DESIGN OF LEARNING UNITS FOR SCHOOL PHYSICAL EDUCATION WITH 6TH GRADE STUDENTS

Proiectarea unităţilor de învăţare la educaţia fizică şcolară cu elevi de clasa a VI-a

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Abstract

Background. From the unitary documents of the teacher of physical education, the didactic design acquires a personalized and individual character, regarding the distribution of the learning units in lessons and throughout the school year, the joining of the learning units into lessons, the placement of the test events for the sunmative evaluation and of the tests stipulated by the National School System of Evaluation, as well as those established by the teacher in the structure of the school year.

Objectives. This research aimed at the following objectives: to present the theoretical documentation of the didactic design in school physical education, particularly the learning units; to carry out the half-yearly test events evaluation; to make the didactic design of the learning units necessary for the teaching-learning-evaluation of the education contents of the motor qualities and skills specific to basketball game; to apply the evaluation system of the test events; to analyze the effectiveness of the didactic design, the achievement of the learning units in basketball and the motor skills of the 6th grade students; to draw conclusions and develop practical recommendations.

Methods. This scientific approach entailed the organization of a study in the Secondary School no. 28 of Bucharest, with a group of 24 students of the 6th C grade; the study was conducted over the 2017-2018 school year, the first semester. The following research methods were used in this paper: study of the specialized literature, method of pedagogical observation, method of the experimental study, method of tests, statistical-mathematical method and graphical representation of results. This study also includes the final results of the specialty inspection for obtaining the teaching certification level II by the first author, highlighting the efficiency of the didactic design of the learning units used during the instructive-educational process of teaching-learning-evaluation of the 6th C grade students. There were also applied 4 test events selected from the National School System of Evaluation for 6th grade students, regarding the speed evaluated by 50 m speed running, explosive power evaluated by standing long jump, endurance evaluated by endurance running (girls – 600 m and boys – 800 m) and sports game – basketball.

Results. The study results prove the efficiency of using the actuation techniques for the development of body segments muscles tonicity, the achievement of motor actions with different efforts and structures and progressive degree of complexity specific to basketball and the integration of the learnt technical procedures into simple tactical actions of the basketball game. The application of the test events evaluation system in 6th grade students highlighted the level of development of the running speed, a low level of the explosive power of the lower limbs, endurance running 600 m girls and 800 m boys and the level of learning the motor and technical-tactical actions specific to the basketball game.

Conclusion. Performing the didactic design of the learning units in school physical education for the 6th grade students contributed to the achievement of the reference objectives of the education contents of "power" motor skill in basketball and to proposing the recommendations needed to improve the teaching-learning-evaluation process at this level.

Keywords: basketball, strength, evaluation, contents, learning units, test events

Introduction

The activity of physical education and sport, through its formative valences, is a good socialization environment for students because at this age their integration into a complex collectivity (class, group, team), develops the personality in all aspects and helps them to integrate better into society (Ghişescu & Moanţă, 2015).

The reform of the Romanian education system has generated conceptual, methodological and organizational mutations at the level of Physical Education and Sport discipline, as in the other disciplines. The „New Games Movement" modern orientation or the tendency to practice all physical exercises in the form of game and competition proves the beneficial effects of introducing the game (dynamic, preparatory, athletic) in the lesson of physical education in order to develop the personality of the children and to integrate them faster into society (Popescu & Porfireanu, 2003).

Didactic design reflects how the teacher of physical education conceives the achievement of the reference objectives for each grade – 9th, 12th and 13th (Colibaba-Evulet, 1995). A final preliminary stage of the didactic design is the analysis of the provisions listed in the National School System of Evaluation and the selection of the evaluation tests and tools (SNEE, 1999). Depending on the

education cycle, some categories of contents stipulated in the curricula can be set up in learning units and can be distributed over lessons throughout the school year. In principle, the design of each unit includes a predictive evaluation at the beginning of its approach and a summative evaluation in its end (Dragomir & Scarlat, 2004; Marinescu, & Popescu, 2008). Taking into account these elements, we consider it appropriate to introduce a new system of evaluation, differentiated per curricular cycles, consistent with the reference objectives and the specific competences stipulated in curricula for each grade (Dragomir & Scarlat, 2004; Grimalschi & Boian, 2011; Potop & Marinescu, 2014).

Basketball game is a „specific way to show oneself and also to practice the body activity and the physical exercise by playing (Colibaba-Evuleţ & Bota,1998). The practitioners, included in two teams of five players each, temporarily in a relationship of implied adversity typical of sports games, called sports rivalry, fight to win on a special court provided with baskets; each team attempt to make more successful throws of the ball through the basket of their opponents under the conditions set up in the game regulations" (Predescu, 1999).

The high level of basketball practicing has been achieved thanks to the process of learning and improving the tactics and technique of the game. The initiation into the game secrets from an early age on the one hand and the identification of the most suitable methods and means on the other hand are the factors that constitute, along with the material conditions, the premises of a fruitful activity (Ghiţescu & Moanţă, 2013).

The main characteristics of the basketball game in school are based on the idea that basketball is a sports game that can be practiced by children and young people, boys and girls as well or even by older people both for competitive purpose and recreational physical activity for fitness or fun. (Hrişcă, Predescu & Negulescu, 1987; Marinescu & Tănase, 2011).

The basketball game stresses and develops equally the entire complex of bio-motor abilities (conditional and coordinative ones) due to its rich motor content and the great variety of necessary movements (Anastasiadis, 1995; Predescu & Moanţă, 2001).

Purpose. The main goal of this paper is to highlight the effectiveness of achieving the didactic design of the learning units specific to "power" motor skill and to basketball sports game abilities at the level of 6th grade students.

Hypotheses of the paper: Performing the didactic design of the learning units in school physical education for the 6th grade students will contribute to the achievement of the reference objectives of the educational content of "power" motor skill in basketball and to proposing the recommendations needed to improve the teaching-learning-evaluation process at this level.

Material and Method

This scientific approach entailed the organization of a study conducted in the Secondary School no. 28 of Bucharest, with a group of 24 students of the 6th grade C, during the 1st semester of the school year 2017-2018.

The following research methods were used for this paper: study of the specialized literature, method of pedagogical observation, method of experimental study, method of tests, statistical-mathematical method and results graphical representation method.

This study also includes the final results of the specialty inspection for obtaining the teaching certification level II by the first author, pointing out the efficiency of the didactic design of the learning units used during the instructive-educational process of teaching-learning-evaluation of the 6th C grade students.

There were also applied 4 test events selected from the National School System of Evaluation for 6th grade students, regarding the following motor skills: speed evaluated by 50 m speed running; explosive power of legs evaluated by standing long jump; endurance evaluated by endurance running (girls – 600 m and boys – 800 m) and sports game – basketball.

The design of the learning units within this study referred to "power" motor skill for the 6th grade, with a number of 12 allocated lessons and 15 minutes exercising time for the explosive power and the segmental power (preparation to work in circuit) and the learning unit "basketball" for 6th grade with 33 lessons allocated and 25-40 minutes exercise time during lessons for the instructive

content: traveling passes, movement by added steps, stopping and pivoting, running and dribbling throw to the basket, travel on the court, bilateral play etc.

Results and discussions

Tables 1 and 2 present the results of the evaluation of the learning units in 6th grade for girls and boys as well, regarding the 50m speed running, legs explosive power, endurance running and basketball sports game.

Table 1. Results of evaluation of learning units at 6th grade level – girls (n=18)

Statistical indicators	50 m speed running (sec)	Legs power (cm)	Endurance running (sec)	Basketball (points)
Mean	9.27	107.5	342.17	8.28
SEM	0.16	3.92	13.57	0.27
SD	0.72	16.65	55.97	1.13
Cv%	7.75	15.49	16.36	13.62

Note: SEM – standard error means, SD – standard deviation, Cv% – coefficient of variation.

Table 2. Results of evaluation of learning units at 6th grade level – boys (n=6)

Statistical indicators	50 m speed running (sec)	Legs power (cm)	Endurance running (sec)	Basketball (points)
Mean	8.45	140	336	9.00
SEM	0.22	9.31	25.80	0.45
SD	0.54	22.80	63.21	1.09
Cv%	6.49	16.28	18.81	12.17

Note: see table 1.

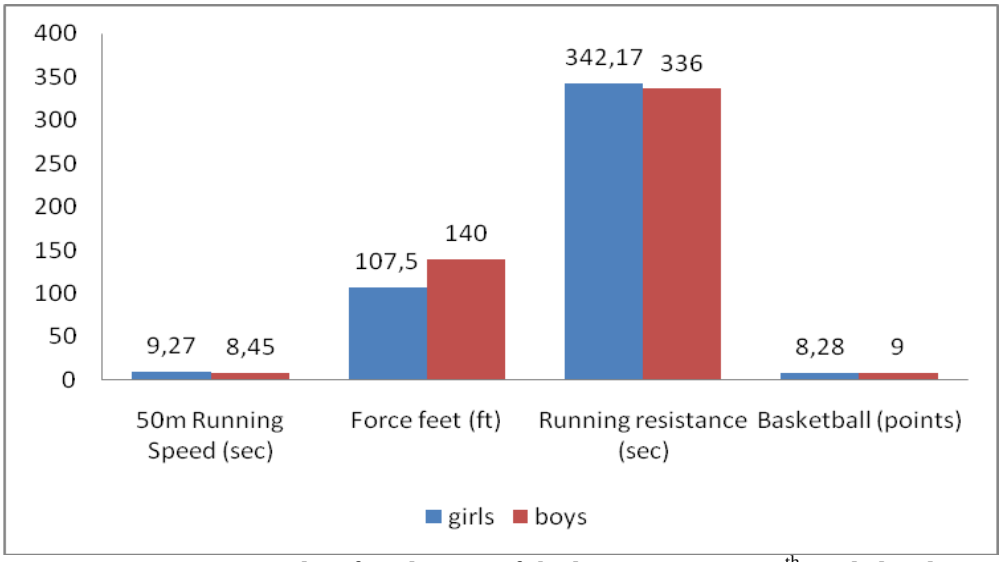

Fig. 1. Results of evaluation of the learning units at 6th grade level

The results of the comparative analysis highlight the following matters: at the speed test event, evaluated by 50m speed running there is a value of the mean of 9.26; ±0.16 sec in girls and 8.45; ±0.22 sec in boys; in both cases there is a high homogeneity between subjects; legs power, evaluated by standing long jump has a value of the mean of 107.5; ±3.92 cm in girls and 140; ±9.31 cm in boys and a moderate homogeneity in girls and boys as well; endurance evaluated by endurance running on 600m for girls has a mean of 342.17; ±13.57 sec; the endurance running on 800m for boys has a mean of 336; ±25.80 sec and a moderate homogeneity in girls and boys as well; basketball game, evaluated according to the content of the training has a mean of 8.28; ±0.27 points in girls and 9.00; ±0.45 points in boys and a moderate homogeneity in both girls and boys.

Following up the didactic activity related to the design of the activities (creative ones in the didactic design of the lessons-activities, correlation of the components of the didactic activity, strategies and evaluation) it was noticed that the requirements of 6th grade curriculum were observed; the content and the level of physical stress was adapted to the proposed objectives and topics; the activities (behavior of the teacher, use of didactic strategies, integration of education means into the lesson, creativity in lesson conducting, guidance of students' actions and thoughts, management of the didactic time, achievement of performance etc) had a high quality level, combining the specific terminological mastery with non-verbal communication elements. The didactic projects were put into practice, respecting the planned content. The didactic time was covered keeping a balance between motor density and pedagogical density while the time allocated to each part (link) of the lesson was observed and resulted in a good motor density, managing the didactic type correctly.

The evaluation of the school performance (methods and techniques for evaluation of the learning results from the prospective of the established objectives) was made with an individual and collective common evaluation after each exercise; the summative evaluation was used at the end of the lesson, by assessing synthetically the way to fulfill the tasks, which allowed to develop some ameliorative measures for students' training.

The level of students' training was evaluated on the basis of direct observation, tests events and longitudinal evaluation; the students had well-assimilated motor skills and abilities and well-developed motor qualities. They responded promptly to the instructions of the teacher, trying to work as accurately as possible throughout the lesson, participating consciously and actively and performing the required elements happily.

The monitored lessons proved a very good knowledge of the students; the teacher was close to them, giving them advice how to fulfill the tasks during the lessons; the teacher has a very good relationship with students, colleagues and parents.

Conclusions

The results of the study highlight the level of the test events evaluation in the 6th grade students regarding the running speed, legs power, endurance running and the assimilation of the contents of basketball game in both girls and boys.

Making the didactic design of the learning units in school physical education for the 6th grade students contributed to the achievement of the reference objectives of the education contents of "power" motor skill and basketball game and to the elaboration of the recommendations necessary for the improvement of the teaching-learning-evaluation process at this level, which confirms the proposed hypothesis.

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