PEDAGOGICAL CONDITIONS OF FORMATION OF READINESS OF FUTURE SPECIALISTS OF PHYSICAL CULTURE TO USE OF INNOVATIVE TYPES OF MOTOR ACTIVITY IN PROFESSIONAL ACTIVITY

Svitlana Atamanyuk, Candidate of Sciences in Physical Education and Sports, Associate Professor,
https://orcid.org/0000-0002-4800-5965
e-mail: shiinna@ukr.net
Zaporizhzya Polytechnic National University, Ukraine, Zaporizhzya

Olena Semenikhina, Doctor of Pedagogical Sciences, Professor,
https://orcid.org/0000-0002-3896-8151
e-mail: shiinna@ukr.net
Makarenko Sumy State Pedagogical University, Ukraine, Sumy

Inna Shyshenko, Candidate of Pedagogical Sciences, Associate Professor,
https://orcid.org/0000-0002-1026-5315
e-mail: shiinna@ukr.net
Makarenko Sumy State Pedagogical University, Ukraine, Sumy

We have identified the pedagogical conditions for training future specialists of physical culture and sports to use innovative types of motor activity in professional activities in three dimensions: 1) as factors of formal education – the introduction into the educational process of educational and methodological support for the training of future specialists of physical culture and sports to use innovative types of motor activity in professional activities; 2) as factors of non-formal education: initiation of sections on
innovative types of physical activity in a higher education institution for students of non-physical education specialties; organization of competitive activities on innovative types of physical activity in higher education; 3) as factors of informal education – the use of digital visualization technologies in the process of forming the readiness of future specialists of physical culture and sports to use innovative types of motor activity in professional activities.

Keywords: professional training; future specialists of physical culture and sports; pedagogical conditions; innovative types of motor activity.

Атаманюк Світлана, Семеніхіна Олена, Шишенко Інна. Педагогічні умови формування готовності майбутніх фахівців фізичної культури до використання інноваційних видів рухової діяльності у професійній діяльності.

Визначено педагогічні умови підготовки майбутніх фахівців фізичної культури і спорту до використання інноваційних видів рухової активності у професійній діяльності у трьох вимірах: 1) як чинники формальної освіти – впровадження в освітній процес навчально-методичного забезпечення підготовки майбутніх фахівців фізичної культури і спорту до використання інноваційних видів рухової діяльності у професійній діяльності; 2) як чинники неформальної освіти: започаткування в закладі вищої освіти секцій з інноваційних видів фізичної активності для студентів спеціальностей нефізичного виховання; організація змагальної діяльності з інноваційних видів фізичної активності в закладах вищої освіти; 3) як чинники інформальної освіти – використання технологій цифрової візуалізації у процесі формування готовності майбутніх фахівців фізичної культури і спорту до використання інноваційних видів рухової активності у професійній діяльності.
**Introduction.** The priority national values that determine the socio-economic policy of civilized countries are health and the formation of a healthy lifestyle. The health of the nation is an indicator of the maturity, culture and success of the state. The development of society, global changes in the economy, culture and science have led to urbanization, informatization, industrialization and a significant reduction in human physical activity. Innovative types of motor activity can serve as an effective means of preventing the negative consequences of the development of modern civilization.

**Analysis of relevant research.** The basis for our study were the results of scientific research of famous scientists of the National University of Physical Education and Sports of Ukraine, which reveal the patterns of functioning of physical culture and sports (FC&S) in the modern market (E. Imas, Y. Michuda); theoretical and methodological principles of the system of sports training (V. Platonov) and management of training and competitive loads of high-class athletes in the conditions of intensification of the training process (Y. Shkrebtiyi); ways of development of modern professional sports (O. Borisov) and the Olympic movement and Olympic education (M. Bulatova, S. Bubka); approaches to learning movements in terms of maintaining statokinetic balance (V. Boloban); theory and methods of physical education (T. Krutsevich); theoretical and methodological principles of forming a sports system for all in Ukraine (M. Dutchak); theoretical and methodological principles of recreational activities of different groups of the population (O. Andreeva).
The purpose of the article is to identify the pedagogical conditions for training future specialists FC&S to use innovative types of motor activity in professional activities.

Results. The latest pedagogical technologies focus the system of higher physical education on the training of graduates with professional competence and skills to navigate the labor market, to present themselves favorably, to withstand competition with other job applicants. Therefore, one of the tasks of higher education is to create conditions for the preparation of graduates who are able to compete in the labor market. The solution to the problem of employment of future specialists in physical education and sports is based on a competency-based approach, in which the professional and personal characteristics of the graduate are associated with the personnel needs of FC&S in specialists with innovative motor activities [1; 2; 3; 4].

Thus, we have identified the pedagogical conditions for training future specialists FC&S to use innovative types of motor activity in professional activities in three dimensions:

1) as factors of formal education – the introduction into the educational process of educational and methodological support for the training of future specialists FC&S to use innovative types of motor activity in professional activities;

2) as factors of non-formal education:

– initiation of sections on innovative types of physical activity in a higher education institution for students of non-physical education specialties;

– organization of competitive activities on innovative types of physical activity in higher education;
3) as factors of informal education – the use of digital visualization technologies in the process of forming the readiness of future specialists of FC&S to use innovative types of motor activity in professional activities.

To determine the motives, interests in innovative types of motor activity, the structure of knowledge and skills of using innovative types of motor activity in the professional activities of future specialists FC&S we used a survey of student youth in the field of FC&S (251 respondents took part in the survey, including 126 coaches of well-known network gyms and sports clubs of Ukraine, 72 freelance students and 29 teachers of general and special disciplines in the field of FC&S, 24 physical education teachers). Sociological research data showed that 45.2% of students consider the development of physical qualities (strength, endurance, agility, flexibility, speed, etc.) to be the main motive for engaging in innovative types of motor activity. Among the main motives for engaging in innovative types of physical activity for 23.6% of students is the motive of "improving health". For 24.3% of students, the determining factor is maintaining optimal physical shape, ie a good figure. Only 6.9% were students' answers, who consider the possibility of their introduction into future professional activity to be the main motive for engaging in innovative types of motor activity. To determine motor preferences and forms of training in the questionnaire to the question "What form of training in innovative physical activity do you like?" 72.0% of students answered that the best form for them is classes of their choice in the sports section.

The results of the survey showed that 7.2% of students consider it necessary to include innovative types of physical activity in the program of classes in professional disciplines in the University, and 20.8% of respondents consciously want to practice independently. The ability to freely choose the form of physical education classes indicates that respondents have a conscious active interest in physical self-improvement.
Determining the need for innovative types of physical activity, in the questionnaire we asked the following question: "Do you play sports in your spare time?". According to the survey results, 56.6% "engage in innovative exercises from time to time"; 18% stated that they do not engage in exercise at all, and 25.4% are constantly engaged in innovative physical exercises. We can assume that this is due to a number of reasons: low level of education about innovation in FC&S, lack of knowledge, low motivation, lifestyle and others. As a result of determining the motor preferences of students to engage in innovative types of motor activity, it was found (Fig. 4.3) that the most popular sports (34.3%) and training on simulators (12.6%). These types of training provide a high emotional background and good physical shape. 43.8% of students want to do various fitness programs. Only 9.4% of respondents chose other physical activity of innovative orientation, including various types of recreation, Pilates, aqua fitness, yoga, stretching and others.

According to the results of the questionnaire on the desire to engage in innovative types of physical activity, 43% of students were interested in Pilates classes; 27% want to do aqua fitness, 9% indicated among the desired types of innovative motor activity fistball, korfball, floorball, petanque and horting, and 21% - other types (yoga, stretching, playing sports, etc.). As a result of the questionnaire, we found that the main factors that determine the interest in engaging in innovative types of physical activity are modern programs and techniques. According to the results of the study of motivational interests and motor preferences of students, training programs with modern types of motor activity are a priority among young people.

The results of the questionnaire showed that the reasons that prevent innovative physical exercises are as follows: 65.4% of students answered that they do not have enough time because it requires basic training; 28.3%
of respondents stated that they are hindered by innovative exercises (family, communication with friends, etc.); 6.3% of respondents did not and do not want to engage in innovative physical exercises.

To the question "Do I need classes in innovative physical activity in the University?" 62% of students answered that they consider them necessary, clarifying the above. Unfortunately, there are 38% of responses that indicate a negative attitude to the introduction of physical exercises of innovative orientation within the programs of educational institutions. Insufficient level of organization of classes in innovative types of motor activity in the University - compliance with generally accepted programs and non-use of modern methods and fitness technologies - are factors that reduce young people's interest in using innovative types of motor activity in future professional activities. Thus, the results of the survey showed the unsatisfactory state of readiness of future specialists of FC&S to use innovative types of motor activity in professional activities in the educational process of higher education and identified the need to describe their place in the educational process of higher education, substantiation of effective methods, tools, forms of training, in particular, the formation of motivation in research and teaching staff and future specialists FC&S to use innovative types of motor activity in professional activities; creating conditions for the introduction of innovative types of motor activity in the training of FC&S specialists.

In order to form the readiness of future FC&S specialists to use innovative types of motor activity in professional activities in experimental groups at the bachelor's level, the introduction of classes in the programs of professional disciplines with the use of the most available innovative types of motor activity becomes especially important. One of the areas popular and widespread today is "fitness", which is especially in demand among women.
Studying the leading innovative modern fitness technologies in the structure of professional disciplines (aerobics, step aerobics, aqua aerobics, double aerobics, spinbike aerobics, body combat, body pump (barrel workout), fitball gymnastics, stretching, dumbba, zumba, slide aerobics, kango-jumpa), the student must be able to demonstrate physical exercises and teach others the correct technique of their implementation, including the use of equipment taking into account the level of physical fitness and age; to develop programs of strength, aerobic training with the definition of stage, purpose, general and special tasks, means, rational parameters of motor activity, forms of organization, control methods, performance criteria for people of different sex, age and physical condition; have basic fitness technologies in various areas and types of fitness; develop a program of preventive exercise for people who have risk factors for diseases of the cardiovascular system, metabolism, musculoskeletal system. For example, the student's independent work within the content module "Strength Fitness" and "Aerobics" involves independent search and assimilation of theoretical information on the anatomy of the musculoskeletal system, methods of developing strength, features of innovative equipment. At the same time, the independent work includes independent practical classes aimed at improving technical skills and developing strength and functional qualities.

To form the readiness of future specialists of FC&S to use innovative types of motor activity in professional activities in experimental groups at the master's level, it is advisable to develop and implement author's special courses "Innovative types of motor activity"; "Innovations and innovative activities of educational institutions in the field of physical culture"; "Best practices of outstanding coaches and physical education teachers." At the same time, we offer seminars as the main type of educational activity for students, which includes presentations, reports, discussions of scientific
issues and problems under the control and guidance of the teacher [7-9]. The teacher gives students the opportunity to express themselves freely during the consideration of issues submitted for discussion, helps them to build their arguments correctly. We held a seminar-discussion with students on the following topics: "Structure and classification of mobile games", "Mobile games with elements of sports games", "Mobile games in general physical training", "Innovative health promotion systems", "Organization of educational and training fitness process ".

Conversations are aimed at forming in students a positive attitude to extracurricular physical education classes, awareness of the importance of physical culture in the daytime, the organization of control of morning gymnastics in extracurricular activities in sports sections. Individual and group conversations with students were held in a free mode, during the conversations consultations were held on the basics of methods of rehabilitation and physical improvement by traditional and non-traditional means and methods of physical culture. In the experimental groups, sections on innovative types of motor activity were initiated in higher education institutions for non-physical education students, with undergraduate students also participating in these sections as wards or assistant coaches, and master's students participated in these sections as trainers.

The classes are mainly integrated development of motor skills with an emphasis on the development of aerobic endurance. The direction of classes is educational and training in nature [10]. The following criteria should be followed for the selection of rational exercises for general physical training: physical exercises should correspond to the nature of neuromuscular efforts, identical to the main sport; physical exercises should promote more full development of special physical qualities; physical exercises should to some extent contribute to the development of general
coordination of movements; physical exercises should promote faster recovery of functions and systems of an organism, development of the general working capacity. General physical training is the basis for special training, which provides a diverse development of physical qualities (strength, speed, endurance, agility, flexibility). Introduction to general physical training of mobile games is an effective means of comprehensive improvement of motor activity. To the greatest extent it contributes to the improvement of such qualities as: agility, speed of motor reaction, endurance, strength. Moving games affect not only the quality of the exercises performed, but also such quantitative indicators as speed and endurance while running, distance and height of jumps. Despite the fact that most games are aimed at improving one of the motor skills, they are classified as exercises of general physical impact. Games with elements of power struggle, as a rule, are characterized by a manifestation of endurance and agility. Without this, martial arts does not make sense, so the classification of games by physical qualities is mainly a manifestation of one of them. One lesson can include from one to four types of moving games and relay races: with load transfer, without load, with overcoming obstacles, use of gymnastic devices, equipment, etc. However, it should take into account the physical training of students, age and gender. Moving games can be included in both the preparatory and the main and final part of the general physical training. The load in the game is regulated by decreasing or increasing the overall mobility of the participants. There are various methods of changing the load in the game: breaks to discuss mistakes, scoring points, specifying the distance for jogging, reducing the number of repetitions, etc. The mobility of game participants is enhanced by increasing the number of obstacles, running distances.

Independent physical exercises are conducted individually or in a group of 2-5 students or more, it is recommended to exercise 3-4 times a
week for 1-1.5 hours in sports that are cultivated in the university, as well as perform physical exercises with elements of athletic gymnastics (dumbbells, barbells, exercise machines, fitness (body fitness, Pilates, stretching), walking and running. For independent physical exercises, teachers develop health programs that take into account the interests of students, their motivation, level of physical condition. Programs of independent physical exercises include the ratio of training tools, pulse regimes, tools and methods of exercise. During independent physical exercises, students acquire knowledge and skills to plan and conduct physical exercises, control their physical and functional development. The organization of independent physical exercises for students involves: improving the skills and abilities acquired in compulsory education and elective classes; acquisition of skills and abilities in game sports (volleyball, table tennis, badminton, etc.). In the course of the research we found that conducting independent physical exercises not only increases the level of physical training of students, but also educates such moral qualities as diligence, self-organization, self-discipline and others. Sports competitions in innovative sports in the University have a dual function: on the one hand, it is the final part of the educational process, on the other - they play a significant social role, being a carrier of positive emotions, diversify student life, bring elements of healthy rivalry, competition, toning the lifestyle of young people. Sports competitions in the University for innovative sports are divided into:

- competitions that take place in the study groups of the faculty (for the championship of the group, including competitions for passing various standards and competitions in sports);

- sports competitions on the course, which are held between the teams of study groups;
- team competitions of faculties (sports competitions by sports), in which the places of each team of the faculty are determined;
- individual-team competitions, in which the places occupied by participants and teams are determined;
- classification competitions in which personal and team places are not determined, and the results of the participants are credited to improve or confirm their sports qualifications.

The purpose of student sports competitions is the harmonious development of motor skills, meeting the sports needs of student youth, activation of the health function and popularization of favorite sports. When organizing sports competitions in innovative sports, bachelor's students were involved as participants or assistant coaches and organizers, and master's students were involved only as coaches, organizers, judges. Involving students in sports competitions requires the creation of the necessary organizational conditions: the creation of qualified teams of judges in sports; the presence of physical student assets (physiognomists and leading athletes). However, the basic skills of organizing and judging competitions must be acquired by all students who train in sports in sections. The scheme of use of sports assets by us is as follows: physiognomist and leading athletes perform work on the organization, agitation of students to participate in competitions; physiogist prepares documents (application, protocol) of judges; assists in equipping competition venues (if necessary); students who do not participate in the competition (due to illness and other valid reasons), participate in the judging of the competition/

The application of the principle of visualization, in particular multimedia (multimedia players, media servers, projectors, screens, video monitors, distributors, switches, scalers), occupies a prominent place in ensuring the readiness of future FC&S professionals to use innovative
types of motor activity in professional activities. The use of multimedia equipment in extracurricular physical education classes is provided by our multimedia programs: fitness program "Beautiful Body", stretching program "Elastic Young People", Pilates program "Bracing Mix". For example, here is one such program as the multimedia fitness program "Beautiful Body", which is a version of a video lesson in aerobics (1 hour 20 minutes), where the movements are designed in the form of video animation, the amplitude and pace of movements correspond to real movements.

We also used Internet resources, including YouTube, which highlights the use of various innovative types of physical activity.

The use of digital visualization technologies in the process of forming the readiness of future undergraduates of FC&S to use innovative types of motor activity in professional activities included future courses for masters of innovative types of motor activity on the largest online education platform in Ukraine Prometheus.

The knowledge and skills gained during the course were used by students during meetings with stakeholders of the specialty. Masterclass is a modern interactive form of learning designed to develop practical skills to improve the professional level, as well as the exchange of experiences between participants. combines the format of training and conference. An expert was invited to conduct the master class - a leading specialist in the field of fitness, who conducted classes in the following stages: presentation, demonstration and discussion. In fig. 1 presents fragments of such classes.
Conclusions. Thus, the types of work that were carried out at the ascertaining, formative and experimental-generalizing stages of the pedagogical experiment to test the effectiveness of the proposed pedagogical system of forming the readiness of future specialists FC&S to use innovative types of motor activity in professional activities.

The readiness of future FC&S specialists to use innovative types of motor activity in professional activities as a phenomenon with a non-trivial structure is being formed today not only in educational institutions, but also under the influence of non-formal and informal education. The integration of these influences with the professional training of a specialist can be the basis for the competitiveness of a graduate of university, and therefore the formation of readiness of future specialists FC&S to use innovative types of
motor activity in professional activities should not occur spontaneously, but purposefully within the pedagogical system, but a balanced combination of traditional and distance learning, integration of professional training in the free and informal environment, as well as modernization of higher education, focused on the formation of each component of the readiness of future specialists FC&S to use innovative motor activities in professional activities.

References:
