

PRIMARY SCHOOL PHYSICAL EDUCATION IN REPUBLIC OF MACEDONIA - CONDITION AND CHALLENGES

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INTRODUCTION

Physical and health education are an integral part of the overall educational system, which affects the overall physical, mental, moral and aesthetic development of personality in general. Based on these facts, the task of the teaching process is to develop a full personality of the student, taking into account the focus of the teacher is the student, rather than body exercise, through which the teacher affects students' capabilities. Realizing the significance, place and role of physical or health education through history we can safely conclude that the early development of education physical and health education gets an important place, which is influenced by cultural and civilizational processes, especially under pressure science and knowledge are integrated as part of general education.

Purpose of teaching physical and health education is meeting the need for movement, contributes to increase adaptive and creative abilities in modern conditions of life and work, the development of health culture. Save tasks and creating lasting physical exercise habits to incorporate into the overall culture of life and living. The purpose of teaching physical and health education is to develop positive mental qualities, and besides establish effective motor skills and guide the students to acquire knowledge, skills and habits of movement.

In primary schools besides regular classes, physical and health education is realized through various forms of extracurricular school activities. For this purpose almost all schools are established and specific student organizations - school sports associations were established again the school system of sports competitions, thus allowing students through an appropriate system of competitions to engage in the sport life of our country. In parallel, significantly modernize curricula, improved material, personnel and other conditions. Speaking in the manner for system significance, physical and health education in recent decades has outgrown the framework of the subject and has grown in educational field in the truest sense of the word. Teaching physical education and a health course, it retained its original features and its commitment to build healthy students and psycho-motor capable individuals to engage in physical culture and life in general.

THE SYSTEM OF PRIMARY PHYSICAL EDUCATION IN REPUBLIC OF MACEDONIA

Changes in all segments of social living in the past few years resulted with numerous changes and reform processes in the segment of education. The last big reform in the educational system in Republic of Macedonia was made in 2007 when the system of primary education was transformed from eight year education to compulsory nine year education system in the primary education, with three cycles of study: first cycle – first to third grade (from six to eight years old, starting with minimum five years and eight months age); second cycle - fourth to sixth grade (average age from nine, ten and eleven years old); third cycle – seventh to ninth grade (average age of twelve, thirteen and fourteen years old) (Conception for nine-year compulsory education, 2007). The changes integrated in the new conception of the educational system are based on previous experiences and noted disadvantages and results from teaching practice, positive experiences from other countries as well as the requirement to educated children to be a citizens of the fast changing

world. Based on these, the new conception in Macedonian system of education integrated several main principles such as democracy, integrity, inclusion, equality, respect of individual differences between children, education for development of complete personality, active participation in school life and society, quality education and international comparability of knowledge, preparations for lifelong learning, education for multiculturalism, competences, responsibility as well as cooperation between school, parents and local community (Conception for nine-year compulsory education, 2007). These basic principles were integrated in the new educational programs for all school subject, including physical education.

Physical education has an important role and place in the educational system in Republic of Macedonia. The subject is named “*Physical and health education*” and it is realized with three school hours during a week, or 108 school hours during the school year (1 school hour 40 min.) or 16,21%. From the total number of classes, three school hours during the week for all three cycles could be consider as good representation compared with other subjects, for example art and music are realized with 2 school hours per week in the first to cycles and one school hour in the third and mathematics that is realized with four school hours per week in all three cycles.

Physical and health education teaching process is realized according the national curriculum as a fundamental document, suggested by the Bureau of Education. The aims and tasks suggested in PHE curriculum are according the main educational goal: holistic and harmonius development of children according their individual abilities and development characteristics. The specific goals determined in PHE curriculum are realized with different physical education contents and fundamental motor activities that activates the locomotor system and have a positive impact and influence on symmetric growth and proper holistic development of the children, improving their physical and motor abilities, promoting health and active lifestyle. Activities suggested in national PHE curriculum are designed to enhance and have positive impact toward all aspects of child development – cognitive, psychomotor, emotional and social. Participating in PHE classes’ apart the acquisition of habits for regular physical activity as a manner for maintaining health and good physical condition, students also perceive the need for their active involvement in various sporting activities in their further education and their lives in general. Other goals of PHE are determined as: aquisition of system of motor knowledges and skills, efficient and creative functioning, development of social conscience, national and cultural identity, development of conscience for care and protection of health and importance of main- taining healthy environment (Conception for nine-year compulsory education, 2007).

Considering the differences that occurs in all segments of children development in different age periods as well as respecting the requirement educational contents to be based on children’s real needs and possibilities, different aims and according this different PHE contents are determined in each cycle.

The main purpose of the **first cycle (1 – 3th grade)** is to propose different PE contents, fundamental movements, exercises and movement games that will activate children’s locomotor system and will improve children’s symmetric and regular growth and development by improving their motor abilities and health and enhance the healthy life style. All these activities also stimulates children’s cognitive psychomotor, emotional and social development and should create a platform of different movement routines and abilities that will facilitate children’s future participation in different sports.

The purpose of the **second cycle of studies (4 – 6th grade)** is continuum of the purposes of the prior cycle with emphasis of learning of basic elements of techniques of certain sport and to familiarized children with the need of regular exercise as well as the benefits of being actively enrolled in different sport activities during the future education and life.

The aims of the **third cycle of studies (7 – 9th grade)** are logical continuum of the previous one, emphasizing the participation in different sports and mastering the basic technics from many sports. From the aspect of health and overall development, one of the aims of the selected sport programs in this cycles of study is help students to reduce stress and improve health, tolerance and cooperation by being engaged in sports and physical activity. These general aims for all three cycles, furthermore are clearly defined and structured in specific aims for each development period or cycle and aims and for each grade. They are related with motor learning and motor performance (development of motor abilities and acquisition of different movement skills), health related and educational tasks that emphasize the development of personal characteristics and positive behavior concepts using physical education contents.

These general aims in all cycles are further concretized for each cycle and clearly defined for each grade. Following objectives are defined for the **first development period from 1st to 3th grade:**

- To encourage to develop fundamental locomotor movements and to overcome new movements and skills.
- To encourage to maintain proper body position and posture in different movements and positions.
- To create positive attitude toward physical activity and sport and to encourage to participate in different sports and activities based on individual interests and preferences.
- To enables collaboration, teamwork and fair play conduct during the execution of activities, games in school and outside of it
- To develop the ability for coordinated motorical movement and orientation in space
- To develop psychomotor skills (dimensions) through games and physical activities
- To be trained to do assessment of his physical capabilities
- Dispose of stress and tension through organized physical activities
- To introduce and perform dances and games in a different rhythm and movements (PHE curriculum for 1– 3 grade).

Objectives for the second development period, from 4th to 6th grade:

- To apply for training exercises and proper physical development
- To develop the physical, functional and psychomotor skills
- To perform exercises correctly and symmetrical morphological development, properly holding the body and proper function of the locomotor apparatus
- To carry out and implement coordinated and correct exercises for strengthening, stretching and loosening
- Introduces in sports to develop an interest in sports
- Develop orientation in space with exercises and complexes of motor skills (coordination of movements, strength, speed, flexibility, resourcefulness, balance, explosiveness, etc.).
- Accomplish new exercises and items from the basics of sports and game (character, dancing, etc.).
- To enrich their sports knowledge by learning the proper techniques and elements derived from the basics of athletics, gymnastics, rhythm, dance.
- To know and practice the rules of the games and to equally participate in team
- Acquire health hygiene and health promotion.
- To be trained to be able to assess its physical and athletic capabilities
- To form a positive attitude towards physical activity and sport and opportunities
- Get acquainted with the benefits of sport and the sport gradually reveals a personal affinity for a particular sport
- Be trained in teamwork and fair play conduct during the execution of games and sports

- Be able to absolve themselves of stress conditions and physical and psychological tension through physical exercise
- To apply health and hygiene practices and promoting their own health and hygiene
- To learn and apply the concepts of educational and educational area of physical and health education, sports equipment, devices and devices in accordance with the curriculum (PHE curriculum for 4th – 6th grade).

Objectives for the third development period from 7th to 9th grade.

- To perform exercises correctly and symmetrical morphological development, correct posture in all positions and proper function of the locomotor apparatus
- To carry out and implement coordinated and correct exercises for strengthening, stretching and loosening, and elements of the sports grounds for the creation of sports
- To apply and develop locomotor coordination and spatial orientation exercises and complex exercises
- To participate actively in learning and acquiring new exercises and items from the basics of sports and games (Relay, character, dancing, games without borders, polygons, etc).
- To enrich their sports knowledge by learning the proper techniques and elements derived from the basics of athletics, gymnastics, rhythm, dance and basics of sports games
- Know the rules of the games evenly participate, cooperate in team
- To develop positive attitudes, health hygiene habits, and love for good health and nourishing one's body
- Develop positive psycho-social and interpersonal communication skills
- To develop skills for positive emotional expression matches (PHE curriculum for 7th – 9th grade).

These aims are realized by different physical education contents and sport activities defined in the national PHE curriculum for each grade in all three cycles. The curriculum is created and proposed by the **Bureau for Educational Development**¹, approved and accepted by the Ministry of Education and Science and is considered as official national document for realization of physical and health education teaching process. Regarded the structure of the current PHE curriculum, for all three cycles of study, it is composed from *compulsory thematic unions* and *optional thematic unions*. Starting from the first grade and moving through grades and cycles, the contents and tasks for the **compulsory thematic unions** are updated, expanded and deepened allowing continuum in acquisition of knowledge based on children`s development and expected progress. The number of compulsory thematic unions is also variable as a result of implementation of new contents in upper grades. In Table 1 are presented compulsory thematic unions contained in current PHE curriculum in the Republic of Macedonia. As noted in the table, activities for proper motor development and body shaping, gymnastics and athletics are compulsory in all nine grades. Contents for gymnastics and athletics in the first cycle are basic fundamental movement such as walking, running, jumping, crawling, turning etc., that are foundation for acquisition of basic technics in latter stages. This is also a case for the unit Bases of sport games in 4th and 5th grade where fundamental movements such as hitting, catching and other manipulative motor movements are used as an introduction in sport games, utilized in upper grades as elements and technics from basketball, handball, volleyball and football.

Optional thematic unions are realized in cooperation with parents and local community and their realization is

¹ **Bureau for Educational Development** is an administrative body within the Ministry of Education and Science as a legal entity and perform professional activities relevant to the development and promotion of education in the country

related with possibilities of local environment, natural resources and material facilities in cooperation with local community. The optional thematic unions are same for all nine grades in primary education. They are following: *Activities on water, Activities on snow, Driving – bicycling, rollers; Activities in nature - hiking, picnics; Mini tennis; Badminton; School sports; School projects and school competitions /sport workshops*. The possibility to propose and implement different specific sport activities using local resources, mainly the beauties of the nature in the local community context is beneficial from many aspects. It gives a possibility for children to be familiarized with many different sports that can't be applied in school context (for example: skiing, hiking, cycling, ice skating, orienting, etc) but could be used as leisure time activities together with whole family, children are getting familiar with the natural beauties of their local environment but also knowledge how to behave in nature and how to take care for it. These types of activities could be also used for the school context as a form for creating integrational and correlational relationships between PHE and other subjects (for example natural sciences, geography, biology (Jovanova – Mitkovska & Popeska, 2015; Popeska & Jovanova – Mitkovska, 2016a; Popeska & Jovanova – Mitkovska, 2016b) and in wider context related with the cooperation between the school and the parents.

Table 1. Representation of compulsory thematic unions in PHE curricula from 1st to 9th grade

Cycle of studies	Compulsory thematic union	Grade
First cycle	<i>Get know yourself</i> (my body – my high, my weight, what can I do with it, how it can move)	1st grade
	Lining and organized movements	1 st , 2 th 3 th grade
	Movements for body shaping	1 st , 2 th 3 th grade
	Basics of athletics	1 st , 2 th 3 th grade
	Basics of gymnastics	1 st , 2 th 3 th grade
	Movement Games	1 st , 2 th 3 th grade
First and second cycle	Movements for proper motor development and physical preparation	4 th , 5 th , 6 th 7 th 8 th 9 th grade
	Athletics	4 th , 5 th , 6 th 7 th 8 th 9 th grade
	Gymnastics and rhythmic	4 th , 5 th , 6 th 7 th 8 th 9 th grade
Second cycle	Fundamentals of dances	4 th , 5 th grade
	Bases of sport games – basketball, handball, volleyball, football	4 th , 5 th grade
Second and third cycle	Dances	6 th 7 th 8 th 9 th grade
	Handball	6 th 9 th grade
	Basketball	6 th 7 th 9 th grade
Third cycle	Volleyball	7 th 8 th 9 th grade
	Football	8 th 9 th grade
	Table tennis	9 th grade

For each thematic union in PHE curriculum following parameters are prescribed: aims, contents, examples of concrete activities, method of work, didactic recommendations for successful implementation of curriculum and its efficient practical realization as well as manners for evaluation of children`s achievements. These are used as directions that should help the teachers in the process of preparation and practical implementation. Yet, the success and the effectiveness of the final realization is highly related with teachers abilities to plan and organize the work, to select most effective methods and forms of work based on the reliable material conditions and equipment in order to ensure the maximal involvement of all children during the class as well as of his/hers ability to select and propose the right exercises for each thematic union based on students abilities and interests. Therefore, aldo the unified curriculum for all schools is proposed, the effects itself are determined a lot by teachers knowledge, personality, approach to work, organizational abilities and creativity. Lot of these competences are learned during the educational process of the

teachers and their university studies.

Considering the importance of collecting information for the state of growth, physical and functional abilities of students, the impact of physical and health education of their growth and development, it is need monitoring of some parameters. With this work is enable to make continuous insight into the physical and functional abilities of students. Monitoring of students is in continuity and with special emphasis on the beginning and end of the school year. These indicators reflect the actual condition of students capabilities and development features. According to the reforms in primary education or the introduction of nine-year school (three cycles after three years), it has emerged need to revise the assessment and its adjustment of the modern education system. In the first three grades the assessment of physical health education is descriptive, while at 4th and 5th grade is numerically. The assessment should be quality, cost-effective, to be the result of the student, not its total psycho-motor and intellectual abilities, his knowledge, skills and habits, values and similar. In objectivity of monitoring, evaluation and assessing in contemporary teaching technology of physical and health education are needed solutions that will be objective and quality.

Assessment as an integral part of the teaching process checks - evaluate the quality of the educational work, interest in the course, student achievement in teaching, engagement of students, sports knowledge, skills and physical progress, efforts, attendance, equipment, fulfillment of health and hygiene habits work. By assessing the classification and objectively we perceive the success of each student, respecting the pedagogical rules. The actual assessment will help the student to see objectively and self-critical the results of his work, compared with the grade obtained, and the results with other students in the class. The assessment is also connected to the personality of the teacher, his conception, principles and methods of assessment. When assessing student, teacher of physical and health education should adhere to the following: assessment to be individually; assessment to be versatile; assessment to be systematically and assessment to be fairly

Sport days. Other form of activtie at PHE classes are sport days (10 hours). Sport days means organizing and participating in various sport competitions organized by the school itself or from other stakeholders (municipality, city, state). These competitions have the greatest impact on students and teachers, and it is a prestige to get into school sports teams that are on a high level and for each teacher is very pleased to rank at state competitions. The teacher because of the credibility that gets through teams and his work with them, it is the greatest satisfaction and the opportunity to truly express self in his field.

EDUCATION OF PHYSICAL EDUCATION TEACHERS IN PRIMARY SCHOOL IN REPUBLIC OF MACEDONIA

In primary school education system in Republic of Macedonia, the subject physical and health education is delivered by general primary school teachers (classroom teachers) up to 5 grade and specialized PE teachers that teaches only PE at 6th, 7th, 8th and 9th grade. Considering the educational work that they should deliver as well as different age group that they are working with, the university education of these two group of teachers is quite different.

General primary school teachers or classroom teachers, are working with children from first to fifth grade and they are running the same class starting from the first grade in the period of five years. These teachers are educated at two different institutions: Pedagogical Faculty/Faculty of Educational sciences (at Universities in Skopje, Stip, Bitola and Tetovo) or at the Faculty of Philosophy, particularly Institute for Pedagogy at the University in Skopje. These studies are four year undergraduate studies, evaluated with 240 ECTS. The title of the diploma obtained after the studies at Teaching

Faculty or Faculty of Educational Science is named as “graduated primary school teacher”, while for the students graduated at the Institute of Pedagogy is named as “graduated pedagogue”.

Speaking about the Pedagogical Faculty/Faculty of Educational sciences, the all three existing faculties in the Republic of Macedonia have similar curricula, entrance requirements for the students as well as similar practices with practical work of the students. These similarities are also noted in regards of the Physical Education. Related to applications and entrance requirements for future students, a central application system is applied, based on points according the success of the studies and points from the state exam. Beside the scores from state exam and success from the high school education, at some Teaching faculties there is established process of additional selection by applying “Test for psychomotor and mental abilities”. It is realized in a form of open interview, face to face with the candidate mainly with aim to determine student’s ability for narration and oral expression, sense for rhythm, verbal abilities, and coordinative abilities.

Related to Physical education, in study programs at all Pedagogical faculties/ Faculty of Educational sciences, there is two obligatory courses named as Basic of Physical Education/Physical education methodics 1 (complete name is Physical and health education with methodics 1), and Physical Education with Methodics /Methodics of Physical education (complete name is Physical and health education with methodics 2). Both courses are realized in different semesters and contents are realized within classes for theoretic lectures, practical exercises, independent work of the students and individual consultations. Practical exercises for the second course (Physical Education with Methodics/Physical and health education with methodics 2) are realized in primary school as observation classes and individual realizations of the students mentored by primary school teacher and university professor. Each course is evaluated with 8 ECTS. The precondition for final exam is realization at least 6 independent PE classes at school, individual preparation for each of them and critical analyses of PE classes realized by students – colleagues. Beside this, at the end of the last, fourth year of study, each students should have a 15 full days of practice in primary education.

Beside this obligatory courses, from the segment of physical education, future primary school teachers could select and enrol different selective courses (faculty and university selective courses) that are also evaluated by ECTS, realized as theoretic lectures, practical activities and independent work. Some of these courses are named as: Theory and practice of movement games, sport pedagogy, sport and recreation, kinesiotherapy, etc.

Specialized physical education teachers, or subject teachers that teach at 6th to 9th grade are educated at the Faculty of Physical education, sport and health at the University in Skopje and Faculty of Physical Education at the University in Tetovo. These studies are also realized as four year undergraduate studies, evaluated with 240 ECTS. The title of the diploma obtained after the studies at the group for physical education is “graduated physical education teacher”. In the last few years, beside the scores from general success from secondary school and scores from state exam, there is no additional requirements or tests for the candidates as a criteria for selection or elimination.

CHALLENGES, CURRENT ACTIVITIES AND FUTURE ACTIONS

As in many other countries, physical education in primary education in Republic of Macedonia is also faced with many challenges, obstacles and problems but also many activities are done and taken in order to improve it.

One of the constant obstacles related to physical education in primary education are available sport facilities and equipment for PHE classes in primary schools. This problem is mainly dominant in first two cycles where primary school PHE classes are realized by general primary school teachers and in where teaching process is realized in only one shift and it is not a problem in schools where there is two shifts – morning and afternoon. The geographic location of Republic

of Macedonia with more than 150 sunny days during the year, four seasons' climate conditions as well as structure of the curriculum and possibility to realize activates from optional thematic unions which are mainly outdoor activities are possible solutions. These means that curriculum by itself is opened toward these activities and depending from the teacher's creativity in accordance with the organizational abilities of the management of the school, these obstacle could be easy overcome. Other possible solution used in certain exceptional situations is implementation of classroom movement games. Different movement games especially the one that require certain preciseness are successfully used in this regard (Popeska & Mitevski, 2016; Popeska, Klincarov, Mitevski & Nikovski, 2013). Speaking about the equipment for PHE classes, lot of solutions are possible depending from the creativity of the teacher, especially when speaking about PHE in the first cycle of study. Use of many inconvenient sport equipment such as elastic band, rope, parachute, plastic bottles, classroom chairs, classroom bans, handmade puzzles etc, are used in certain situations when realizing PHE contents (Popeska & Mitevska- Petrusheva, 2014; Popeska 2015). Suggested options could not, and should not replace the standard PHE equipment but could be useful in many situations and also could change the approach and the point of view for both teachers and students.

The Conception for nine-year compulsory primary school education from 2007 (Conception for nine-year compulsory education, 2007) bring several new innovations grounded with the implementation of nine-year education, and which are with aim to realize the holistic approach, integral development of children and wholeness of the acquired knowledge. Some of these innovations refers to the requirement 70% of the contents of certain teaching subject to be correlated with the contents of other subjects and the requirement for implementation of ICT in the school subjects, particularly compulsory implementation of 30% ICT in teaching all school subject including physical and health education. The requirement for correlation of PHE contents with different school subject has its own physiological basis in the functioning of the CNS where the centers for logical thinking and problems solving are integrated with the centers for motor activity and motor learning (Malina, Bouchard & Bar - Om, 2004). The current PHE curriculum in Macedonia, especially in the first cycle of study, 1st to 3th grade, when the emphasis of holistic approach in children learning is very important, offers excellent possibilities for achieving the required intersubject correlation. The actual practical implementation of this requirement will depend primarily on the skills and the creativity of the teacher. In this regard, several studies are made in order to emphasize the need, values as well as all possibilities for these type of work and results suggest that contents from PHE curriculum could be successfully realized in correlation and integration with mathematics, natural sciences and music (Jovanova – Mitkovska & Popeska, 2015; Popeska & Jovanova – Mitkovska, 2016b). As practical actions, several workshops with teachers and student - future primary school teachers are realized. This issue is also included in some university study programs at the Faculty of educational sciences/ teaching faculties.

The requirement for compulsory implementation of 30% ICT in teaching all school subject including physical education and considering the subject main goal – promoting physical activity and movement, future actions should be carefully selected and implemented. If we distance from the first association of computers which is sedentary style, the implementation of ICT in PE process could be a positive thing if is done properly. In this regard, starting from 2015 as a pilot project, two schools from Republic of Macedonia were introduced with “Brain Break”, 3-5 minute classroom based physical activity, active break which do not detract from the current curriculum or realization of the school program (Popeska & Jovanova - Mitkovska, 2016). These Brain Break video are suggested by the CDC, HOPSports as an interactive platform created aim to increase student's daily physical activity levels by connect children in classrooms around the world by sharing culture and country/region depictive sports, dance and the arts in classroom-based and core-curricular integrated physical activity (<http://hopsports.com/>). These form of implementation from the aspect of involved

teachers was evaluated as interesting, easy to apply, interesting for children, motivating etc. (Popeska & Jovanova - Mitkovska, 2016). The other possibilities suggested to the teachers and students – future teachers are related to implementation of ICT in PHE process as a method for visual demonstration of some contents and technics; method for evaluation of individual progress by filming consequent performances of certain movement tasks, analyzing the learning process; manner for evaluation of students performances – heartbeat, speed of movement; method for self-evaluation; implementation of different smartphone applications as a form for motivation for physical activity etc.

CONCLUSION

As integral part from the educational system, physical and health education has important role in overall development of children. Realization of PHE contents defined in the Macedonian national curriculum is not pointed just to the development of motor abilities and behavior but also affects to all other segments of child development – cognitive, social, emotional and conative. This paper analyzes the current situation with primary physical education in Republic of Macedonia from the aspect of its representation in all grades, the structure and realization of the curriculum, its aims and contents, extracurricular activities as well as the system of education of PE teachers. We also analyzed the latest changes in the curriculum, problem and challenges that teachers are faced with as well as some of current activities and practices to overcome them and improve the effectiveness of realization of the teaching process.

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