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MODEL FOR PHYSICAL EDUCATION CONTENT STANDARDS AT EARLY STAGES OF PRIMARY EDUCATION IN THE REPUBLIC OF MACEDONIA

INTRODUCTION

One of the goals of physical education (PE) is to activate locomotor system, to improve physical abilities and to stimulate healthy way of life with general intention to activate regular psychomotor, cognitive and socio-emotional development through different contents, exercises and movement games (Bureau for the development of education, 2007). Using different contents and activities of locomotor, non-locomotor and manipulative character, positive transformational processes are provided. The knowledge of age and developmental characteristics of students is essential for suitable content selection and realization of proposed goals. In this sense, the knowledge of structure of motor space, morphological characteristics, as well as students' intellectual potentials are important in the process of developing and designing PE curricula as leading documents for successful teaching process and realization (Blazevic et al., 2007; Bilic, 2007).

Morphological and motor structures of children at preschool and early school ages are treated in numerous researches (Bala, 1981, 2002, 2003; Strel & Šturm, 1981; Rajtmajer & Proje, 1990; Peric, 1991; Rausavljevic, 1992; Rajtmajer, 1993, 1997; Zurc et al., 2005, Pisot & Planinsec, 2005). The obtained findings of children's anthropological status are important in the sense of designing educational curricula and programmes conception according to children's possibilities and potentials at specific age. The findings give correct content selection, organization and realization with main goal and positive anthropological changes (Popeska, 2009a).

Educational programmes, based on findings about morphological and motor structure as objective indicators for student potentials and possibilities, are in relation with students' achievements, precisely with content standards which refer to what students should know and what students should be able to do after certain period of active realization of programme contents and participation in PE activities. National curriculum or programme frame enriched with precise standards of students'

achievements is an accepted way of functioning in many countries through Europe and worldwide (Klincarov, 2007).

Analyzing PE process in the Republic of Macedonia and in the region, there are different approaches in the concept of PE national curricula designing and developing as well as in the establishment of models for assessment of achievements, educational effects and overarching standards. There are approaches with clearly defined contents and activities, precisely determined goals and tasks, but not clearly enough defined expected results, models of students' achievements, overarching standards and norms for evaluation.

Exactly defined achievements, output for what children should be able to do after a certain period of realization of some PE contents, give a possibility for clear definition of goals, correct choice of contents, as well as clear directions for assessment of students' progress. In this sense, every country should have a national curriculum based on objective indicators for children's motor potentials and capacities at every age period, clearly defined goals, and number of contents that offer possibilities for achieving the goals, as well as overarching standards in each segment of anthropological status.

The aim of this article is to propose a model of PE standards for students achievements, based on the findings about motor structure of Macedonian children, in relation with Macedonian PE curriculum, and overarching PE standards for children in California, USA (California Department of Education, 2009), chosen as a representative model of PE, which is in the same line with our opinion of how a PE model content standard should be created in the Republic of Macedonia (Klincarov, 2007, 2010).

ANALYSIS OF DETERMINED MOTOR STRUCTURE IN 7-YEAR-OLD MALE STUDENTS IN THE REPUBLIC OF MACEDONIA

In research conducted by Popeska (2009b), a factor structure of motor structure of 7-year-old male children was determined. The research was realized on a sample of 100 second grade students in five primary schools in Skopje, the Republic of Macedonia. Using 33 motor tests, the following factors were isolated: flexibility, running speed, coordinate speed of legs and arms, explosive strength, accuracy while leading, accuracy while throwing, coordinated speed strength, one undefined factor, strength of arms and shoulders, balance and factor for trunk and arms strength.

According to the results obtained in this research, coordination as complex motor ability is not clearly isolated among children at this age, but it appears together with speed and power. This is a result of the complex structure of coordination, its connection with other abilities and the connection with still unfinished developmental

processes and unfinished development of CNS. Similar motor structure is obtained in other researches in early childhood (Strel & Sturm, 1981; Rajtmajer, 1993; Peric, 1991; Bala, 2002; Pisot & Planinsec, 2005).

ANALYSIS OF NATIONAL PHYSICAL EDUCATION CURICULUM FOR FIRST TO THIRD GRADE IN NINE YEAR PRIMARY EDUCATION IN THE REPUBLIC OF MACEDONIA

In the Republic of Macedonia, PE is realized as a teaching subject named physical and health education. In the first three years in primary schools it is realized with 3 classes weekly, or 108 classes per year. The teaching process is based on the national PE curriculum for first to third grade in nine year primary education (Bureau for the development of education, 2007). PE curriculum for this stage is structured in 5 themes named as (1) lining and space organization exercises (2) body shape exercises (3) fundamental athletic activities, (4) fundamental gymnastic activities, (5) games as well as additional contents realized in dependence of schools' possibilities and students' interests.

Beside general goals given in PE curriculum, for every theme there are specifically defined goals, contents, terms, activities and methods. Analyzing PE curriculum, general characteristic is orientation toward educational content, represented by fundamental moving abilities. Projected contents are elaborated within every theme in the section of activities, methods and terms. On the other hand, PE goals are elaborated in general, indistinctly and inaccurately (unclearly and imprecisely defined). They are mostly directed toward contents, specifically, the goal indicates the content and activities that should be realized.

Only small numbers of goals are oriented toward students' achievements and abilities, but these goals are defined in general, for example: to develop balance, to improve coordination etc. This segment from the curriculum is not complementary with the results obtained in the previously mentioned research. Although the motor structure obtained in this research is not clearly defined, researches point out that beside coordination, balance and accuracy as it is directed in Macedonian PE curriculum, for seven-year-old children, there are also abilities such as accuracy with leading, running speed, flexibility, as well as certain strength qualities, such as explosive strength, trunk, arms and shoulders strength etc. which are in line with developmental changes in this period (Malina et al., 2004). Therefore, according to our opinion, PE curriculum for early stages of primary education should be enriched with contents and activities used to initiate, provoke and develop mentioned abilities. Also, a standard that will ensure ways to asses and measure these abilities, as well as how to assess changes in motor abilities caused by practical realization of PE contents and activities should be designed.

Other notification directed to the current PE curriculum refers to lack of goals directed to psychological, social and emotional aspect and gains from physical activity. We consider that PE contents gives an ideal opportunity, using games and team activities for children to learn certain manners of behaviour, solving conflicts, positive feedback, personal development, manners of communication, interaction, cooperation, collaboration and many other so called life skills.

Intention of goals determined in the current PE curriculum in the Republic of Macedonia is motivating individual achievements according to students' possibilities, without clear distinction what is the basic minimum of achievement for every child in the sense of what should be learned, what should be developed and what should be the gain of that activity as a psychological, social and emotional effect. Because of this, we consider it necessary to redefine goals in the sense to design clear content standards as output results for students' achievements.

ANALYSIS OF CALIFORNIA PE MODEL CONTENT STANDARDS

A California PE model content standard is selected as representative role model for designing Macedonian PE content standards. California's PE standards (California Department of Education, 2009), focus on PE content and provide a comprehensive vision of what students need to know and be able to do at each grade from kindergarten through grade twelve. For elementary and middle school students, five overarching model content standards are accepted. It contains following standards:

Standard 1: Students demonstrate motor skills and movement patterns needed to perform a variety of physical activities. This standard refers to movement concepts, body management, locomotor movements, manipulative skills, rhythmic skills.

Standard 2: Students demonstrate knowledge of movement concepts, principles and strategies that apply to the learning and performance of physical activities. This standard refers to movement concepts, body management, locomotor movements, and manipulative skills.

Standard 3: Students assess and maintain a level of physical fitness to improve health and performance. It refers to fitness concept, aerobic capacity, muscular strength/endurance, flexibility, assessment.

Standard 4: Students demonstrate knowledge of physical fitness concepts, principles and strategies that are applied to improve health and performance. Elements of standard 4 are fitness concept, aerobic capacity, muscular strength/endurance, flexibility, body composition.

Standard 5: Students demonstrate and utilize knowledge of psychological and social concepts, principles and strategies that apply to the learning and performance of physical activity.

Standard 5 refers to self – responsibility, social interaction and group dynamics.

This model of five overarching standards is accepted for students from kindergarten up to grade eight, while in the secondary school, from ninth grade there is standards integration, standard 1 incorporates standard 1 and 2 from K-8, Standard 2 incorporates standard 3 and standard 4, while standard 3 incorporates standard 5. Standards designed in California's model clearly define what students should be able to do or should know after overarching certain PE content, making a clear distinction between knowledge, abilities, possibilities and effects. Therefore, according to our opinion this model could be used as a role model for designing Macedonian PE content standards. Similarities also could be found with obtained motor structure, as well as our intentions in organization and structuring of PE process in primary schools, where precise determination of PE contents areas is essential.

The integration of all three analyzed elements: current PE curriculum for early stages in the Republic of Macedonia; estimated motor structure for seven-year-old students as an objective base for children's potential; and California PE model content standards, points out the following three strands for the development of Macedonian PE model content standards:

Strand 1: Movement skills. This strand refers to the acquisition and the development of locomotor, non-locomotor and manipulative movement skills as well as theoretical knowledge of movement concept and principles.

Strand 2: Motor abilities - health related and performance related. This strand refers to practical manifestation of motor abilities, assessment, development and theoretical knowledge and recognition of motor abilities.

Strand 3: Psychosocial characteristics. This strand refers to the changes that occur and are developed during PE process in a sense of children's personality and interaction, a part that deprives in defined aims and teaching contents in current Macedonian national PE curriculum.

CONCLUSION

Scientific analyses and results obtained from researches applied in order to assess the structure of anthropological area as well as students' needs and possibilities, should be considered when strategic educational documents, such as national curriculum and content standards are being designed. Research results applied for estimation of developmental characteristics are objective indicators for students' potentials and possibilities, and are closely related with students' achievements. In this sense, clearly defined standards in relation with curriculum goals and contents are an objective way to assess students' achievements. Macedonian national PE curriculum does not provide standards for students' achievement. Therefore, an observation of experiences

from abroad was made and as a result of this analysis in relation to obtained results of an investigation of motor structure conducted on seven- year-old Macedonian students, the model for the development of national PE content standards has been proposed. It contains following three strands: movement skills, motor abilities - health related and performance related and psycho-social characteristics.

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ABSTRACT

The aim of this article is to propose a model for designing national physical education content standards in early stages of primary education in the Republic of Macedonia. Proposed model is based on the findings about motor structure of children at the early stage of primary education obtained in researches realized in 5 primary schools in Skopje, the Republic of Macedonia, in relation with Macedonian PE curriculum, and overarching standards for children at this age in California, USA, chosen as a representative PE model. As a result of detailed analysis of mentioned documents and results, a model with three defined strands under which the PE standards should be established is proposed. It contains following stands for the development of Macedonian national PE standards: movement skills, motor abilities and psychosocial characteristics.

Key words: *physical education, content standard, curriculum, students, achievements*