PEDAGOGICAL CONDITIONS FOR THE FORMATION OF A COMPETITIVE PERSONALITY OF A FUTURE SPECIALIST

CONDIÇÕES PEDAGÓGICAS PARA A FORMAÇÃO DE UMA PERSONALIDADE COMPETITIVA DE UM FUTURO ESPECIALISTA

CONDICIONES PEDAGÓGICAS PARA LA FORMACIÓN DE UNA PERSONALIDAD COMPETITIVA DE UN FUTURO ESPECIALISTA

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ABSTRACT: The relevance of the presented topic is conditioned by the necessity of formation of harmonious and freely developed personality in training competitive specialists within the framework of professional education. A competitive specialist is not only a competent and highly professional worker, but first, a personality, who cares about his/her health, has high spiritual and moral qualities, skills of non-standard, flexible thinking, ready for continuous professional growth, capable of self-organization and self-improvement. The focus of a vocational institution is to create conditions for students to develop a healthy lifestyle and personal qualities that will ensure their competitiveness in the labor market, as well as to develop a spiritually moral, creative personality that can adapt in today's environment. Proper organization of the process of physical education among students can make a significant contribution to this direction. The study developed and experimentally proved the content of physical education process in secondary vocational education institution, aimed at improving

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the physical fitness of students. The positive influence of the content of the educational process on the indicators of physical fitness of students in higher education institution has been revealed. The aim of the research was the theoretical justification and experimental confirmation of the effectiveness of the content of physical education process in higher professional education institution for students, aimed at forming a competitive specialist's personality. The study reveals a positive impact of the content of the educational process on the formation of students' personality and physical preparedness indicators of university students. The paper presents the content of the process of physical education in the institution of higher vocational education of students. The practical significance of the study lies in the possibility of application of the developed content of the process of physical education in institutions of secondary vocational education of students, as well as the use of individual means and methods in other educational institutions.

KEYWORDS: Vocational education. Competitive specialist. Physical education process. Harmoniously developed person. Physical fitness.

RESUMO: *A relevância do tema apresentado está condicionada pela necessidade de formação de uma personalidade harmoniosa e livremente desenvolvida na formação de especialistas competitivos no âmbito da educação profissional. O especialista competitivo não é apenas um trabalhador competente e altamente profissional, mas, antes de mais nada, uma personalidade, que se preocupa com a sua saúde, tem elevadas qualidades espirituais e morais, habilidades de pensamento atípico, flexível, pronto para o crescimento profissional contínuo, capaz de auto-organização e autoaperfeiçoamento. O enfoque de uma instituição profissionalizante é criar condições para que os alunos desenvolvam um estilo de vida saudável e qualidades pessoais que garantam a sua competitividade no mercado de trabalho, bem como desenvolvam uma personalidade espiritualmente moral e criativa que se adapte ao ambiente atual. A organização adequada do processo de educação física entre os alunos pode dar uma contribuição significativa nesse sentido. O estudo desenvolvido comprova experimentalmente o conteúdo do processo de educação física em instituição de ensino médio profissionalizante, visando à melhoria da aptidão física dos alunos. Revelou-se a influência positiva do conteúdo do processo educacional nos indicadores de aptidão física de alunos de instituições de ensino superior. O objetivo da pesquisa foi a justificativa teórica e a confirmação experimental da eficácia do conteúdo do processo de educação física em instituição de ensino profissionalizante superior para estudantes, visando a formação da personalidade de um especialista competitivo. O estudo revela um impacto positivo do conteúdo do processo educacional na formação da personalidade dos alunos e nos indicadores de preparação física dos universitários. O artigo apresenta o conteúdo do processo de educação física na instituição de ensino superior profissional. O significado prático do estudo reside na possibilidade de aplicação dos conteúdos desenvolvidos do processo de educação física em instituições de ensino secundário profissional, bem como na utilização de meios e métodos individuais em outras instituições de ensino.*

PALAVRAS-CHAVE: *Educação profissional. Especialista competitivo. Processo de educação física. Pessoa harmoniosamente desenvolvida. Aptidão física.*

***RESUMEN**: La relevancia del tema presentado está condicionada por la necesidad de formación de una personalidad armónica y libremente desarrollada en la formación de especialistas competitivos en el marco de la formación profesional. Un especialista competitivo no es solo un trabajador competente y altamente profesional, sino primero, una personalidad, que se preocupa por su salud, tiene altas cualidades espirituales y morales, habilidades de pensamiento no estándar, flexible, listo para el crecimiento profesional continuo, capaz de autoorganización y superación personal. El enfoque de una institución vocacional es crear las condiciones para que los estudiantes desarrollen un estilo de vida saludable y cualidades personales que aseguren su competitividad en el mercado laboral, así como para desarrollar una personalidad creativa y espiritualmente moral que pueda adaptarse al entorno actual. La organización adecuada del proceso de educación física entre los estudiantes puede hacer una contribución significativa en esta dirección. El estudio desarrolló y probó experimentalmente el contenido del proceso de educación física en una institución de educación secundaria vocacional, con el objetivo de mejorar la condición física de los estudiantes. Se ha revelado la influencia positiva del contenido del proceso educativo sobre los indicadores de aptitud física de los estudiantes de la institución de educación superior. El objetivo de la investigación fue la justificación teórica y la confirmación experimental de la efectividad del contenido del proceso de educación física en una institución de educación superior profesional para estudiantes, orientada a la formación de una personalidad competitiva de especialista. El estudio revela un impacto positivo del contenido del proceso educativo en la formación de la personalidad de los estudiantes y los indicadores de preparación física de los estudiantes universitarios. El trabajo presenta el contenido del proceso de educación física en la institución de educación vocacional superior de los estudiantes. La importancia práctica del estudio radica en la posibilidad de aplicación del contenido desarrollado del proceso de educación física en instituciones de educación secundaria vocacional de estudiantes, así como en el uso de medios y métodos individuales en otras instituciones educativas.*

***PALABRAS CLAVE:** Educación vocacional. Especialista competitivo. Proceso de educación física. Persona desarrollada en armonía. Aptitud física.*

Introduction

The formation of a competitive personality of a future specialist relates to the general pedagogical problem of finding conditions, technologies, mechanisms of this pedagogical process aimed at the development of personal qualities, realization of potentialities and abilities of a person. In the Concept of the Federal Target Program of Education Development for 2018-2025 it is noted that at present there is an inadequate response of the professional education system to the labor market needs (ANANYINA; BLINOV, 2018; BYSTRITSKAYA *et al.*, 2019; OREKHOVSKAYA *et al.*, 2019). This is due to the insufficient development of theoretical prerequisites and practical recommendations for the organization and implementation of the training process of a competitive specialist (BAYANOVA, 2020;

BAYANOVA, 2021; BLINOV *et al.*, 2015; DNIEPROV; GOLOVKIN, 2017; PEREVOSHCHIKOVA *et al.*, 2016).

Physical culture is an integral part of the general culture of society, one of the spheres of social activity aimed at health promotion, development of physical abilities of a person; a set of material and spiritual values of society in the field of physical improvement of a person. It not only strengthens human health, increases the level of physical fitness, but also provides high working capacity, social and creative activity, maximum longevity (BELGAROKOVA, 2017; GARAEVA, 2013; GRIGORYEVA *et al.*, 2020; IVANOVA *et al.*, 2017).

The main aim of physical culture is to prepare the younger generation for life, work and defending the Fatherland. Regular exercise of physical culture and sports leads students to achieve the necessary level of fitness, and contains unlimited opportunities for spiritual, moral, intellectual, labor, aesthetic education, and the harmonious development of personality (BISHAEVA, 2015; BOROVSKIKH; MOSIENKO, 2018; NATOLOCHNAYA *et al.*, 2016; KOCHNEVA *et al.*, 2019; STAFEEVA *et al.*, 2020).

In recent years, attention to healthy lifestyles among young people has intensified due to the growing number of young people classified as a special medical group, increased morbidity in professional training, and decreased capacity to work. Young people's health issues in general come to the forefront as the most important indicator in addressing the internal and external challenges of our nation.

Currently, the educational and methodological literature presents recommendations on the content of the process of physical education in higher vocational education institutions. However, these recommendations are mainly aimed at comprehensive physical training, and to a lesser extent at vocational-applied training.

Therefore, the problem of developing the content of physical education process in higher vocational education institutions, which includes in- and out-of-school forms of physical education classes regarding professional-applied physical training, seems relevant to us.

The relevance of the research is due to:

1. In the social aspect: the need to create conditions for the formation of a competitive specialist within the framework of professional education to optimize the content and improve the process of physical education in vocational education institutions, contributing to the involvement of most students in physical education and considering the combination of general and professional applied physical training;

2. Theoretical aspect: the lack of methodological recommendations on the application of applied physical training in a particular vocational education institution for physical education teachers;

3. In the methodological aspect: the need to apply the means of professional-applied physical training in the process of physical education in institutions of higher professional education of students.

Thus, it is relevant to develop the content of the process of physical education in the institution of higher professional education of students, aimed at the formation of a competitive specialist's personality. As a working hypothesis of the study, it was assumed that the use of means and methods of general physical training in combination with vocational-applied, constituting the main content of the physical education process in the institution of vocational education, will improve the physical preparedness of young students.

Methodological Framework

The methodological basis of the study included: systemic and integrated approaches in the study of scientific and practical problems, pedagogical processes of educational system, and personal, activity-based approaches to professional training of future specialists.

The process of physical education in vocational education institutions is carried out in accordance with the federal state educational standards of vocational education, which impose requirements for the mandatory minimum content and level of training of graduates in the academic discipline "Physical Education" (CHELNOKOVA *et al.*, 2018; KARPUSHKINA; KUDRYAVTSEV, 2015).

In general humanities disciplines a graduate should in the field of physical culture: have an idea of the role of physical culture in general cultural, professional, and social development of a person; know the basics of healthy lifestyle; be able to use physical education and sport activities to promote health, achieve life and professional goals, self-determination in physical culture (IVANOVA *et al.*, 2017; KHOLODOV; KUZNETSOV, 2017; VOROBYEV *et al.*, 2018).

Based on the federal state educational standards, local conditions and interests of students, the head and teachers of physical education determine the forms of physical education classes, means and methods of physical education, sports, and motor activities.

The content of the physical education course is reflected in the program on physical education in vocational colleges for students. The program maintains continuity, consistency in physical education classes and links with other programs.

The teaching material consists of theoretical, methodological, and practical sections. The theoretical section of the program assumes that the students acquire knowledge of the basics of theory and methodology of physical education. Educational material is delivered in the form of lectures, discussions, practical classes, as well as assimilated through independent study of educational and special literature. The practical section of the program is based on scientifically grounded credit standards, requirements and contains teaching material for all training departments, the content of which includes such sections as athletics, gymnastics, swimming, skiing, tourism, sports games and shooting.

All courses include material on vocational physical education and training in relation to the major.

In the practical section of the program, it is advisable to distribute the material in accordance with the main parts (types) of physical education - physical education, sport, physical recreation, motor rehabilitation. Each kind includes elements of other parts. All of them fully meet the needs of students (all academic departments) in all types of motor activity aimed at improvement, health improvement, hardening of the organism.

Physical education of students of higher professional education institutions is carried out using a variety of forms of lesson and extracurricular activities throughout the period of study at the institution. Lesson-based activities may take the form of: theoretical, practical, monitoring, elective practical lessons (optional), individual and individual group additional lessons (consultations), independent study on the instructions and under the control of the teacher.

Extracurricular activities are organized in the form of: performance of physical exercises and recreational activities in the school day, activities in sports clubs, sections, hobby groups, amateur physical exercise, sports, tourism, mass health, physical education and sports activities (KOCHETOV, 2012).

Vocational-applied physical training as an integral part of the process of physical education of students in vocational education institutions is carried out with the aim of preparing future specialists for productive activities. When planning the content of the teaching material, it is necessary to specify the social order of society for a specialist, considering scientifically justified qualification characteristics and occupational diagrams. The objectives of applied vocational physical education and training include:

– to develop and improve the physical and mental qualities required by future professionals through physical education;

– to acquire the knowledge and applied motor skills that contribute to the development of the profession;

– to design and implement training programs for self-study with elements of applied exercises encountered in the workplace;

– to cultivate special volitional and organizational qualities, emotional stability, concentration, necessary for future production managers by means of physical education and sport.

Vocational applied physical training is planned mainly in the senior year in the form of theoretical, methodical, and practical classes, group, and individual consultations in all academic departments. In addition, it can be carried out at training and on-the-job practice, in a health and sports camp or during classes and competitions in applied sports.

The choice of means of professional physical training must be aimed at ensuring effective adaptation of the organism to the complex factors of labor activity: increasing resistance to microclimatic conditions of production, expanding the arsenal of applied motor coordination etc. The most widespread in the practice of professional-applied physical training are activities in profile sports (GUBANISCHEVA, 2014; NIKONOV, 2011).

Characteristics of sports recommended for students of higher vocational educational institutions as a professional applied physical training.

1. Endurance sports (middle-distance running, cross-country skiing, swimming, hiking, cycling, rowing, speed skating). Regular exercise forms the applied skills of rational walking, running, patience; provides a high level of dynamic performance, high functioning of the cardiovascular, respiratory, and thermoregulatory systems; general adaptive capacity; development of a high level of general endurance, resistance to adverse meteorological factors of the working environment.

2. Sports requiring complex sensory-motor coordination in a variation-specific situation (basketball, volleyball, handball, rugby, tennis, hockey, football; all types of wrestling, boxing). During systematic training, skills and abilities of operative and collective actions are formed; a high level of general efficiency, functioning of the central nervous, cardiovascular, respiratory systems, visual, auditory, and motor analyzers is ensured.

3. Sports for movement coordination (gymnastics, diving, trampoline, acrobatics etc.). Properly planned activities develop skills of control over the body, work at height, provide a high level of motor and visual analyzer functioning, vestibular apparatus, ability to dose

different efforts on the strength and amplitude of movement, strength, power and static endurance of trunk muscles, abs, tracking reactions, dexterity and coordination of movements, flexibility, vestibular stability, sense of balance, movement, space, switching and distribution of attention, self-control.

4. Coordination and endurance sports (mountaineering, sport climbing, mountain hiking). The systematic year-round training promotes the formation of skills in climbing, working at height, insurance and self-insurance, operative thinking, mastering of the methods of self-regulation of the emotional state; provides a high general physical performance, a high level of functioning of the cardiovascular, respiratory systems, thermoregulation system, vestibular apparatus, the general resistance of the organism.

5. Sports of various means of transportation (automobile, motorcycling, hang gliding etc.). Training in these kinds of sports contributes to the formation of skills in controlling various means of transportation, operational thinking, provides a high level of functioning of the central nervous system, visual and auditory analyzers, the vestibular apparatus. Regular training develops strength and static endurance of the arms, trunk, back muscles, all types of reactions, speed and accuracy of movements, sensorimotor coordination, vestibular stability, resistance to adverse weather factors, sense of speed, observation, volume, rational distribution, switching and stability of attention, operational thinking, emotional stability, initiative, self-control, courage, determination.

6. Sports requiring extreme nervous activity (bullet shooting, archery, chess). Regular training provides development of skills in motor tasks under conditions requiring extreme tension of nervous activity, good condition of the central nervous system, visual analyzer, develops the ability to dose small force stress (SIVAKOV, 2006).

The above-mentioned sports with a certain structure of sports training can contribute not only to the development of psychophysical qualities and applied skills, but also to the solution of other problems of professional-applied physical training.

Results and Discussion

To solve the set tasks, we conducted the ascertaining and formative pedagogical experiments.

The pedagogical ascertaining experiment was conducted in September-October 2018 to identify the indicators of physical fitness of students in higher vocational education. This

experiment involved 28 1st year students in the direction of training "Mechanization of agriculture" and 26 1st year students in the direction of training "Information systems".

The pedagogical experiment included the following stages: pedagogical testing and development of the content of physical education educational process for students, including a combination of general physical and vocational-applied physical training.

The initial level of physical fitness of the students of the educational institution was identified during the ascertaining experiment. The results of the ascertaining experiment showed a low level of physical fitness of the students of the educational institution, in this regard, the need to change the situation for the better using means of applied professional physical training in the process of physical education is ripe.

The formative pedagogical experiment was conducted from January 2019 to June 2019 with the purpose of experimental justification of the effectiveness of the content of physical and applied training of students of the educational institution.

The students of the same training areas participated in the formative experiment in the number of 48 people.

The essence of the experiment consisted in the use, in the process of physical education of professional-applied physical training, which, in turn, consists in the optimal use of means and forms of physical education to achieve and maintain based on general physical training the preferential development of mental and physical qualities, to which increased demands in the process of learning and mastering the profession. Each profession has its own motor specificity, which differs by working conditions, psychophysiological characteristics and imposes different requirements for the level of development of physical qualities, psychophysiological functions and mental properties, and personality traits.

Importance was given to the use of VAPT exercises in the section "Ski Training". In our opinion, the proposed VAPT exercises on skis, as well as mobile games on skis have a positive impact not only on the functional capabilities and endurance of students, but also on coordination abilities, such as differentiation of muscle effort, spatial orientation, and balance.

Physical education of students in vocational education institutions is carried out using a variety of forms of in- and out-of-school activities throughout the entire period of study at the institution. Lesson lessons may take the form of: theoretical, practical, control, elective practical lessons (optional), individual and individual-group additional lessons (consultations), self-study by assignment and under the control of the teacher.

Extracurricular activities are organized in the form of: performance of physical exercises and recreational activities in the school day, activities in sports clubs, sections, hobby groups, amateur exercises, sports, tourism, mass health, physical education and sports events.

The essence of applied vocational physical training consists in the optimal use of means and forms of physical education to achieve and maintain, based on general physical training, the predominant development of mental and physical qualities, which are demanded in the process of learning and mastering the profession. Each profession has its own motor specificity, which differs by working conditions, psychophysiological characteristics and imposes different requirements for the level of development of physical qualities, psychophysiological functions and mental properties, and personality traits.

Professional-applied physical training is carried out in close connection with general physical training, which is the basis of the practical section of the discipline "Physical Education" in the institution. According to A. V. Nikonov (2011), general physical training of future specialists cannot fully solve the problems of special training for a particular profession. Professional-applied physical training should be based on good general physical preparedness of students. The ratio of general physical and vocational-applied physical training may vary depending on the profession.

The selection of means and methods of applied physical fitness requires a precise description of the occupation (occupational profile). The occupational profile indicates the type of work, the nature of work and working conditions, and the nature and dynamics of fatigue.

Graduates in the "Mechanization of agriculture" training direction should be able to plan and organize the maintenance, installation, and repair of agricultural machinery; adjust individual units and aggregates; carry out the necessary calculations and draw up technical documentation; identify the causes of faults; carry out machinery tuning. They must therefore possess the following abilities and personal qualities:

– the ability to concentrate and distribute attention;
– ability to think visually, technically and logically;
– the ability for hand-eye coordination;
– good eyesight and hearing ability;
– well-developed manual dexterity;
– physical endurance;
– spatial imagination;
– accuracy and responsibility.

Agricultural machinery mechanics work in hangars and garages, at service stations. Work is carried out outdoors and indoors, under conditions of high noise and vibration exposure. The work involves a lot of social contact.

Graduates in the field of information systems training should be able to develop algorithms and programs suitable for practical application in the field of information systems and technologies, to select platforms and hardware and software tools for the implementation of information systems.

As such, they need to:

– have interest in routine work, ability to concentrate, diligence, attentiveness, diligence, responsibility, honesty, good memory, ability to work with large volumes of information;

– be educated, keep abreast of changes in accounting regulations, changes in legislation, and if possible attend seminars and refresher courses;

– have good mobility of hands and fingers, a balanced nervous system; communication skills.

An IT specialist works in a room with a normal domestic microclimate, sitting at a desk at a computer, using computer technology. The work is associated with a huge amount of iconic information (numbers, letters), which often leads to great mental stress. Social contacts are limited; the work is highly instructed and individualized.

Stamina, coordination, and strength exercises are necessary for students in the specialty "Mechanization of agriculture". Endurance, coordination, and joint mobility exercises are required for students majoring in Information Systems.

We included complexes of exercises of professional-applied physical training for agricultural mechanics and for specialists in information technology in each practical training session. We allocated 15-20 minutes for performing the exercises of the complex in the main part. Students performed general endurance exercises when exercising outdoors (September, October). Exercises for coordination, strength and flexibility are performed in the sports hall.

Acrobatic exercises for development of coordination abilities were performed in a flowing manner on the mats. Jump rope exercises were performed in a frontal manner (girls jumped first, then boys). Exercises for the development of strength ability in boys and for the development of flexibility in girls were performed in a circular method. The number of series and repetitions of exercises was regulated individually for each student depending on the state of health, considering the average load. Control of the load in the classroom was carried out by self-control (the value of heart rate), how the students feel and by external signs of fatigue.

As a result of the introduction of physical education content in the process of physical education of students based on the inclusion of applied exercises at the end of the experiment, we have identified significant differences in the physical fitness of students of vocational education institution (Table 1).

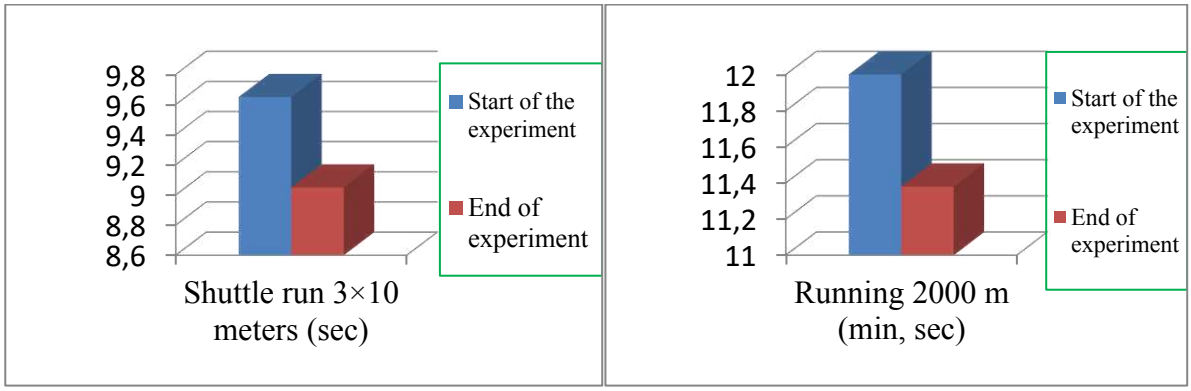
Table 1 – Dynamics of physical fitness of higher education students (X±m)

№	Name of the movement test	Start of the experiment	End of experiment	p≤0.05
Girls				
1.	Running 60 m (sec)	10.20±0.05	9.78±0.02	t=2.34 p<0.05
2.	Shuttle run 3×10 meters (sec)	9.65±0.04	9.05±0.01	t=2.29 p<0.05
3.	Forward bending from a sitting position (cm)	3.50±0.05	8.50±0.04	t=2.43 p<0.05
4.	Low bar pull-up (number of times)	9.15±0.34	13.15±0.04	t=2.52 p<0.05
5.	Running 2000 m (min. sec)	12.00±0.06	11.38±0.23	t=2.32 p<0.05
6.	Long jump from a place (cm)	172.31±1.93	179.21±1.33	t=2.43 p<0.05
Boys				
1.	Running 60 m (sec)	9.60±0.06	9.24±0.02	t=2.34 p<0.05
2.	Shuttle run 3×10 meters (sec)	7.94±0.04	7.65±0.02	t=2.29 p<0.05
3.	Forward bending from a sitting position (cm)	3.57±0.37	5.57±0.07	t=2.43 p<0.05
4.	Pull up on the high bar (number of times)	5.18±0.33	8.18±0.03	t=2.52 p<0.05
5.	Running 3000 m (min. sec)	14.06±0.04	13.46±0.09	t=2.32 p<0.05
6.	Long jump from a place (cm)	198.57±1.70	204.6±1.50	t=2.43 p<0.05

Source: Devised by the authors

Analyzing the dynamics of changes in the results of girls studying in the specialty "Information Systems" we can conclude that the greatest increase is observed in the development of coordination abilities and endurance. So, the result in the test run 3x10 m at the beginning of the research for girls was 9.65±0.04 seconds, at the end of the experiment 9.05±0.01 seconds, differences are significant (p<0.05). In the 2000m running test, the result at the beginning of the experiment was 12.00±0.06 min, sec, at the end of the experiment - 11.38±0.23 min, sec, differences are significant (p<0.05) (figure 1).

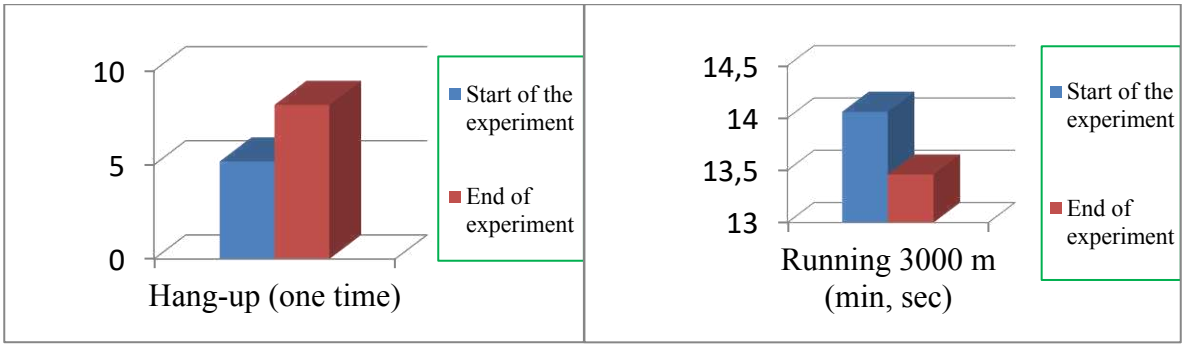
Figure 1 – Dynamics of change in girl's coordination and endurance during the experiment



Source: Devised by the authors

At the end of the experiment the greatest changes were found in strength and endurance. So, the result in the test pulling up on the bar at the beginning of the study in boys was 5.18±0.33 times, at the end of the experiment 8.18±0.03 times, differences are reliable ($p<0.05$). In the 3000m running test, the result at the beginning of the experiment was 14.06±0.04 min, sec, at the end of the experiment - 13.46±0.09 min, sec, differences are significant ($p<0.05$) (figure 2)

Figure 2 – Dynamics of change in girl's coordination and endurance over the course of the experiment



Source: Devised by the authors

We also analyzed the results in a test to determine the level of endurance development in the VAPT section of ski training. It consists of a 1000m obstacle course in cross-country skiing. As part of the test, trainees overcome such obstacles as a fence (only boys, without skis), a three-pole fence (reach between the bottom and middle poles without removing skis), a maze (pass under pipes), a ditch.

The results of overcoming obstacles and cross-country skiing demonstrated by the examinees were evaluated according to the table in points. These levels were developed by the physical education teachers of the educational institution (Table 2).

Table 2 – Scale for evaluating 1000 m steeplechase skiing technique

№	Tests	Course	5		4		3	
			B	G	B	G	B	G
1.	Skiing 1 km with overcoming obstacles	I	7.3	8.5	8.3	9.5	9.3	10.5
		II	6.3	7.5	7.3	8.5	8.3	9.5
		III	5.3	6.5	6.3	7.5	7.3	8.5

Source: Devised by the authors

Thus, the result in the applied ski training test for girls at the end of the section was 8,4 points for technique and 10 min 12 sec for the 1000 m result. These results indicate a positive effect of VAPT in the Ski Training section on the formation of technical and physical fitness. The boys also showed an increase in both distance technique and performance. At the end of VAPT Ski Training the boy's result in 1000m was 8 min 34 sec and the technical score was 6.5. These scores for the obstacle course technique of both boys and girls correspond to an excellent grade.

Thus, the use of means of applied training in combination with the means of general physical training has increased the effectiveness of teaching and educational process of physical education at universities. The development of special physical qualities of students, depending on the specifics of their future professional activities, had a positive impact on both the indicators of general and special physical training, and contributed to the formation of personal qualities of professionals and their competitiveness in the labor market. The use of exercises of professional-applied physical training in the section "Ski training" contributed to the formation of professionally important motor skills, as well as increased the level of functional reserves of the body of students, reflected in the indicators in the endurance tests.

Conclusion

The analysis of scientific and methodological literature has led to the following conclusion: the main goal for any vocational education institution is to train a competitive specialist with professional and moral qualities demanded by the market and society, capable of setting and achieving personally significant goals that contribute to the development of the country's economy.

Physical education strengthens human health, increases the level of physical fitness, provides on this basis a high capacity for work, creative activity, and maximum longevity.

As a result of the pedagogical ascertaining experiment the evaluation of physical fitness of the students of the first year in the direction of training "Mechanization of agriculture" and "Information systems", which corresponds to a low level. During the study, the content of the process of physical education in higher vocational education, aimed at improving the physical fitness of students, thereby ensuring a high level of personal qualities and competitiveness. Considering the occupational profile for machine operators agriculture developed a set of exercises on endurance, coordination, and strength abilities. Considering the occupational profile for specialists in information systems, sets of exercises for the development of endurance, coordination abilities and joint mobility have been developed. The effectiveness of the content and its impact on the indicators of physical fitness of trainees in a professional institution is substantiated through a formative experiment.

Recommendations

The process of physical education in vocational education institutions is carried out in accordance with the federal state educational standards of secondary vocational education, which impose requirements for the mandatory minimum content and level of training of graduates in the subject "Physical Education". When organizing this educational process and creating pedagogical conditions for the formation of a competitive specialist, the following methodological recommendations should be observed:

Based on the federal state educational standards, local conditions and interests of students, the head and teachers of physical education determine the forms of physical education classes, means and methods of physical education, types of sports and motor activities.

The main forms of organization of physical education classes are practical classes in lessons, which consist of many interrelated components that determine their content. Extracurricular physical education activities in vocational education institutions should complement the practical physical education lessons, enriching them with specific content and a variety of forms of organization.

An integral part of the physical education process in secondary vocational education institutions should be general and professional-applied physical training, which ensures the formation and improvement of properties and qualities that are essential for a particular professional activity. The essence of professional-applied physical training consists in the optimal use of means and forms of physical education to achieve and maintain based on general

physical training the predominant development of mental and physical qualities, which are demanded in the process of learning and mastering the profession.

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