

# Techniques of Play Activity at Physical Education Classes at Specialized Secondary Educational Establishments

Victoria A. Martynova<sup>a</sup> and Aleksandr G. Kapustin<sup>b</sup>

<sup>a</sup>Kazan (Volga region) Federal University, Kazan, RUSSIA; <sup>b</sup>Vyatka State University, Kirov, RUSSIA

#### **ABSTRACT**

The issue is urgent today because at present the organization and content of Physical Education (PE) classes at specialized secondary educational establishments (SSEEs) do not completely meet contemporary requirements. The following negative trends prove that, namely: the physical and psychological health decline in school leavers and students, the incidence rate of the cardiovascular, respiratory, nervous and digestive systems while studying. The aim of the article is to scientifically explain how the techniques of the play activity can raise physical and technical competence, functional state, interest in classes and improve academic progress of students at SSEEs in PE. The leading method of the research of this issue is the method of a pedagogical experiment. It makes that possible to practically prove the effectiveness of the suggested theory. The article describes the essential features and the role of play activity techniques, shows the role of the game as the main motivational component of students' activities, develops and demonstrates the techniques of the play activity. Thus, the structure of the techniques of the play activity contains the concept base, the content component and, what is of high importance, the techniques in process (technological process). The data of the study can be useful for making PE academic programmes for students at different types of educational establishments.

#### **KEYWORDS**

Students of SSEEs, the compulsory school subject 'Physical Education', the techniques of the play activity, motivation

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#### Introduction

# Topicality of the research

Current political, socio-economic and cultural conditions in the country have caused the change of educational objectives, have resulted in the processes of rethinking the educational development concept in specialized secondary

CORRESPONDENCE Aleksandr G. Kapustin



usr11637@vyatsu.ru

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education. Professional education at SSEEs is becoming humanitarian, cultural and creative. Being a humanitarian component of specialized secondary education, PE aims at top-priority developing personal skills, improving selfeducational and self-learning functions of students, training them to be a citizen and a well-educated specialist. The main tasks to be solved at PE classes are developing physical and volitional features, consciousness; preparing them for labour and defense of the Motherland; maintaining and enhancing health; acquiring motor skills and motor habits of professionally applied physical training taking into account the future working activity; acquiring general knowledge of foundations of the theory, the methods and organisation of PE and athletic training; mastering sportsmanship. At present the organisation and content of PE classes at SSEEs do not completely meet contemporary requirements. The following negative tendencies prove that, namely: the physical and mental health decline in school leavers and students, the incidence rate of the cardiovascular, respiratory, nervous and digestive systems while studying, the increase of people with deviant behaviour due to living with the limited motor activity, the decline and loss of socio-cultural values and attractions of PE for students, and the inviolately decreasing level of material and technical support of the teaching and learning process (Ilyinich, 2000; Sheenko, 2008; Yavorskaya, 2013). Conscious will of specialists to solve current problems face a number of contradictions. The basic ones are the following:

- understanding the importance to use modern pedagogical techniques at PE classes and the lack of them in the secondary non-professional education sector;
- necessity of taking into account the motives and needs of students in PE and their directive and regulatory organisation restricting the interests of a person's intellectual culture;
- aims of students for competitiveness, comparing their skills and abilities in play and competitive activities and its restricted use in the compulsory school subject 'Physical Education';
- the availability of examples of using play pedagogical techniques at PE classes in preschool and schoolchildren and the lack of their using at PE classes at SSEEs as the condition to develop physical and technical competence of

Negative results are worsening because of: losing opportunities to receive adequate nutrition, the inefficient training agenda, lack of effective preventive measures in healthcare, necessity for students to work alongside their studies in order to provide proper living. As a result, the health and physical state of senior students substantially worsen. Only small number of students join physical selfeducation. Being a multiform social phenomenon the play is beyond the sector of physical education and education in general. Appearing early in the history and evolution of the whole society, the play was and is to meet different demands for self-knowledge and external contacts, spiritual and physical development, rest and entertainment. One of the main functions of the play is a pedagogical one: it is one of the main educational means and methods in the broad sense of the word. At present we have considerable practical experience of different techniques at PE classes at SSEEs (Andryushenko, 2002; Titulov, 2009; Konovalov, 2013). However, the experience does not take into account all the transformations in our country, namely: positive and negative changes in

education and, particularly, in the sector of physical education. The analysis of the problem of the research in theory and practice shows that in spite of the existence of play pedagogical techniques, as the condition to facilitate the teaching and learning process, at PE classes in preschool and schoolchildren (Strelkova, 1993; Nabokova, 1996; Astashina, 2002; Kapustin and Kapustin, 2007) they are not really applied. This fact needs further investigations and new methodical and organisational solutions.

# Method

# Methods of research

To achieve the research objectives and to test the hypothesis the following methods of research have been used: the analysis of the literature on the research; the questionnaire survey; testing physical fitness; assessing the level of functional vigour; the judgment-based assessment method; the pedagogical experiment; the method of mathematical statistics.

# Experimental Base of the Research

Kirov Timber College and Nizhniy Novgorod Railroad Training College, Kirov Branch were the experimental base of the research.

# Research Stages

Achieving the research objectives needed several stages. The first preliminary stage was the stage of the analysis of the literature on the research, the analysis of PE academic programmes at SSEEs and working plans, the analysis of learning materials and requirements for physical fitness of students, the choice and substantiation of the research agenda. In addition, games, relay races and play tasks were chosen according to the structure of PE classes, the test system was built and the most probable students' mistakes were predicted.

At the first stage the preliminary experiment at Kirov Timber College and Nizhniy Novgorod Railroad Training College, Kirov Branch was carried out in order to analyse and correct the plot and rules of games, and physical exercise criteria.

The second stage was the stage of the pedagogical experiment itself and took place at Kirov Timber College.

The third stage was the stage of the analysis and interpretation of the data which had been obtained during the pedagogical experiment. As a result, the conclusions were made and practical recommendations were provided.

#### Data, Analysis, and Results

# Foundations and Criteria of the Techniques of Play Activity at PE Classes

The Basic Law on Physical Education and Sport of the Russian Federation considers Physical Education at secondary and higher educational establishments as an academic discipline and important component of the full development of a personality. Being a component of general culture and professional teaching a student at the period of studies, PE is considered to be a compulsory element within the humanitarian education and to show its

significance harmonizing spiritual and physical forces and setting such human values as health, physical and psychological well-being, physical perfectness.

On the basis of the state academic programme in Physical Education at higher and secondary educational establishments the chairs of physical education develop their academic programmes including peculiar resource, material and staff support at every chair, the development of PE infrastructure, resource and staff support in the teaching and learning process. The programmes aim at optimising the education process and include the introduction, aims and objectives of physical education, organisational forms of classes, the assignment of students at educational faculties, the content of academic material, credit requirements. That's why the multi-level structure of teaching students of secondary and higher educational establishments is connected with the integration of cultural and academic qualification in graduate students while training professional skills. On the basis of academic programmes the chairs of physical education develop their academic curricula performing programme requirements according to the study year. The aim of physical education at secondary and higher educational establishments is the physical education development in future competent specialists. This stimulating aim fulfill a programme function and sets an integration specific character of teaching activities while solving the following educational and recreation problems:

- understanding the role of physical education in a person's development while preparing for future career;
  - mastering fundamentals of physical education and healthy lifestyle;
- forming a motivation and value attitude to physical education and need for regular physical exercise;
- acquiring the system of practical skills ensuring health maintenance and promotion, development of psycho-physical abilities;
  - providing professional physical fitness in students for their future career;
- acquiring some experience of applying physical activities to achieve professional development.

The peculiarities of the academic programme are its educational focus, the availability of practical classes and the end-of-course assessment. All the parts of the programme have the professional and practical focus and, in this way, fulfill their integration function. Moreover, the extension of humanities knowledge does not stimulate the technocratic thinking in future specialists and shapes a creative personality. Regulation and academic maintenance of physical education in students is provided in accordance with the requirements of the Federal State Educational Standard, giving minimum requirements for the content and level of physical fitness of students, and the requirements of the Regional Educational Standard, providing more academic freedom to the chairs of physical education while writing the contents of curricula and academic programmes in physical education.

Thanks to the Regional Educational Standard the chairs of physical education at educational establishments of any specialization have a chance to develop academic programmes taking into account the peculiarities of their educational establishment, their region and, of course, the interests and needs of students. In my opinion, this regional standard obliges PE teachers to develop

new academic programmes and techniques taking into account the peculiarities of their educational establishment in order to optimize the teaching and learning process and, as a result, physical education development in students.

PE optimisation is not a special technological method or technique. It is the focused approach of the teacher to organising the teaching and learning process according to the principles of the physical education development. It is the conscious science-based (not random) selection of the best model to organise the teaching and learning process according at educational establishments under their specific conditions.

The optimization principle means the selection of the best model to organise the teaching and learning process in every particular case. To be more exact, it includes the best possible content of teaching methods and means, modes of study, the norms of: - introducing learning material, - time-effectiveness, - the degree of difficulty, - scientific character, - creating favourable conditions for teaching and learning activities (educational, sanitary, psychological and moral, aesthetic), - stimulating and regulating activities within the teaching and learning process itself, - controlling and correcting the activities, etc. Put in other words, the optimization principle expects each element of the organisation system of teachers and students' activity to reach a desired optimal level under particular conditions.

Optimization excludes the exaggeration of some working methods, the underestimation of certain educational ways and means, the overestimation of conventional guidance papers which do not take into account specific conditions and students' interests. It leads to the creative platform of a pedagogical process on its scientific base and to the search of better technological options. The idea of optimization excludes the overload of students and teachers with academic work, requires an effective level of difficulty, proper educational pace and proper volume of individual work.

Apart from the optimization principle, G.M. Solovyev (1999) outlines some essential principles to be taken into account while developing educational techniques of PE in students:

The principle of united connections of system elements of the pedagogical technique developing physical education of a person

The technique is considered to be a system if it possesses three important and necessary features of systemacity: structuring (elements), interconnection of structural elements, focusing of all the elements on certain aims and tasks. Main components of a pedagogical technique (informative, instrumental and social) are interconnected and interdependent, i.e. the change of one element causes the change of the others. A new aim of developing physical education in a person, the content of PE, its fundamental principles required a change of new coherent ideologies, textbooks and resource books. According to the informative component of physical education the problem of training and retraining of specialists occurred.

#### 2. The principle of the diagnosticity of target setting

The results of physical education aims must be predictable (every level of physical education in a person is to be separated according to their qualitative features) in order of the scientific character of knowledge experience, the level of

the acquisition, motivation and value orients, physical fitness, world view and diligence, doing physical exercise, etc.

3. The principle of functional completeness of PE development

PE development takes place when it develops all the components of physical education in a person. The effectiveness criterion of physical education functioning is complexity, i.e. many interconnected qualitative features. One of the main system property of physical education in a person is the compensation property, i.e. the ability to compensate the lack of a minor component with the other ones within certain limitations. This principle refers to a functional technological structure. Any system functions effectively, if it possesses a functionally complete set of system elements.

4. The principle of the scientific character of PE knowledge

This principle reflects the necessity to increase abstract scientific knowledge about PE and to correspond it with the level of experience.

5. The principle of functional interconnection of the PE content and its forms and methods

The content of the PE development can be shown only in certain forms and methods (the distribution of the academic programme material - certain variant; the transformation of structures - strategies; the range of the compulsory and elective courses; the period of the training module; the management methods unlocked, periodic, dispersed, direct), the parts of PE classes and the content of the PE development are functionally dependent on the components of pedagogical techniques.

6. The principle of openness of functional and methodical actions.

The whole physical educational process must be understandable, logic and open to students.

7. The principle of the objective assessment of the final result.

It is one of the main principles, it is the base of educational techniques. Only meeting this requirement makes it possible to effectively control and correct mistakes and to search for management ways. Referring to the technique the control is not a mistake correction made by students, but the correction of an instructional process.

8. The principle of the cultural approach while developing physical education in a person.

This approach must be the base of the pedagogical physical education process maintaining general culture, integration tendencies, the complex of social and spiritual, motivational and practical values of the gained experience.

9. The principle of the consistency and completeness of the personal identity in physical education

This principle means not only the content but the technological model, forms of the teaching and learning process at different stages within the macroand micro-structure. At every following stage knowledge and skills are expanded and improved, the transfer from a lower level to a higher one takes place. Moreover, gaining the aim is obligatory, transforming structures-strategies is necessary, and what's more, the 'closed' teaching and learning process must be transferred into the system which ensures meeting physical education interests and needs of students.

### 10. The principle of the variability of PE means and methods

The variability of PE means and methods and students' choice of PE activities ensure the adequacy of the educational system meeting personal interests and needs of students. This principle also refers to making the technological systems manage the teaching and learning process and gives freedom of creativity under the conditions of pedagogical techniques and principles.

The following criteria allow us to estimate any pedagogical technique: conceptual importance, systemacity, manageability, effectiveness, repeatability, social significance, topicality.

Conceptual importance (Scientific base). Every pedagogical technique must be based on a certain scientific concept of gaining some experience, scientific explanation of the process of achieving educational aims.

Systemacity. Every pedagogical technique must have all features of the system: procedural logic, interconnection of its all components, completeness.

Manageability of a pedagogical technique means target setting, planning, designing the teaching and learning process, stage-by-stage testing, selecting means and methods to correct the results.

Evvectiveness. Modern pedagogical techniques exist under certain conditions of the teaching and learning process and must guarantee the achievement of a certain educational standard and must be result and cost effective.

Repeatability means the opportunity to apply pedagogical techniques at other one-type educational establishments.

#### The structure and content of the technique

The technique of the play activity is a certain sequence of actions, operations of the teacher in selecting, developing, preparing plays, joining the subjects the play activity, playing the game itself, summarizing their conclusions and results.

Play techniques differ from other teaching and educational methods. They give a person a chance to take part in the social life and to 'live' for some time under 'real' life conditions. At the same time, play techniques do not substitute conventional teaching methods but effectively complete them and broaden the teacher's experience and achieve the set aims and tasks. A play technique allows students to try different social roles. That helps to much deeper understand the laws of life, to see the results of their activities, to analyse their own and other participants' mistakes.

While developing play techniques I took into account that a pedagogical technique is a certain arrangement of a teacher's activity where all actions constitute a certain completeness and sequence, and the fulfillment means the achievement of a necessary result and may be predicted.

The structure of a pedagogical technique consists of:

- the conceptual base, i.e. the base on a scientific theory;
- the content (aims, tasks of the teaching and learning process, its complete content, i.e. the system);

the process sector - the technological process (designing, planning, activity organisation, activity forms and methods of students, activity forms and methods of teachers, self-analysis and stage-by-stage testing).

Developing the technique of the play activity at PE classes is based on these statements and the content of the structure. Main part of the work was to transform the process sector, namely: the physical education process at Kirov Timber College. While 'technologisating' the process I tried to pay attention to every component, from designing and planning to end-of-course checking and correcting the results.

According to most researchers, any pedagogical technique must contain a technological scheme ensuring a certain sequence of a teacher's actions and a chance for any other teacher to copy them.

While analysing the scientific literature on modern pedagogical techniques the following technological scheme was suggested. It allows us to use the play activity at PE classes (Kapustin amd Kapustin, 2007). Being an important component, this technological chain concerns the process sector and includes the preparation stage, the fulfillment stage and the analysis and correction stage (fig. 1).

Preparation stage	Before classes	<ul> <li>the analysis of teaching materials and requirements of physical fitness of students;</li> <li>the choice of games, relay-races, play tasks according to the class objectives;</li> <li>the choice of the type and organisation of play activity;</li> <li>the development of the plot and rules;</li> <li>building the control system and thinking of the most probable mistakes of students</li> </ul>
Fulfillment stage	During classes	<ul> <li>forming commands;</li> <li>setting aims and objectives;</li> <li>brief safety training;</li> <li>proper refereeing;</li> <li>individual and team bonus during the game;</li> <li>finishing the game and summarizing;</li> <li>further use of the gained experience</li> </ul>
Analysis and correction stage	After classes	<ul><li>general analysis;</li><li>self-assessment;</li><li>recommendations on the usage;</li><li>corrections of the plot, rules, loads.</li></ul>

Figure 1. Technological scheme of using the play activity

So, the technological scheme of using the play activity demonstrates the systematic work of the teacher, the algorithm of their actions from analysing teaching resources to correcting the rules and criteria of work.

Another important component of the pedagogical technique is testing or pedagogical control, which is a necessary part in any teaching activity in order to analyse the work effectiveness and its further correcting. Therefore, in order to get the objective data about students' physical fitness and the immediate identification of the functional value of physical exercise according to the cardiac rate the initial, urgent, regular and final checks were used.

Introducing the experiment, the initial check showed the preliminary data about the level of students' physical fitness and its correspondence with the norms of the academic programme at the SSEE.

The urgent check was used to regularly observe the functional state of students (according to the cardiac rate) and it helped to regulate the academic and training load at every class. The pulse was checked as many times as necessary (frontally and individually) at small temporary losses, as it is very important at class. The pulse was checked by students. They palpated for 6 seconds at the 5-10 second relax after training, then the result was multiplied by 10. Later checking do not show the pulse performance rate. According to the pulse rate physical loads were spread and corrected at classes. Thus, the fastest pulse rate in a student (180 beats per minute and more) indicated their low level of physical fitness and in this case the physical load was to be reduced at class. The weak pulse rate after the load (90-100 beats per minute or a bit more) indicated a good level of physical fitness and meant a possibility to increase individual physical load at class. The urgent check was conducted according to the range of external features of tiredness (complexion, facial expression, body perspiration, acceleration, physical coordination, motor performance) and to personal feeling tiredness.

The regular check indicated and estimated individual changes in students' physical fitness on the basis of their personal results. This check provided students with creative tests including some play activity and they were interested in taking them (speed dribble, upper handling in volleyball, shuttle run, etc.). This check helped students to analyse their physical and technical fitness, promoted further physical exercise.

The final check provided teachers with final results. In general, the diagnostics was based on the learner-centered approach taking into account age and individual peculiarities of students and on the fact that while checking the results were compared not only with the academic requirements but with the results of previous checks. At Kirov Timber College a modified learning kit has been developed according to the academic requirements and class peculiarities. It contains additional, leading up and learning games for PE classes. Fitting the general academic requirements at SSEEs these games are easy to be applied at PE class and are designed to stimulate the development of physical and psychological features and skills which are necessary under the given conditions. Organising and playing the games was based on following principles:

- fitting the forms and means with psycho-physical states of students;
- wide availability for everyone;
- audience appeal and emotional intensity of games;
- completeness and logical sequence of play means;
- full effect on motor skills and brains of students;
- gradual and periodic use of games;
- openness, result comparability, obviousness of aim and tasks, unity of requirements;
  - efficient organisation and playing the games;
  - fitting traditions and innovations;

- mutual respect, kindness, health-improving focus, educational and entertaining element.

It is commonly known that one of the objectives of the class is to develop physical skills. Therefore, I have selected the games and play activities according to the set tasks. There is a wide choice of sports and active games, play tasks, competitions and relay races. While selecting some games have been improved and had a new content. These improved games attract bored students. Such a creative approach to leading up the games may have unpredictable results.

# The results of the research

The effectiveness criteria of the suggested experimental technique of the play activity were the changes of physical fitness, functional state and the level of having qualifying standards according to the academic programme in the subject Physical Education. As the facts show, there has been a significant increase in all the criteria of physical fitness in the experimental group of firstyear female students (P < 0.05). At the same time, in the control group there is a real change of only one test out of five (Table 1). Although the final intergroup difference in the 100-meter race is not reliable (P >0,05), the result increase by this criterion in the experimental group is higher. Thus, the result improvement in the 100-meter race in the control group is 4.2%, whereas in the experimental group the result improved by 8.4%. The percentage difference in the increase of the results in physical fitness proves the advantage of the technique of the play activity developing physical skills in students in experimental groups.

Table 1. Changes of criteria of physical fitness in female-students in the control and experimental group (n=36)

experime			7 (11-3	0)												
	Co	ntrol					Ехре	erime	ntal				Intergro		Inte	rgrou
Criteria	before		fore after		t	P	befo	ore	after				up initial		p fina	l
	m	± M	m	± M	J	,	m	± M	m	± M						
100 metre s (sec.)	18,42	0,22	17,65	0,25	2,31	<0,05	18,64	0,20	17,08	0,24	4,99	<0.05	0,74	>0,05	1,65	>0,05
shuttl e run 3x10m (sec.)	10,45	0,23	10,17	0,21	06,0	>0,05	10,53	0,23	9,61	0,13	3,48	<0.05	0,25	>0,05	2,27	<0,05
sit-up (reps)	25,16	1,21	28,16	1,22	1,75	>0,05	24,50	1,13	33,05	1,28	5,01	<0.05	0,40	>0,05	2,77	<0,05

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standi ng long jump (sm.)	165,83	4,79	171,88	3,50	1,02	>0,05	168,50	3,19	181,77	3,19	2,94	<0.05 0,46	>0,05	2,09	<0,05
2000 race (m.)	756,16	18,56	739,94	18,22	0,62	>0,05	756,61	15,19	692,61	11,90	3,32	<0.05 0,02	>0,05	2,17	<0,05

My technical testing tasks in every part of the academic programme were to estimate motor activities in students in control and experimental groups. The method of the expert assessment was used to estimate the quality fulfilling the testing tasks. Three experts observed fulfilling the testing tasks. The final result was the average number of their marks for fulfilling technical elements. A five-mark grading system was used to assess each task.

The data of the carried out research show that the experimental technique of the play activity develops skills and ensures their high level (Table 2).

Table 2. Changes of criteria of technical fitness in female-students in the control and

experimental group (n=36)

Criteria Criteria	_	trol	1-30)				Experim	enta	·l				Interg	2r	Inter	
CITICITA	bef		afte	r	t	Р	before			after		P	oup initia		gro p	
	М	± m	М	± m	·	г	М	± m	М	± m	t	г	t	Р	t	Р
track and field (points)	3,54	0,13	4,17	0,10	3,84	<0,05	3,42	0,08	4,53	0,08	7,65	<0,0>	0,79	>0,05	2,81	<0,0>
gymnas tics (points)	3,38	0,13	4,08	0,11	4,11	<0,05	3,39	0,09	4,36	0,11	6,82	<0,05	90'0	>0,05	1,80	>0,05
Sports games	3,35	0,10	4,24	0,09	6,62	<0,05	3,40	0,10	4,59	0,08	9,29	<0,05	0,35	>0,05	2,91	<0,05
(points)	3,68	0,14	4,21	0,10	3,08	<0,05	3,57	0,00	4,45	0,10	6,54	<0,05	0,66	>0,05	1,70	>0,05
ski training (points)	3,54	0,13	4,17	0,10	3,84	<0,05	3,42	0,08	4,53	0,08	7,65	<0,0>	0,79	>0,05	2,81	<0,0>

Table 3. Changes of criteria of functional fitness in female-students in the control and

experiment	tal group	(n=36)
	Control	

Control							Experimental						rgr	Intergr		
before		after		t	Р	before		after		t	Р	oup initi befo	ial	oup after		
М	± m	М	± m	М	±m	М	± m	М	± m	M	± m	М	± m	М	± m	

Ruffier functio

nal test 0,72 9,64 1,26 ->0,05 ->0,05 0,86 6,81 0,86 2,92 2,92 >0,47 >0,05 <0,05

Harvar												
d step-	_	4			2	6	7	Ю		2		2
test	8,	,19 0,2	33	۲,	0,0	2,8,79	, 10,	5,58	,33	0,0	,51	0,0
	ó	7 7	7	<del>-</del>	$\check{}$	. <del>,</del> 6	7 7	ν Ω	O	$\check{}$	7	$\stackrel{\vee}{\vee}$

The final analysis of the statistical processing of the data of average performances of acquiring technical elements of the suggested set exercises demonstrated true-to-life intergroup differences in the two testing tasks out of four (in the testing task in track and field athletics and sports games).

It should be mentioned that during the experiment both in the control and experimental groups there were true-to-life changes in technical fitness in all performances. I think it caused the lack of true-to-life intergroup differences in final results in gymnastics and ski training testing tasks. However, one can't help noticing the superiority of the play activity technique while improving motor skills over the conventional PE teaching system on the basis of the higher percentage rate of the results in test groups.

To prove the changes in functional readiness and performance of students at PE classes in test groups the indices of the cardiovascular system were taken according to the reaction of the pulse to physical load (the Ruffier functional test). And general performance of students was measured at the beginning and end of the experiment by making use of the Harvard step-test.

Thus, having analysed the data of the final results in functional performance and changes in the teaching and learning process, according to true-to-life relevance (P< 0,05) the experimental group showed more significant changes in thegeneral functional state of students, their performance and readiness of the body for load than in the control one (Table 3). The high quantitative and percentage rates of functional readiness indices in both groups prove that. Obviously, the increase of functional fitness in the experimental group was caused by using play and competitive methods at PE classes, because while performing physical exercises these techniques promote the motor activity in students and boost their functional performance.

The changes of indices of physical, technical and functional fitness in male groups are the same and verify the results of this research. Thus, one may conclude that the developed technique of the play activity at PE classes at SSEEs is effective and can be widely used.

#### **Discussion and Conclusion**

Many scientists consider the problem of improving the teaching and learning process at PE classes at SSEEs. Some of them V.I. Ilyinich 2000, E.I. Sheenko (2008), A.A. Yavorskaya (2013) mention steady negative trends in the organisation and content of physical education of students at SSEEs. The most apparent trends are the lower level of physical and psychological health in school leavers and students, the incidence rate of the cardiovascular, respiratory, nervous and digestive systems while studying.

The scientists strive to solve these problems. L.B. Andrushenko (2002) suggests using a sports-oriented technique in Physical Education.

R.V. Titulov (2009) proves the effectiveness of the complex development and control of speed and strength abilities in male-students at SSEEs. I.E. Konovalov (2013) develops a new content of modern academic programmes in Physical Education at SSEEs.

The analysis of scientific papers on the play activity at PE classes indicates that there are play techniques for pre-school and schoolchildren (Strelkova, 1993; Nabokova, 1996; Astashina, 2002; Kapustin and Kapustin, 2007) but they are not used at SSEEs in order to improve the teaching and learning process. This fact needs further research and new methodical and organisational solutions.

Techniques of the play activity at PE classes at SSEEs are considered to be a condition to improve physical and technical fitness, functional state of students, their interest in practical classes. The role of the game as the main motivational component of students' activity at SSEEs is established. This role promotes not only cognitive, but professional motives and interests and it is the leading incentive to intense the conscious activity. The process part of the technique of the play activity was developed and applied at PE classes at SSEEs ensuring the solution to key aims of Physical Education.

# Implications and Recommendations

The article materials may be interesting to practical teachers in order to apply them at different educational establishments: at universities and high schools. The techniques may develop physical state in the youth, improve their motor skills, increase functional state and stimulate their interest in physical exercise. The results of the research may help in making academic programmes in Physical Education for students at different educational establishments and in the system of further training of Physical Education and sports specialists.

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# Disclosure statement

No potential conflict of interest was reported by the authors.

# Notes on contributors

Victoria A. Martynova is PhD, Associate professor of the Department of theoretical foundations of physical culture and life safety of Kazan (Volga region) Federal University, Kazan, Russia.

Aleksandr G. Kapustin is PhD Professor, Dean of Physical Education and Sports Faculty, Vyatka State University, Kirov, Russia.

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