



Ita. J. Sports Reh. Po.

Italian Journal of
Sports Rehabilitation and Posturology

Methodological-organizational forms of work in physical education teaching

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Abstract. *The primary goal of teaching physical education is to increase the fund of motor knowledge, habits and skills. Regardless of the recognized importance of the subject, in most countries in the world the number of classes is constantly declining, and there are certain financial problems in the implementation of teaching, which affects the quality and manner of curricula. The aim of this review is to show the importance and role of methodological and organizational forms of work in physical education classes as well as to show and strengthen the role of teachers in the process of programming, planning, implementation and evaluation of physical education classes. Reduced physical activity of students, which reached only 20% of active time, led to the appearance of various forms of work that raised the value of active time in class over 50% (additional exercise), 61% (polygon and station), while the form of circular training very little time used for preparation, that is, 90% of the time remains for work. The wave and the beginning are the organizational forms of work that are mostly applied in Serbia. Thus, it can be concluded that the methodological and organizational forms of work have led to positive transformations of students, primarily in the field of motor skills.*

Key words: *Methods of physical education, forms of work, students, motor skills.*



Citation: *Nikola Aksović, Ljubinko Jovanović, Bojan Bjelica, Milan Zelenović, Rosario D'Onofrio Methodological-organizational forms of work in physical education teaching ; Ita. J. Sports Reh. Po. 2023; 10 (24); 3; 2; 2436 – 2451 ; ISSN 2385-1988 [online]; IBSN 007- 11119-55; CGI J OAJI 0.201). Published Online. Open Access (OA) publishing. **Authorship Credit:** “Criteria authorship scientific article” has been used “Equal Contribution” (EC).*

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Introduction

There have been numerous changes in the school system, which are conditioned by complex, diverse and growing demands of social life. The teaching of physical education in primary schools forces a predominantly IT component of the content of work, learning motor skills¹. Therefore, it is necessary to provide certain activities and the quality of exercise that contribute, primarily to the development of motor skills.

The task of teaching physical education is the formation of personality, and therefore the basis for physical transformation, is to get to know their anthropological status, which is a multidimensional system of anthropometric, functional, motor, cognitive, conative dimensions that determine motivational space, social adjustment, value system, social as and health status. In order to achieve an appropriate transformation of one or more parts of the anthropological status of students, the existing criteria should be respected. Physical education, whose primary goal is to increase the fund of motor knowledge, habits and skills, can be predicted, organized and implemented without knowing the impact of motor activities on the status of students^{2,3}. Certainly, a more significant factor in the teaching of physical education than all the mentioned anthropological abilities and characteristics are motor abilities. Numerous studies show a positive impact of physical education classes on students' motor skills⁴⁻⁹. However, the Zrnzević study (2007) indicates that physical education classes are not intensive enough, and that they do not leave positive traces on the organism¹⁰. Unfortunately, despite these findings, there are still problems in the form of maintaining the quality of classes as well as the problem of the status of physical education, both in the world and in Serbia. In support of this, regardless of the recognized importance of the subject, in most countries around the world the number of classes is constantly declining, as well as that there are certain financial problems in the implementation of teaching, which affects the quality and manner of curricula¹¹. Too, it should be emphasized that additional physical activity in the form of organized training has positive effects on physical development and is a predictor of student health status¹²⁻¹⁴. In the teaching of physical education today, various organizational forms and forms of work in physical education classes are used. In recent years, there has been a tendency of teachers with the aim of modernizing teaching, to use a modern organizational form in teaching, although they themselves are not familiar with this work or the



choice of form. Often teachers choose the content of the paper in order to be able to apply one of the newer organizational forms, instead of choosing the most suitable form depending on the content and the set goal. This means that the form is applied in order to achieve the goal, because the form, no matter how perfect it was, is not a goal, but only a means to achieve a certain goal. E.g: in the class of physical education, whose primary goal is to intensify the physiological load, work with additional exercises or stations will be used as an organizational form. The material in class, the basic exercise, the teacher can process either by analytical or synthetic method, can use the method of explanation or the method of demonstration^{15,16}.

Therefore, the aim of this review is to show the importance and role of methodological and organizational forms of work in physical education classes as well as to show and strengthen the role of teachers in the process of programming, planning, implementation and evaluation of physical education classes.

Theoretical consideration of the problem

methodical-organizational forms of work in teaching physical education and practical experience

Methodological and organizational forms of work in the teaching of physical education represent a way of organizing exercises in physical education and sports. By carefully observing the tasks of teaching physical education, the teacher in everyday work can use various comparative advantages that arise from a variety of methodological and organizational forms of work. Which methodological and organizational form of teaching work the teacher will apply depends on a number of factors: educational task, character and specifics of the teaching unit, number of students, material working conditions, etc¹⁷. Considering the goals and tasks of physical education, a certain number of experts tried to raise the quality of teaching, which actually led to the appearance of methodological and organizational forms of work in the main phase of the class. However, this was preceded by numerous announcements, warnings about the poor and unsatisfactory state of motor abilities of primary and secondary school students. After that, numerous methodologists tried to find a solution with the goal of correcting such a situation. The education system at that time definitely required numerous changes which implied permanent solutions to the problems of poor organization of work in class. After that, modern and complex

teaching aids began to be introduced in the classroom, which included various forms and forms of work in order to increase the physical activity of students. At that time, modern props, devices as well as the application of new organizational forms of work began to be used². The education system at that time definitely required numerous changes that meant permanent solutions to the problems of poor organization of work in class. After that, modern and complex teaching aids began to be introduced in the classroom, which included various forms and forms of work in order to increase the physical activity of students. At that time, modern props, devices as well as the application of new organizational forms of work began to be used². The education system at that time definitely required numerous changes that meant permanent solutions to the problems of poor organization of work in class. After that, modern and complex teaching aids began to be introduced in the classroom, which included various forms and forms of work in order to increase the physical activity of students. At that time, modern props, devices as well as the application of new organizational forms of work began to be used².

The attitudes of the methodologists were based that the teaching of physical education does not only mean the intensification of physical activity, but also implies educational, emotional and intellectual activity, but in such a way that all activities must take place through physical activity. This meant intensifying physical activity through intensifying moral, emotional, and intellectual activity. So, increasing physical activity in class leads to the class being more efficient and meaningful. Thus, the emergence of methodological and organizational forms of work was aimed at intensifying physical education classes, which previously implied minimal physical activity of students^{2,18}.

"New" methodological and organizational forms of work have achieved very good results that have led to positive transformations of students, primarily in the field of motor skills. Reduced physical activity of students, which reached only 20%¹⁹, led to the emergence of a form of work "additional exercise", which can raise the value of active time in class over 50%, and thus affected the increase in physiological load in class²⁰. Also, it should be emphasized that the forms of work "polygon" and "station" (active time 61%) are even more efficient²¹. The form of work "circular training" was created with the aim of improving teaching, which, in addition to a lot of active time, spends very little time on preparation, ie. for work remains almost 90% of the time^{1,19,21,22}. However, there are opinions that "circular training", despite its efficiency, has not found its place

among the methodological and organizational forms of work¹⁷, while Kitić (1982) believes that it should have its application in the independent practice of students²³.

Milanović (2020) points to the following methodological and organizational forms of work in the main phase of the class, and they are: beginning, additional exercise, stations, training ground and circuit training¹⁷.

The authors Milenković & Simić (2009) show that the following methodological and organizational forms of work are applied in school practice²:

- Work by type - BEGINNING
- Parallel work - WAVE
- SUPPLEMENTARY EXERCISE
- POLYGON
- Work on STATIONS
- CIRCULAR TRAINING

In the following chapters that follow in this review of current literature, the methodological and organizational forms of the work of the author Milenković & Simić (2009) will be presented and explained in more detail.

Start - Type

Beginning or type is a methodological-organizational form of work that involves the simultaneous work of a small number of students from different types or groups of one class in different jobs, where individual students one after another or several times in a row the same student, do the exercise after a certain teachers, make changes in the workplace^{2,3,24}. This is the most commonly used form of work in schools in Serbia. It was taken directly from the gymnastic exercise on the machines. However, this form of work has its place in the teaching of physical education, not only when gymnastic elements are processed, but always when the training of a movement begins. Accordingly, to the same extent, this organizational form is applied, both in the training of the technique of athletic disciplines, as well as in the beginning of the training of some elements of the technique of sports games. In the organizational form, the beginning of classes is planned for each working group in the department, a separate place or device, and only one



workplace is given a new motor task. When dealing with a new motor task, the teacher stands while maintaining the necessary supervision over the work of other groups². The advantages of this form of work according to Zdanski (1967) are: applicability in students of all ages, suitability for a number of program tasks, the possibility of application in indoor halls and open fields, a good overview of teachers, due to prolonged work on one device a high degree of success in training exercises¹⁵.

The disadvantages of this form of work are: short active exercise time of students, more difficult way of individual dosing of physiological load of students, violation of discipline due to insufficient activity of students².

Parallel operation - Wave

The form of parallel work means the simultaneous parallel work of a large number of students, in one or more jobs in different working groups, whether they are the same or different exercises¹⁸. Parallel work is not characterized by the same device on which the exercise is performed, but by the same motor task that can be performed on different devices, ie. simultaneous performance of the same or similar task on the same or different devices is a characteristic of "waves". So, the wave implies the direct application of exercises on several gymnastic devices, that is, it represents the so-called. simultaneous exercise. Unlike the previous methodological and organizational forms, the "waves" of the group do not change places. It should be emphasized that the wave and the beginning are the organizational forms of work that are mostly used in the teaching of physical education in Serbia².

The advantages of this form of work are: simultaneous practice of a large number of students, simultaneous performance of the same exercise, simple organizational form, good overview of work for teachers, application at all ages indoors and outdoors².

The disadvantages of this form of work are: limited individual dosing of students, the need for a larger number of the same or similar props and devices, limited teachers to conduct controls, reduced student activity².

Additional exercise

The organizational form of "additional exercise" means work when students, after practicing the main exercise, before taking their place in the group, perform some other movement independently. This means that supplementary exercise means exercises that supplement the work of students in one work cycle²⁴. The goal of these exercises is to intensify the physical education class, ie to reduce the break between the two exercises²⁵. Therefore, supplementary exercise implies movements and exercises that briefly fill the student's time in one cycle of exercise, which leads to an increase in the physiological load of students. Stanojević (1965) significantly increased the active time of the class to 51.86%, which improved the profile of the physiological load curve in the class, as well as more favorable conditions for the development of functional and motor abilities¹⁹. It should be mentioned that the number of additional exercises depends on the difficulty of the main exercise and additional exercises, the place of exercise, the age of the students and the degree of interest of students in physical exercise. One, two or at most three additional exercises can be added to the group exercise cycle¹⁷.

The advantages of this methodologically organizational form of work are: reduced passive time between the two performances of the main exercise, better educational work, application at all ages indoors and outdoors, individual dosing of students.

The disadvantages of this methodological and organizational form of work are: more difficult application in the work of sports games (basketball, football, handball, etc.), requires more free space, depends on the amount of available equipment².

Polygon

The polygon represents the performance of physical exercises successively one after the other, in motion, in open or closed space, in technically arranged halls. The main characteristics of this methodological and organizational form of work are:

- the training ground does not contain any new motor task that must be specially trained,
- does not require mandatory division of departments into working groups.

In a narrower sense, a polygon can be defined as performing a certain number of exercises successively one after the other on a conveniently or standardly arranged path in an open space or a closed exercise room. In short, the polygon represents running and walking interrupted by motor tasks that must be arranged in one regular and logical sequence. Depending on the basic purpose of the physical education class, the polygon is used: in the educational, training, recreational sense, in the sense of checking motor abilities, in the sense of achieving positive emotional effects in the class²⁴.

The good sides of the methodological and organizational forms of polygon work are: a large number of students can practice in a small space, it does not require standardized objects and props, wide possibilities of application with regard to gender, age, season, type of terrain available².

The disadvantages of the range are: reduced control of students, ie greater workload of teachers, more versatile preparation of teachers, the occurrence of incorrect performance of tasks in a row, the impossibility of frequent use because it does not take into account motor and functional differences between students.

Systematization of polygons can be performed according to several criteria, so that we distinguish the following polygons in relation to: the way the object is made, the intention, the predominance of the type of body movement, the number of paths with tasks, the geometric profile of the path. Finally, we should mention the permanent training grounds, the so-called Trim trails, although intended for the elderly population, are very effective in solving faster and more complete tasks of physical education².

Stations

The methodological and organizational form of the stations is applied in teaching in order to stabilize and automate the motor activities that were trained in previous classes, to improve motor knowledge and skills to the level of habits and skills. So the cellular form of work is not applied in order to train a new element, but in terms of increasing the frequency and volume of exercise. The use of this form of work leads to the improvement of functional and motor abilities,

physical condition. The goal of this method of work is, in fact, to automate and stabilize known motor structures. The basic task of station work is to achieve a longer continuity of work, by setting a larger number of jobs - stations, which reduces the waiting time to a minimum, and significantly increases the effective exercise time¹⁷.

Milenkovic & Simić (2009) define this form in the following way: a station means a determined part of the training area, possibly with a certain object or prop, where one or more students perform the set motor task simultaneously or alternately. The advantage of this form of work is the fact that the stations can be applied with the whole class, with all groups of students or only with one of the groups in the class, while others can apply some other methodological and organizational form of work. For example: group (a) trains the long jump technique, ie. work in the form of work is the beginning, while the other three groups can apply cellular work, namely: at the workplace (b) throwing medics in pairs, (c) jumping around the screw, (d) lifting the legs while lying down. In this example, the working groups take turns in the interval of 1/4 of the duration of the main phase of the class and thus close the class cycle of exercises².

The advantages of this form of work are: suitable for training elements and exercises with simultaneous high intensity of work, the possibility of appropriate dosing for individual students, positive educational impact, the possibility of application in schools with an insufficient number of appropriate props².

The disadvantages of this form of work are: long-term preparation, full cooperation of students is necessary, limited application in order to improve basic motor skills².

Circuit training

The primary function of circuit training is to improve students' motor skills (strength, speed and endurance), which is actually a characteristic that distinguishes it from all other methodological and organizational forms of work. The following is specific for circuit training: type of exercises, exercise regime, exercise documentation. The number of exercises of this form of work is different: easy or short circle (4 exercises) and long circle (8-10-12 exercises)².

The important characteristics of circuit training are: in the sequence of exercises, avoid exercises that activate the same muscle group, and after a heavier exercise, a lighter exercise

follows (with less load). Also, it is important to take into account the size of the load, the duration of work on individual tasks from the circle, the duration of rest between two or more series of repetitions on one task, and between two consecutive tasks. Thus, circuit training is an individual dosage of exercise, so the size of the load is very variable².

Matveev & Novikov (1974) distinguish: circuit training by the method of prolonged continuous exercise (development of general endurance), by the method of interval training with sharp intervals (development of strength and speed-strength endurance) and by the method of interval average rest intervals (development of strength and speed)²⁶.

The advantages of this form of work are: simultaneous work of all students, simple, familiar and accessible exercises for all students, no special safety measures are required, class loads are at a high level, possibility of individual dosing of loads, possibility of efficient work in small space, simple devices and props, the ability to control motor tasks².

The only disadvantage of circuit training is that it is used exclusively to improve the physical abilities of students².

Conclusion

The aim of this review was to show the importance and role of methodological and organizational forms of work in physical education classes and to show the role of teachers in the process of programming, planning, implementation and evaluation of physical education classes. The emergence of methodological and organizational forms of work has led to the intensification of physical education classes. Reduced physical activity of students, which reached only 20% of active time, led to the appearance of various forms of work that raised the value of active time in class over 50% (additional exercise), 61% (polygon and station), while the form of circular training very little 90% of the time is used for preparation, ie for work. The wave and the beginning are the organizational forms of work that are mostly used in the teaching of physical education in Serbia. Based on the above results, it can be concluded that the methodological and organizational forms of work have achieved very good results that have led to positive transformations of students, primarily in the field of motor skills. Based on all the above, the general impression is that methodological and organizational forms of work are valid and give results when used in practice.



The practical applicability of the obtained results enables the optimization of the educational-teaching process in the domain of regular physical education classes for primary school students.

Ita. Sports Reh Po.

Italian Journal of
Sports Rehabilitation and Posturology

Declaration of conflicting interests

Declaration of conflicting interests The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article. All authors have read and agreed to the published version of the manuscript.

Editor's disclaimer

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