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Faculty of Physical Education, Sport, and Health

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TANDEM TEACHING IN PHYSICAL AND HEALTH EDUCATION CLASSES FROM TEACHER`S PERSPECTIVE

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Abstract

Physical education is integrated part of educational system in Macedonia. Its effectivnes and realization are determined by many factors and teachers are one of those factors. This paper analyses the possibility to influence the effectives of PE teaching process by implementing tandem teaching of generalist teachers and physical education specialist at PE classes. In this process, the opinions of the main involved actors are the most relevant for the effectiveness of suggested model. Therfore, the aim of this study was to investigate the opinions of generalist teachers and PE specialist for implementation of tandem teaching. The research was realized on a sample of 118 teachers, 83 generalist teachers and 35 PE specialist from 15 primary schools in Republic of Macedonia. Specialy designed questioner was applied. The results suggest that both group of teachers supports the idea of tandem teaching but also that additional workshop, seminars and other forms of education are required. The paper emphasizes the benefits from implementation of tandem teaching and also suggest the future steps in the implementation process.

KeyWords*: physical education, teachers, tandem.*

Introduction

Education is one of the most important segments in human lives providing knowledge and experiences that determine the future of each human and each country worldwide. As one of the segments of everyday life, education is closely related and influenced by changes in other segments in everyday life and existence – economical, social and political. These changes results with many educational reforms in different segments of education that should make it more reliable to needs and requirements of the society and everyday living. As integrated part of the educational system, physical education is not exception from this process of reforms and constant changes.

The values and importance of quality physical education are recognized by many international institutions such as UNESCO, United Nations, European Commission. UNESCO recognize physical education as "the most effective means of providing all children and youth with skills, attitude, values, knowledge and understanding for lifelong participation in society" (Quality PE report, 2013: pp 6). Values of physical education that are not only related with physical and motor development but also referring to good health, personal development and social inclusion are recognized and emphasized by the European commission (Euridyce report, 2013). In the White paper of sport (European Commission, 2007a) it is underlined that "time spent in sport, whether in school physical education lessons or extracurricular activities, could result in substantial education and health benefits". These values of physical education are recognized on the national level as well. As underlined in national conception for education of Republic of Macedonia (2007), physical and health education curriculum is 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. Other specific goals of PHE are determined as: acquisition of system of motor knowledge 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 maintaining healthy environment. These specific aims of PHE are in accordance with the main educational goal: holistic and harmonies development of children according their individual abilities and development characteristics (Conception

for nine-year compulsory education, 2007). More important than only theoretical determinations of the goals of PHE education curriculum is its realization, implementation in practice and effects that this implementation has on children. Regarded this issues, teachers particularly their education, competences and motivation are the key factors for successful implementation of PHE curriculum and realization of PHE process. As emphasized in the report of the Expert Group on Health-Enhancing Physical Activity, (2015) "physical education teachers are key agents for putting physical and sport policies into practice". Putting teachers work in the spotlight as an agents for effectiveness of PHE teaching process, indicates on importance of their work and effects from that work. In these regard, and related with previously indicated processes of constant reforms in the educational system aiming to make it more reliable to the needs of contemporary society, are the last reforms in educational system in Macedonia.

Namely, the current situation in Macedonia related to PHE teaching process and its effectiveness indicates a decrease of quality of its realization. Although there is an evident luck of research data that will justify this decrease of quality of PHE realization, yet is notable and evident in everyday work and practice. Apart from common problems and obstacles that exist in everyday work related with PHE process such as luck of equipment and material facilities, improper designed of certain unions in current curriculum (Popeska, Klincarov, Mitevski & Nikovski, 2017) some of noted problems are also related with teachers education, competences and possibility for constant learning and improvement. In this regard, teachers reported luck of instructions for work for specific thematic unions within the regular curriculum, problems with practical realization and demonstration of certain contents as well lack of opportunities for professional development (Popeska et all, 2017). These results indicate that certain changes are needed in the segment of teachers work and delivery of physical education. In this regard, using the positive experience from some European countries in the first line the experience from Slovenia, one of the suggested reforms in education in Macedonia is implementation of Tandem of generalist teacher and PHE specialist in PHE teaching process in primary education.

Currently, in primary school education system in Republic of Macedonia, 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 deliver the subject physical and health education. 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. Generalist teachers are educated at Teaching Faculties and Faculty of Philosophy, particularly Institute for Pedagogy. PE specialists are educated at Faculty of Physical education, sport and health. The education of both groups of teacher as well as within the group of generalist teachers is different regarded the knowledge for bases of physical education, methodical and didactical aspects of realization of PHE teaching process, knowledge for development characteristics of children in different age periods, PHE contents and level of practical preparation (Malcev & Popeska, 2017). The suggested reforms for implementation of tandems should integrate the qualifications of both group of teachers and consequently is expected to improve the effectives of realization of PHE teaching process and effects on children.

The tandem by itself means common work of generalist teachers and PHE subject teachers as partners in teaching process. This means equal participation in planning and preparation of PHE classes, equal participation in practical realization, equal obligations and responsibilities as well.

Tandem teaching is not unknown form of work in primary education, aldo is not very common practice in Europe and worldwide. Based on results presented in UNESCO worldwide study for physical education, primary education PE is delivered 79% by generalist teachers and 31% by specialized PE teachers. For example, in Malta, each class has both type of teachers. Specialist teacher in charge for one-lesson and generalist teachers in charge for the remaining lessons. Based on analyses in Eurydice report from 2013, in some European countries such as Germany, France and Ireland, classroom teachers are supported by sport coaches or advisers for some PE lessons. The tandem teaching as suggested in reforms in Republic of Macedonia already exist as a positive practice in Slovenia. In this country, both generalist teachers and PE specialist work together at PE classes at elementary primary education. This concept is evaluated very positive from both group of teachers.

Considering that the reform for implementation of tandem teaching in PHE is oriented toward teachers that deliver PHE in primary education, we were interested in their opinions for this issue. In this regard, we designed this study with aim to identify the opinions of generalist teachers and PHE subject teachers related with implementation of tandem teaching at PHE classes in elementary stage of primary education.

Material & methods

The study was realized on total sample of 118 teachers, from 15 primary schools in four different cities in Republic of Macedonia. From the total sample of participants, 70% or 83 participants were generalist teachers, while 30% or 35 teachers were specialized PE teachers. The study was realized in May, 2017. Descriptive analytical and descriptive explicative analyses were used as method of research. Teachers opinions for their competences, initial educational preparation for delivering PE in primary education as well as the possibility for implementation of tandem teaching, were identified using specially designed questioner. The validity and reliability of the questioner were previously determined an published in separate study. The questioner was composed from four different questions with four suggested answers. The obtained data were analyzed using frequencies (f) and percents (%). Results are also presented graphically.

Results

The first question refers to teachers opinions for possibility for tandem or co - operational teaching in physical education from first to fifth grade. Following options were suggested: it is possible working together with generalist teachers as tandem; possible as cooperators and professional advisers to generalist teachers; possible as cooperators and tandem teachers to classroom teachers for certain specific units and it`s not possible, there is no need for such organization. The obtained results from both groups of teachers are presented at Figure 1.

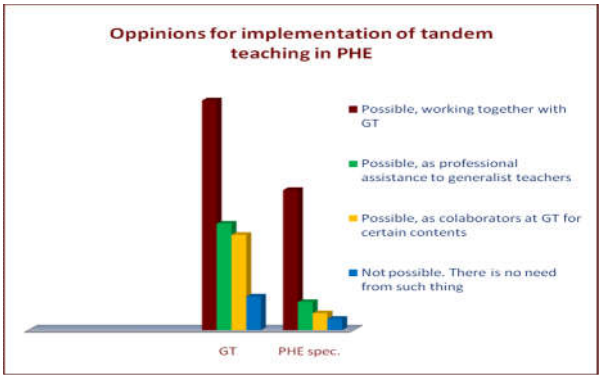

Figure 1: Tandem teaching

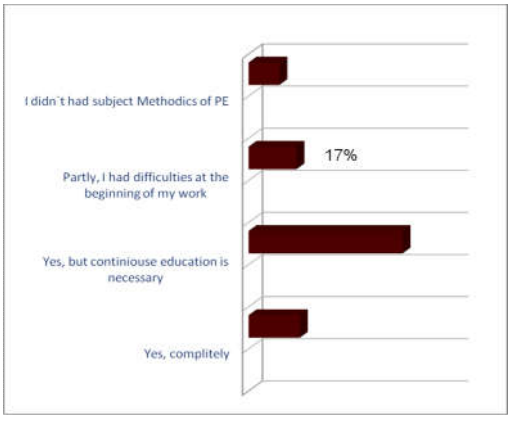

Figure 2: Satisfaction from aquired knowledge for PE didactics during university studies – Generalist teachers

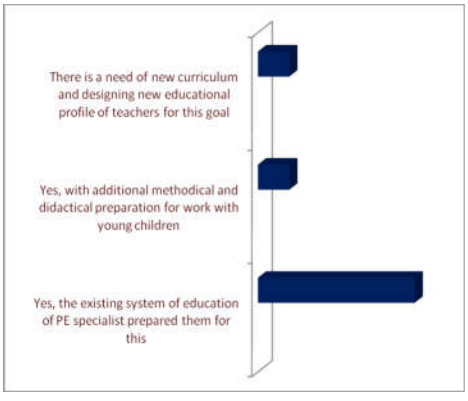

Figure 3: Satisfaction from aquired knowledge for PE didactics during university studies – PE specialists

Realization of physical education process requires teachers to have certain knowledge from kinesiology related with motor development of children, children motor abilities and skills, basic principles of physical exercises, theoretical and practical knowledge for fundamental movements, elements from certain sport disciplines etc. Teachers should also have specific pedagogical and

psychological knowledge for work with children in different age periods as well as specific knowledge from methodic and didactics of physical education. All these aspects integrated together are one of the important factors for successful realization of PE teaching process. Therefore, the following two questions are related with satisfaction from the level of acquired knowledge during initial studies at faculty for both, generalist teachers (Figure 2) and PE specialists (Figure 3) and need of additional education and continuous development in this segment (Figure 4).

The realization of curriculum should be related with children needs and possibilities in certain age period, but the success of its implementation is mainly related with teachers knowledge and abilities to deliver the curriculum contents at best possible way and most efficient manner. Therefore, the issue of curriculum delivery is closely related with teacher's education, which was previously mentioned. The responsibility that teachers has on effectiveness of curriculum realization, as well as their everyday work and experiences, suggest on great competences that teachers has in evaluation of current PE curriculum. This also put teachers in position to suggest changes and improvements in this segment. Regarded this, the last question refers to teachers opinions for current PHE curriculum for primary education and possible needs for changes. The obtained results are presented in Figure 5.

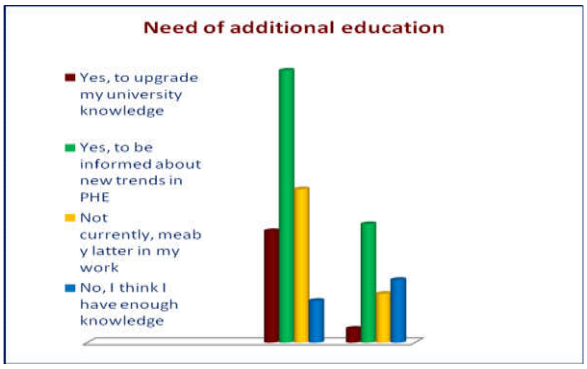

Figure 4: Additional education and continuous development in PE teaching

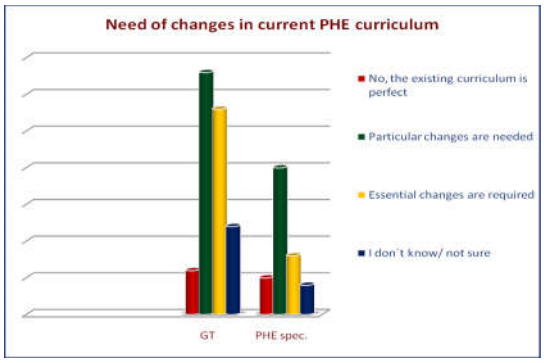

Figure 5: Possible changes and improvements in current PHE curriculum

Discussion

According the results for the first questions that investigate teacher's opinions for possibility for tandem or co - operational teaching in physical education from first to fifth grade, the highest percent of interviewed teachers in both group, particularly 49% of generalist teachers and high 71% of PE specialists agree that to work together as tandem teachers. The next highest percent of choices or 23% of generalist teachers and 14% of PE specialist consider that PE specialist can be professional advisers to generalist teachers. These form means that responsibilities and realization are mainly to generalist teacher but PE specialists can be included as support, help and advice in process of planning, selection of content and if needed demonstration in certain part. For 20% of generalist teachers and 9% of PE specialists, this role of PE specialist is needed only for some specific thematic unions. The smallest percent of interviewed teachers, particularly 7% of generalist and 6% of PE specialist consider that operational and tandem work between both groups of teachers is not needed, it`s impossible to be implemented, suggesting that current organization is acceptable and should not be changed. Based on obtained results on this question, it`s notable that both, generalist teachers and PE specialist recognized the need of co -operational and tandem work at PE teaching process in elementary level of primary education. This means a green light for latest suggested educational reforms. Considering that both group of teachers are aware of benefits from this process, next steps should be oriented toward precise determination of the tandem model, clear distinction of tasks, requirements of both group of teachers and professional training for how this process should be implemented and realized most effectively.

Following two questions are closely related to implementation of tandem teaching. They are investigating the level of knowledge of teachers for didactics of PE and their need for continuous future professional development, considering that the university education of both group of teachers is realized in different institutions and different study programs. From the sample of generalist teachers 54% are satisfied from the level of knowledge that they had during university education related to PE, but also

emphasize the thing that is essential for teachers – continuous learning following the changes in educational requirements. From all interviewed generalist teachers, 15% are very confident and completely satisfied with current level of education, while 14% reported that they had difficulties at the beginning of their work. These answers could be result of several factors. Some of them could be different personal level of activity of teachers during their initial education, manner of education or whether they were full – time or part time students or suggest on different quality of delivery of didactics of PE at different universities that also, in some points is closely related with different maintains of hours for practical work (Jovanova – Mitkovska, Poepska & Smilkov, 2014). One group, particularly 11% of generalist teachers reported that they never had subject Methodic of PE. This is not surprising, considering the fact that in Macedonian educational system, generalist teachers could be teachers educated at Teaching faculties having diploma "graduated generalist teachers" and teachers that had diploma qualification "graduated pedagogues" and were educated at Faculties of Philosophy, studies for pedagogy (Conception for primary education, 2007). The structure of study programs of both groups of studies is completely different especially in terms of methodic of certain subject, mainly physical education, music education and art education. This difference and possible consequences from it are also emphasized in other studies (Popeska, Klincarov, Mitevski & Nikovski, 2017; Malcev & Popeska, 2017) alerting that all generalist teachers at state level should have proper and equal education for PE. Related with the sample of PE specialist, the level, their satisfaction for acquired knowledge from methodic of PE and competences to deliver it in elementary phase of primary education, 72% are satisfied with the existing system of education required for effective delivery of PE teaching process in primary education. From total sample of PE specialists, 14% consider that additional methodic and didactic preparation is needed, while 14% consider that essential changes in this process are needed in order to be fully competent to deliver PE at all levels of primary education. The explanation of this result could be given with analyses of study program at Faculty of physical education, sport and health where 97% of interviewed participants were educated. Namely, this study program offers variety of subjects from different sports, sport disciplines, methodical, psychological, social aspects of work but particular subjects related with educational work with small children are missing. These answers indicate the future actions that should be oriented to need of continuous education of both group of teachers and development of specific qualification required in the work with children in early and middle childhood.

Preparedness for continuous learning, improvement of competences and knowledge is investigated in the third question in the interview. Based on results, the highest percent of teachers, particularly 47% of generalist teachers and 49% of PE specialist have need of additional education, workshop and seminars in order to be informed for new trends in PE education and manners how to improve their work. The need of additional education in order to upgrade university knowledge is reported by 19% of generalists and only 6% of PE specialist with is in line with results from previous question. Nearly half of PE specialists (45%) and 34% from generalist teachers are not so interested for improvement of personal knowledge, reporting that currently they don`t need any form of additional education or improvement (26% GT and 20% PE specialist). Surprisingly, almost 25% of PE specialists and 8% of generalist teachers are very confident in their knowledge and don`t need additional professional improvement at all. The explanation in the results for final two groups can be found in several reasons such as age of the participants and years of working experience, motivation for personal development, satisfaction from work, working conditions, lack of offers possibilities for development (lack of professional seminars, workshops) etc. All suggested aspects should be specifically investigated in future studies.

This question was also followed with open question: What are the topics that you are most interested to be included in future possible seminars and workshops? Based on qualitative analyses on obtained results, we did the ranking of mentioned answers. From most to less mentioned, they are following: creative approaches in teaching work that not require use of standard sport equipment and alternative forms of realization of PE teaching process; new trends in PE; use of technology in PE teaching process; work with children with special educational needs; creating an effective network for practice exchange between generalist teachers and PE specialists etc. Similar results for suggested topics for additional improvement via workshop and seminars are obtained in study of Popeska, Jovanova & Sivevska (2017) referring to implementation of technology in PE teaching process. The study of Popeska, Klincarov, Mitevski & Nikovski (2017), referring to common obstacles in realization of PE teaching process, where teachers included in realization of PE teaching process reported lack of seminars and workshops for their

topic of interests.

Considering teachers working experience and the impact of their work upon effectiveness of PE teaching process, the last question refers to their opinion for current PE curriculum in primary education at the level that they teach and possibilities for improvement or change. According the results, 42% from generalist teachers and 54% from PE specialist consider that particular changes are needed. Essential changes are required by 35% of generalist teachers and 22% of PE specialist, while completely satisfied with existing one are 8% of generalists and 13% of PE specialist. Asked about segments that should be changed or improved, different aspects were emphasized. For generalist teachers changes are needed in certain thematic unions; more hours for corrective gymnastics, compatibility between suggested contents, age and development characteristics of the children. PE specialists suggested following issues for improvement or change: contents in the curriculum with emphasis on selection of sport in 8th and 9th grade, implementation of new interesting sport, greater compatibility between theoretical contents suggested in books for each grade from 6th –to 9th and curriculum for respective grade; greater compatibility of the contents and requirements in the curriculum with material facilities and available equipment as well as suggestion of alternative forms of realization of PE teaching process.

Conclusions

Summarizing the results from all previous analyzed questions, the same vision could be noted. Changes are needed in several segments of realization of PE teaching process in elementary education. Uniting the knowledge and working forces of both group of teachers, generalist teachers and PE specialist many of challenges and noted problems could be overcome and will lead to greater effectiveness of PE teaching process and greater benefits for the children. In this regard, implementation of tandem teaching between generalist teachers and PE specialist could be one of possible effective manners.

What could be the possible benefits from implementing the tandem teaching in PE in elementary primary education? Following we present some of them for which we consider important:

- Increased level of physical activity of children at PHE classes
- Equal and successful realization of all suggested contents
- Better holistic learning through PHE
- More effective realization of PHE classes
- Possibility to follow and assess children motor development at regular bases
- Increased level of PA during school day
- More time for educational component
- Possibility for better realization of health component
- Better support between generalist teachers and physical education specialists

The concept of tandem teaching should be beneficial and successful only if it is created with joint actions of all relevant and included parties. In this regard, following future actions should be taken:

- Creating an expert group that will work on concept and implementation of tandem teaching. This expert group should be consisted of university professors from Faculty of physical education, sport and health and Teaching faculties from all state universities that work in the field of methodic of PE; representatives of generalist teachers and PE specialists, representative from Bureau of Education, representative from Ministry of Education, experts from countries that already implemented such concept. This group should work on all aspects of implementation of tandem teaching.
- Implementation of positive experiences of other countries considering and adapting the national context.
- Organization of meetings, seminars, workshops for promotion of the concept.
- Organization of workshops, seminars, lectures for preparation of generalist teachers and PE specialist for tandem teaching.
- Designing text books and guidelines for tandem teaching for the teachers.
- Development of network of teachers included in TT
- Designing a common study programs for educating tandems.

All suggested actions require teamwork from generalist teachers, PE specialists, university professors from Faculty of PE, sport and health and Teaching faculties and governmental institutions. Each one of them should contribute in their field of expertise. Each one of them is equally important and the

implementation could be successful only if teamwork and benefits for the children are focused as priority. At the and the focus and main goal are the children and their wellbeing and only common actions could lead to this common goal.

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