. Demonstration will resume several times, for all those are working effectively;
- To organize in such a way that each student will have a chance to practice and provide an increased number of repetitions;
- To schedule the practice of complex fragmented techniques, global recurrence or structure exercises, being performed only after students mastered the whole process.

Fourth link. Enhancing knowledge, skills and motor skills through repetition. Activity for approximately 15 minutes. This link is designed to strengthen the skills learned and generalizing the ability of application of knowledge, skills and motor skills learned.

Exercise is carried out usually in structures and global activities. The structures will not enter unlearned elements and processes, which may distort the correct execution, creating the danger of accidents. To ensure greater efficiency it is strongly recommended for the links to be organized by groups value. Students with a higher level of training will be able to set higher system requirements, and those with skills gaps will be able to organize a simplified exercise regarding effort and complexity, thus creating conditions for them to progress. Organizing work groups must not lead to offending students for this reason, and to stimulate those who have progressed, some students will be sent periodically from one group to another.

Fifth link. Motor skill development. Activity for 15 minutes. This link is aimed at raising the quality of motor development indices. It must be present in every lesson as specific means (usually the front so portable objects or physical training circuits) and by using non-specific means by which practice develops one or more driving skills.

The most effective way to develop motor qualities remains physical training circuit designed for targeting certain qualities or adding more.

Sixth link. Checking the level of ownership of knowledge, skills, motor skills and development of qualities. Activity for 3-20 minute. This link is checked and assessed the performance of students pass tests for grading students planned control system according to requirements of programs. Time reserved for this activity may vary depending on how it is organized.

Testing for grading the degree of motor skill development must be carried in special lessons in optimal inspection effort. Providing sound, the teacher can perform this test within two hours without too much diminish the quality of these lessons.

Seventh link. Returning the body to a state close to the usual. Activity for about 2 minutes. To achieve the aim pursued in this link, the teacher uses breathing exercises, calm, relaxation and capture attention. This work will be done depending on the duration and nature of effort.

Link to VIII. Assessments on their activities and recommendations for self-employment. Activity for about 2 minutes. This time should be short and precise, especially emphasizing the positive aspects of the lesson. Appreciating the progress of students, teachers will conduct on this

occasion current evaluation. Also, on this occasion, the teacher will make recommendations for independent work or school competitions.

4. Insurance density, variety and attractiveness of the lesson. For the purpose of the lesson to be fully achieved, and its effectiveness to increase, the upper parameters are required with determination, to be indispensable, providing three basic requirements regardless of type and that the lesson objectives, namely: optimal density, variety and attractiveness. These requirements can be achieved in different ways, we can exemplify some of them;

a) Optimal density is achieved mainly through the organization of work in class, front or in small groups of students, which ensures continuous active participation of all students, using fully and judiciously practical time work. For it is necessary to use a rich sports equipment, allowing all students achieve in practice a large number of repetitions.

b) The variety of lesson content can be achieved by using a large number of resources (variety of content) or, if necessary, to maintain the same means to a cycle of lessons, the range achieved by changes in organizational form, changing the bands work and stimulants that can help increase the students' interest for lesson.

c) The attractiveness of the lesson is the "key" problem to its effectiveness. The way that it manages to achieve this aspect of the lesson depends on the interest and effective participation, on conscious and active participation of students, and on whether they are giving their full mental and physical readiness for the planned activities or not. These aspects of the lesson contributes greatly to the determination of students to love exercise and to show willingness to practice independently. The attractiveness of the exercises can be induced by content or by providing a permanent spirit of self, against race, within a pleasant climate, recreational, conducted mainly through competitions and games of movement.

To be able to achieve all these requirements, aimed at increasing the efficiency of the lesson, the teacher has the duty to pay special attention and ongoing studies, continuously selecting methods and means to rank on all chapters worksheets curriculum, seeking to continuously improve them, supplementing them with new and interesting exercises designs based on experience or reproduced from the literature.

5. The optimal relationship issues concerning teacher - student in the lesson. The teacher - student relationship is a new type of democracy, in which both teacher and student are involved in joint activities to achieve a common goal, each of the two factors with well defined tasks, with the teacher's leadership, as a model to be followed by students.

In the event leading role and its authority, the teacher must not forget that both indulgence and excessive requirement adversely affect the work of the educational process. The teacher's competence and authority stems from his conduct. The latter should be dignified, fair, demanding

both with itself and with students. In support of his authority comes the professional training, which students analyze and appreciate permanently.

Teacher-student relationship in physical education activities fall within the whole educational system. But unlike other disciplines, physical education is a complex relationship that manifests in multiple and various plans.

The student- teacher relationship in physical education and sports activities can take many forms, namely:

- The teacher - student relationship in physical education lessons;
- The teacher - student relationship in the classes of sporting activities;

6. Awareness - principle of the educational process. Increasing the efficiency of physical education lessons is positively influenced if the teacher is concerned, besides taking organizational measures and methodical application of the awareness of students, by the practice of the exercises during the lesson.

A means of making students aware is to understand the purpose of learning and that of acquired knowledge utility. Awareness process inevitably leads to attracting students towards understanding and desire of knowing the execution. When the student will understand these things he will act with greater pleasure, showing a greater willingness to improve his performance. Students must understand the purpose of practicing exercise and its influence on their body.

Conscious activity of student motivation to practice exercise is determined by immediate motives related to hour and motivations of perspective, of which include:

- Desire to be among the leaders in sport groups ;
- The desire to practice at a particular branch of sport performance and a job that is subject to the development of certain physical qualities, the state of robustness, etc.

A particular influence in increasing awareness can be the explanation, demonstration, and use as many intuitive materials. Therefore, awareness of students is not random: it must be scheduled carefully at the various times of the lesson, when necessary. The methods and procedures used for awareness are set according to the team that is working.

7. Problem-solving - the modern method used in physical education lessons. Improvements in learning and physical activity, both those that occur in the course of lessons, and those who organize extra activities, are a contribution to the increasingly important asset of methods. One of these methods is the problem-solving. It involves the creation of special practice which are proposed to solve task-related situations. The student is asked to solve tasks, theoretical or practical, by personal effort and personal experience to solve a difficulty that has no ready answer prepared. To apply this method it is necessary to create conditions that give students the opportunity to highlight the qualities of “discoverers” . Basic means of discovery through practice

is achieved by deliberate organization of complex exercises with some tasks that raise student problem situations. In such situations, because the student has no precise knowledge about how to solve common situation, he needs to appeal to analogy to its general knowledge, which helps him and allows him to correctly solve the problem.

Usually scheduled problem situations, for example, are routes more easily resolved when you encountered for the second time, or those who confront it with other colleagues who have witnessed executions.

One of the important advantages of using this method is that it provides intellectual independence in directing the implementation and development of creative thinking. In terms of the organization and form of expression, problem-solving lessons scheduled or unscheduled occurs:

a) in problem-solving programs, the teacher deliberately creates situations of problem, in this case it is a problem-driven (eg : journeys created the application).

b) problem-solving occurs instantaneously, unscheduled. During exercising, students seek different solutions to solve. In this situation it is necessary that the teacher, observing students while they solve, to take further action to demonstrate and explain the exercises, and when appropriate, adopting and generalizing how to resolve it to certain students or recommending another solution (often situations encountered in the consolidation of knowledge in sports).

Problem-solving is easily programmed in different application routes utilities. It appears, however, instantly, often in learning and practicing sports, where problem-solving does not have a reproductive character, not deriving from direct information, but from a combination of information by requiring intense intellectual activity.

Solving creative problems that occur during a practice game is reflected by choosing the most efficient process.

8. Designing exercises' structures and their use in physical education lessons. Using exercise structures in physical education lessons is a modern method of training that helps to speed up the learning process and reinforce proper driving skills with sporting.

To have a guarantee of success using this method, one must know and comply with the following requirements:

a) exercise structures contain elements or staggered procedures in a logical order, as required to practice these sports industry.

b) Initial structures must be simple exercises and then, as the student progresses, these structures can become complex and with a higher degree of difficulty.

c) To consider the age and knowledge level of students who work.

d) Establish a maximum of two difficult techniques in a structure, which were previously acquired by means of analytical work.

e) structures of exercises that require special materials and sports facilities will be made only if such materials exist in sufficient quantity to allow concurrent exercise for a large number of students, thus ensuring proper density lessons.

f) structures can be designed exercises for a group of students and additions or waived in some elements of structure group to group, group activity taking place.

g) The composition: exercise structures must have regard to the deliberate scheduling favorable conditions before executing the elements of great difficulty.

These favorable conditions can be expressed in certain breaks, before that year.

I will exemplify through a the research undertaken in the 2012-2013 academic year, which highlights ways to increase the efficiency of physical education lesson.

Our research aimed to verify the following *hypotheses*: "It is assumed that the growth potential quality of training students enrolled in the physical education is influenced by forms of training in the principles and methods of teaching and learning with high efficiency. "

Working methods

Among the methods used in the experiment, we can mention those that are formative participatory. To these we can add heuristic procedures, which provide a creative learning, participatory and anticipatory.

Research purposes

- Evaluation of motor behavior of a total 60 students (30 experimental group, 30 control group) of first year female students of the University of Bucharest, practicing aerobics in the academic year 2012-2013.

Subjects: the subjects of our study, aged 19-20 years who participated in aerobics class 2 hours per week.

The composition of the groups was done by voluntary adhesion; female students were presented the idea of differentiated activity.

To determine the effectiveness of the work carried differentiated with the experimental group we used a control group who preferred traditional activity in the basic course.

What differentiated the 2 groups was the system of organization of lessons: frontal activity in the control group and individualized in the experimental group.

The process of acquiring skills and motor skills targeted objective referencerespectively aerobics designing structures that can be practiced independently after completion of the course of physical education.

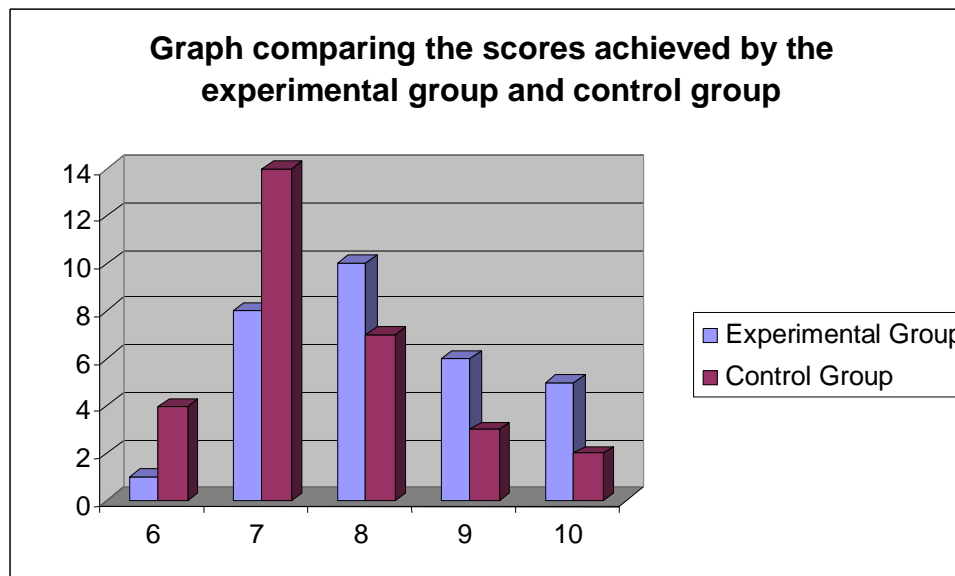
Efficacy assessments properties of specific elements was done by grades.

Discussion

In the pedagogical experiment conducted, assessing the effectiveness degree of assimilation of knowledge gained by students was based on the rule applied docimologic normal evaluation.

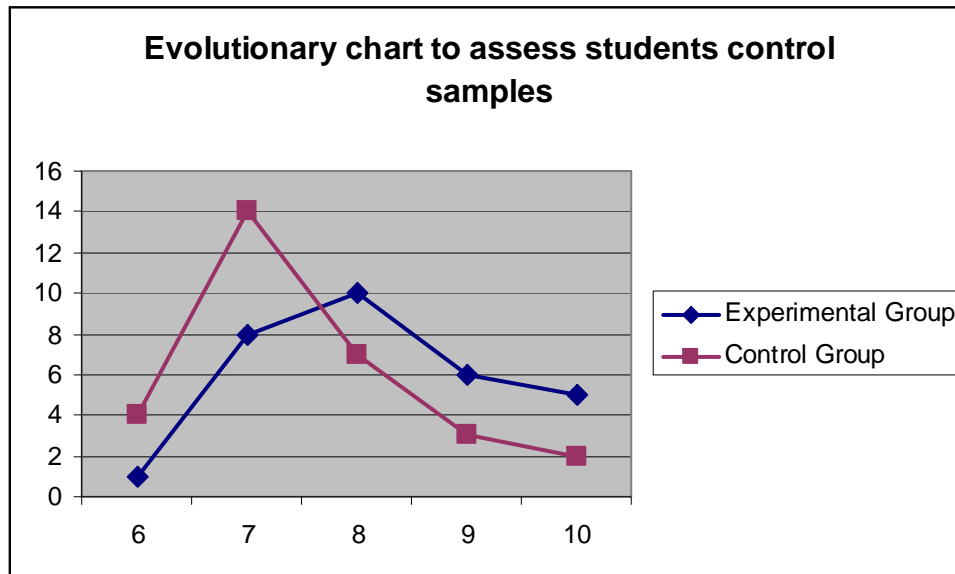
Therefore within the groups of students did not operate any selection in predictive assessments. Subjects provided for summative assessments were made based on the curriculum prescribed for physical education, noting maintaining objective character.

Frequency graph notaries specific record of the marks obtained by students in support of the control samples and illustrates the qualitative leap and efficient pathway in the experimental group instruction.



(Figure 1 – horizontally the obtained marks and vertically the number of subjects)

The figure 1 shows the grades obtained by students in the final assessment, as compared graphically. There is an efficiency properties of physical education course in the experimental group compared to the control group, the experimental group having a larger range of students with grades 8, 9 and 10.



(Figure 2 – horizontally the obtained marks and vertically the number of subjects)

The frequency of good grades recorded, confirm current modern theories of learning (mastery learning) who argue that in the educational use of the most appropriate ways and means, about 90% of students can effectively learn what they were taught. These conclusions explain our notaries argument that turns the famous curve of normal distribution of the Gauss-Laplace in a curve corresponding to inflections notes 8 and 9.

Conclusions of the experiment

The experienced teaching project which predicted the transition from frontal training to group and individual training was more effective than that which has been prepared by the control group subjects.

An important role in achieving superior results by the experimental group had the application of the differentiation and awareness of the activity. In this respect, each subject was aware of the shortcomings of order motility that she has, the goals and purposes they have to perform, according to which were established operational structures (systems of exercises and methods) that were practiced systematically in their free time.

Presenting these results highlight the effectiveness of its remarkable aerobics course as a result of applied teaching strategy emphasizing raising student motivation based on teaching quality and teaching logistics;

Percentages and grades recorded certifies that students have perceived, understood, memorized and updated, applying knowledge learned in their practice.

Organizing and conducting training process based on differentiated treatment of the relationship between forms of instruction, contributes to an efficient and complete knowledge, pedagogical and professional skills.

The applied training based on principle of the conscious participation allows the intensification of development theoretical and practical knowledges process, contributing to increase the results.

All these are arguments that validates the effectiveness of materialized learning through theoretical and practical aspects of student performance based on application of the principles of training.

Final conclusions

Physical education lesson effectiveness must be assessed primarily by the quality and quantity of effort by students during the lesson. This depends on the acquirement, consolidation and sustainability skills at a high level of motor skill development.

To ensure optimal density and intensity need to be taken several measures, both in methodological and organizational terms and in terms of sports material used.

References

- Aducovschi, D., - "*Varietatea gimnasticii pe muzică*", Edit. Universității București, 2009;
- Bizim, A., et al., "*Methods of physical education in higher education*", Edit. University, 1994;
- Cerghit, I., "*Teaching methodology*", University Printing House, Bucharest, 1998;
- Dragnea, A. , Bota, A., "*Theory driving activities*", Edit. Didactic and Pedagogic, Bucharest, 1999 ;
- Dragulin, I., - "*Mișcare pentru sănătate psiho-fizică*", Edit. Printech, București, 2004;
- Horghidan V. ,, *Măsurare și evaluare în cultura fizică și sport* " Editura ALPHA 2005;
- Neacsu, I., "*Training and learning*", Edit. Didactic and Pedagogic, Bucharest, 1990;
- Niculescu G., "*Gimnastică aerobică*" Editura Fundația România de mâine, București -2008;
- Oprea, C., "*Strategii didactice interactive*", Edit. Didactic and Pedagogic, 2006;
- Scarlat, E., "*Educație fizică și sport*", Editura Didactică și Pedagogică, București, 2002;
- Stoica, A., - "*Gimnastică aerobică. Fundamente teoretice și practico-metodice*", Edit. Bren, 2004;
- Stoica, A.,- "*Particularitățile predării educației fizice în învățământul superior de neprofil*" - Edit. Arvin Press, București, 2004;
- Stoicoviciu, A., - "*Probleme actuale ale activității de educație fizică în învățământul superior*" - Edit. Universității, București, 2008;