

Reflection and Effectiveness in Physical Education

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ABSTRACT

The focus of the current research is the effective mastering of the educational content of physical education classes, Fitness and Bodybuilding module in particular, by 16 to 19 year-old students applying the principle of learning through reflection. Good practices and effective prerequisites for encouraging the mental perception of physical movements have been established through:- project development under the national programme "The school - students' territory" and a financial support by the Ministry of Education for the equipment of a fitness sports hall in the Private Secondary School for General Education "New Century", Stara Zagora, with modern sport facilities allowing students to practice daily sport activities;- the writing of an electronic methodology textbook on fitness and bodybuilding created by Trakia university professors and school teachers in compliance with state educational standards and requirements for curriculum development.

Keywords: Reflection, Effectiveness, Physical Education

INTRODUCTION

The focus of the current research is the effective mastering of the educational content of physical education classes, Fitness and Bodybuilding module in particular, by 16 to 19 year-old students applying the principle of learning through reflection. Good practices and effective prerequisites for encouraging the mental perception of physical movements have been established through:

- project development under the national programme "The school students' territory" and a financial support by the Ministry of Education for the equipment of a fitness sports hall in the Private Secondary School for General Education "New Century", Stara Zagora, with modern sport facilities allowing students to practice daily sport activities;
- the writing of an electronic methodology textbook on fitness and bodybuilding created by Trakia university professors and school teachers in compliance with state educational standards and requirements for curriculum development.

As a result of the above students' individual potential has been enhanced through the use of effective means, methods and forms of education to address society's values, nature, human self-value and the contemporary role of physical culture for a healthy life.

The interest in the relationship between the processes reflection, physical education, efficiency stems from a great number of uncertainties in their sides. In theoretical and practical aspect, it is necessary to optimize their everchanging conditions and increasing requirements for:

- formation of personality through successful implementation of physical education;
- provision of personal and socially significant preconditions for motor active life through systematic physical exercises and sports classes.

The reflection is seen in scientific publications from different positions [1; 3; 4; 6 etc.]. It is the ability of



consciousness to concentrate on itself, to master itself. This is the transition from unconscious to conscious knowledge, development of self-consciousness, the basis of self-expression. The reflection is meditation, introspection, analysis of your own thoughts, experiences. It includes the elements of the psyche: self-knowledge (cognition), self-experience, self-esteem (affectivity) and conduct toward yourself (conation) [5]. It forms and reflects the self perception of "I": as physical, social, spiritual "I" "I" - the image - real and ideal, "I" as a present, past and future. It reveals and develops itself through evaluation and self-evaluation, claims, activity, self-regulation, self-mastery and more [1; 2; 7; 8 etc.].

But regardless of that reflection:

- has important functions in the formation and expression of personality;
- is crucial for the results in physical exercises and sports;
- has been placed as a problem since the first pedagogical publications (Jan. A. Comenius) up to now;
- is investigated and specified by different specialists.

It holds potential for physical education in the present. Our and other studies show that it is difficult to connect the theory with the practice in the motor learning. Often the curriculum is managed by students mechanically, without understanding. For complete absorption and utilization of knowledge and skills is a reflection of the need to update the pedagogical interactions.

Our view is that in the physical education can be created and used favorable conditions for the onset and development of reflexes, contributing to improve performance in personal development.

That gives us grounds for applied research with a **goal**: to optimize the physical education of 16-19 year old students to raise awareness and activity performance through reflection and **tasks**:

- To explore opportunities and prerequisites for improving the mechanisms of reflection on motor learning in fitness and bodybuilding.
 - To identify key interdependencies in pedagogical interactions with the development of reflection.

METHODS AND RESULTS

A scientific research, which covers the school years from 2008 to 2011 for experimental work in Private Secondary School for General Education 'New Century', Stara Zagora, Bulgaria is carried out. The implemented system of work is a manifestation of reflection and development by:

- Increasing the interest in theoretical and applied nature of reflection processes, physical education and personal development in an interactive learning environment;
 - Implementation of individual fitness programs for self-organization, self- control, self-evaluation;
- Stimulating group and individual creativity in the performance of integrated classes in aerobic and anaerobic mode of complexes of exercises to gain muscle mass and reduce fat, of complexes of stretching exercises;
 - Putting in place of discovery, exploration of the characteristics, qualities, processes for physical exercise;
- Disclosure of their own achievements and errors in motor performance, interactions, relationships, comparisons with others involved;
- Targeting active and conscious participation by observation and introspection, analysis and self-analysis, evaluation and self-evaluation, control and self-control with specific tasks in a free choice according to the objectives, the individual, age and other characteristics;
- Orientation to the values in society, nature and man as self-value and the role of physical culture for healthy living, using affordable and persuasive means, methods, forms;
- Application of reflection activating technical means audio-visual recordings, teaching materials with creative ideas and analysis.

Characteristic for the implemented pedagogical interactions in the research and development is our goal to create a positive emotional environment for knowledge and insight understanding, goodwill, cooperation and encouragement.

The testing criteria and indicators for reflection and effectiveness in physical education, used in the research



are mainly for:

- Health and vitality of the performers;

Accuracy, comprehension, application of knowledge and skills;

- Development of personal qualities and self-consciousness, manifested in the performance of physical exercise in special control measurements.

Work carried out and reported performance data show that reflection helps to optimize physical education. According to the interests, age, experience, it allows to get acquainted with the individual circumstances and specifics of the processes taking place in and through motor activity, such as:

- Characteristics of some basic concepts, criteria and indicators for assessment and self-assessment of physical development and health;
- Motor skills specifics, methods and age dynamics of their development. Assessment tests, control and self-control;
- The training in bodybuilding principles, division into periods, training experience; physical loading and criteria for determining the workload; tiredness-recovery- hyper recovery, special training, overtraining, work hypertrophy;
- Drawing up a nutrition and nutritional balance, according to energy consumption in various activities in their daily schedules. The influence of androgen hormones and enhancers on the process of increasing muscle mass;
- Characterization of the main muscle groups and the specifics of their development in bodybuilding-occupation. Physical exercises for major muscle groups;
- Characteristics of the training in bodybuilding for teenagers specifics for teenage girls and teenage boy; selection of the physical exercises for the self-preparation; methodological guidelines for working with strength training. Tests for assessment of the level of training;
- Gym-rules of use; methodological guidelines for the work of trainers and cardio equipment. Control by cardio-leading devices;
 - Sample training programs for beginners;
 - The daily regimen and self-control in it.

On the base of motion are derived habits of introspection, comparing, analyzing, perception of others (teacher, classmate), and their own actions; favorable conditions for reflection and through it - for effective participation and development of the learner have been created; the motor and mental activity are improved; the possibilities for detection of significant, notable for the performances, for finding appropriate solutions in fitness activities, a successful self-organization, self-evaluation and self-control are increased. It builds confidence; knowledge and skills to operate according to their capabilities have been learned. The orientation in terms of performance is faster and more accurately.

These correlations in *fig.1* are a small proportion of positive interactions between physical, mental and moral development in the unity of personality, society, nature and their specificity for reflection. The **results** show that it supports the realization of the important functions of the educational process:

- target to learn knowledge, to develop relationships that form the sports culture as an important component of the overall culture of the individual;
- content and information complementary skills to improve the physical preparedness and harmony of body composition by enhancing knowledge of purposeful use of basic tools and methods of training to develop conditioning and coordination skills;
- motivational develops personal and social motivation for systematic physical exercises in school and leisure activities;
- coordination-inclusive bound to motor training with general education in school and learning, integrating various aspects of the experience cultural, social, physical, mental, etc.;
- corrections developing competencies for analysis and planning of physical training, drawing on introspection and self-assessment of individual self-study programs;
 - control ability to learn to self-achievement, and self-control in self-practicing;



• developing-educational - to stimulate the expression of autonomy and responsibility in achieving educational goals, strengthens the initiative and sense of belonging among students in solving problems related to ecology, communication, spiritual values and more.

Conducted research and development leads to the conclusion:

- Development and expression of reflection and physical education are mutually constitutive and have positive influence in the personal formation.
- The knowledge of the mechanisms and the development of reflection is essential for the effectiveness of motor learning.
- Reflection helps optimizing fitness classes by creating opportunities for activity, awareness and deployment characteristics of individual learners.
- The increased interest, motivation and awareness in the performance of physical exercise are essential for motor active healthy lifestyle through fitness and bodybuilding.

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