

IT TECHNOLOGIES AND DIGITALIZATION OF EDUCATION AS A FACTOR OF THE QUALITY OF PROFESSIONAL TRAINING OF FUTURE SPECIALISTS IN PHYSICAL CULTURE AND SPORTS

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Summary

Today's realities are the special attitude of the majority of teachers and students of education toward the use of new information technologies, including their own electronic devices, during the educational process. Some of the subjects of the educational process believe that this has a positive effect on the quality of the provision of educational services, while others, on the contrary, have a negative attitude towards the modernization of the professional training of future specialists. This, in turn, actualizes the issue of digitalization of the educational process, in particular during the professional training of future physical culture and sports specialists.

In order to find out the attitude of education seekers to the digitalization of the educational process of professional training of future specialists in physical culture and sports, the authors conducted a survey of students of the first (bachelor) level in the specialty 017 Physical culture and sports of the National University "Poltava Polytechnic named after Yuri Kondratyuk". 187 students took part in the survey.

The raised scientific question aroused the active interest of education seekers who passed a survey on the use of IT technologies in the professional training of future specialists, where, for the most part, they gave positive answers regarding the digitalization of the educational process.

The authors single out the positive aspects of the digitalization of professional training of future physical culture and sports specialists and emphasize that we should not forget about the negative consequences of the digitalization of education and try to protect both students of higher education and teachers from them.

It is concluded that the application of IT technologies, with the aim of digitalizing education during the professional training of future specialists in physical culture and sports, makes it possible to improve the educational process and ensure the quality of the provision of educational services.

Keywords: *digitization of education, professional training, education seekers, specialists in physical education and sports, IT technologies.*

Introduction. The rapid development of IT technologies and their constant use in professional and life situations prompts a rethinking of the meaning of modern achievements and the need for their implementation in the educational sector. Modern metamorphoses associated with the need to transition to a distance (mixed) form of education forced subjects of the educational process to actively use information and communication technologies (ICT). At the same time, both teachers and students of education were convinced of the positive impact of the introduction of ICT in the educational process on the quality of providing and obtaining education,

because the habits of students to use personal electronic devices all the time became useful even during education. However, one cannot remain silent about the negative impact of ICT during the professional training of future specialists, in particular in physical culture and sports.

Ensuring the quality of professional training of future specialists in physical culture and sports, the positive impact of digitization of education and prevention of possible negative effects on the subjects of the educational process, requires pedagogical research. S. O. Sysoeva emphasizes the need to study the following areas of digitization of education: the model of the teacher/pedagogue of digital education, the content of his professional training; technologies for the development of digital educational content, methods of assessing its quality and application in the educational process, taking into account ergonomic, valeological, psychological and pedagogical requirements; effective methods, forms, means of learning in the open educational space and their methodological justification, in particular the ratio of traditional and electronic learning, contact and independent work of students, methods of monitoring success and the formation of educational results in the conditions of transferring the educational process to the global network; means of ensuring the quality of education, prevention of possible risks in the conditions of digitization of education, etc [4].

A brief analysis of studies and publications related to the problem. Scientists N.M. Dukhanina and H.V. Lesyk emphasize that qualitative changes in the education system are impossible without digital transformation of the educational process, which involves the maximum use of the potential of digital technologies [2]. V. Yu. Areshonkov emphasizes the issue of digitalization of education in the context of changing goals, priorities, corporate ideology, organizational principles and approaches, the structure of an educational institution, etc., and not just quantitative accumulation of technical means [1]. Currently, the digitization of education is becoming actualized and interested in this scientific problem by a considerable number of domestic researchers (Bykov V. Yu., Kovalchuk V. I., Kolesnikova I. V., Podolska I. S., Sbruyeva A. A., Semenikhina O. V., A. O. Yurchenko, etc.), however, the issue of digitalization of professional training of future physical culture and sports specialists remains unsolved.

The purpose of the study. Investigate the feasibility of implementing IT technologies and digitalization of education during the professional training of future physical culture and sports specialists.

Research material and methods. In the course of the research, methods of analysis and synthesis of scientific sources were used; systematization of Internet resources on the issue of IT technologies and digitalization of education; pedagogical observation; poll.

The novelty of the research lies in the fact that for the first time the issue of the application of IT technologies and digitalization of education during the professional training of future specialists in physical education and sports is actualized. The analysis of the results of the survey of education seekers regarding their attitude to the digitalization of education demonstrates the positive attitude of students to the digitalization of education in the vast majority of respondents. The authors also draw attention to the positive and negative impact of digitization of education on the subjects of the educational process and emphasize the need to protect both students and teachers from the negative impact of IT technologies.

Presentation of the main material. As S. O. Sysoeva rightly points out, "one of the most important problems of digitalization of education is that innovations in the digital educational space are not only technical and technological innovations, but also changes in the content and organization of educational content, in the structure and organizational principles of the institutions' activities education. This requires a review of conceptual provisions, content of categories and concepts of established pedagogical science, their adaptation (or development of new content) to the digital educational space."

Modern IT capabilities, on the one hand, facilitate the professional activity of the teacher and improve the perception of didactic material by students of education, on the other hand, they are an additional burden on the teacher during the preparation of educational information and, to a certain extent, lead to negative consequences in the learning of students. Sysioeva S. O. emphasizes the same in her research and notes the following problems of higher education during its digitalization [5]:

- loss of basic cognitive skills (ability to read, count, write), decrease in the quality of education;
- the "public" model of the pedagogue-teacher, high demands on his psychological qualities, the growth of conflicts;
- decrease in personal contacts, "outflow" of talented youth and teachers abroad, decrease in the general level of training, quality control problems;
- changing the requirements for the content of education, further changing the means of education;
- updated requirements for the qualifications of specialists, a decrease in the need for an "intellectual" specialist and "attraction" to his technological image, a reduction in the contingent of higher education;
- movement towards "educational services", departure from fundamentalism, change / redistribution of functions of the administration of higher education institutions and teachers, increase in conflicts, decrease in the quality of education;
- loss of the status of domestic higher education, decrease in the number of students.

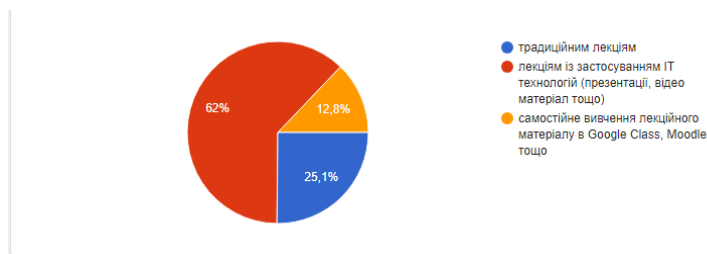
We conducted a survey among students of the first (bachelor) level in the specialty 017 Physical Culture and Sports of the National University "Poltava Polytechnic named after Yuri Kondratyuk" regarding their attitude to digitalization of education. 187 students took part in the survey, of which 67 people (35.8%) – 1st year, 59 people (31.6%) – the second, 24 people (12.8%) – the third and 37 people (19.8 %) - 4th year. The vast majority of interviewed applicants are inclined towards full-time education - 58.3%; 21.9% of applicants are not against the distance form of education, and 19.8% of respondents are in favor of a mixed form of education.

The majority of applicants (78.1%) have a positive attitude towards the use of IT technologies in the educational process of a higher education institution (Pic.1).



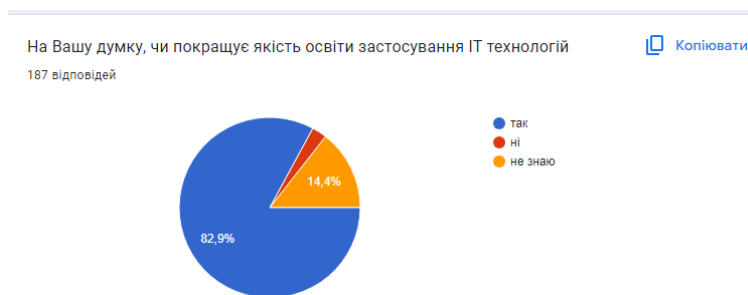
Pic. 1. The attitude of education seekers to the use of IT technologies during the educational process.

62% of respondents prefer lectures using IT technologies (including video materials, presentations, etc.); 25.1% of respondents noted that they are more comfortable with traditional lectures; 12.8% of respondents voted for independent study of lecture material using educational platforms, such as Google Class, Moodle, etc. (Pic. 2).



Pic. 2. Answers of students regarding the use of IT technologies during lectures.

When asked whether the use of IT technologies in the educational process improves the quality of education, almost all applicants (82.9%) answered in the affirmative; 27% could not choose an affirmative answer, and only 2% of respondents believe that the use of IT technologies in the educational process does not increase the quality of providing educational services (Pic. 3).



Pic. 3. Answers of students regarding the impact of IT technologies on the quality of education.

After analyzing the answers of future specialists in physical culture and sports, we find that most of the applicants support the implementation of modern digitalization achievements in the educational process, which, in their opinion, improves the perception of didactic material and facilitates the students' learning. We can highlight the positive aspects of digitalization of professional training of future physical culture and sports specialists [3; 4]:

- extremely flexible, mobile, personalized and differentiated training system;
- the integration of technology in educational classes is an effective way of uniting education seekers with different preferences and different levels of knowledge;
- an individual approach to each education seeker, who can choose the most optimal means of learning for him;
- an opportunity for students to improve interaction with their classmates and teachers by encouraging cooperation;
- the use of IT technologies provides teachers with the opportunity to develop their own digital skills;
- significant improvement of the content of education, through the use of innovative methods, means and technologies of education;
- organization of appropriate forms of training and management of educational and cognitive activities of education seekers by taking into account the typical IT habits of young people to constantly use personal electronic devices (computers, tablets, smartphones, etc.);
- convenience when updating and editing materials online, using audio and video materials;

- convenient placement of educational and methodological materials (lecture courses, presentations, manuals, etc.) on Moodle, Google Class, etc. platforms;
- unbiased assessment of students, using Google forms, Kahoot control, etc.

However, it is worth taking into account the possible negative consequences of the introduction of IT technologies that were mentioned above and preventing such manifestations on the part of students and teachers.

Conclusions. Today's requirements, in particular the need for digitization of education, require the unification of efforts of scientists from various fields for the interdisciplinary solution of tasks related to modern transformations in the organization of the educational process. In order to ensure the quality and accessibility of education, strengthen the individualization and differentiation of education, the acquisition of digital competence by students, etc., higher education institutions should introduce available digital technologies into the educational process.

The use of IT technologies during the professional training of future physical culture and sports specialists makes it possible to improve the educational process and ensure the quality of the provision of educational services, as indicated by the answers of those seeking education during the survey.

Prospects for further research provide for the identification of the most effective means of digitalization of education for high-quality professional training of future specialists in physical education and sports.

ІТ ТЕХНОЛОГІЇ І ЦИФРОВІЗАЦІЯ ОБРАЗОВАННЯ ЯК ФАКТОР ЯКОСТІ ПРОФЕСІОНАЛЬНОЇ ПОДГОТОВКИ БУДУЩИХ СПЕЦІАЛІСТІВ ФІЗИЧЕСЬКОЇ КУЛЬТУРИ І СПОРТА

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Аннотация

Реалиями сегодняшнего дня является особое отношение большинства преподавателей и соискателей образования к использованию новых информационных технологий, в частности собственных электронных устройств, в ходе образовательного процесса. Некоторые субъекты образовательного процесса считают, что это положительно влияет на качество предоставления образовательных услуг, некоторые наоборот – негативно относятся к современным тенденциям профессиональной подготовки будущих специалистов. Это, в свою очередь, актуализирует вопросы цифровизации образовательного процесса, в частности, во время профессиональной подготовки будущих специалистов физической культуры и спорта.

В целях выяснения отношения соискателей образования к цифровизации образовательного процесса профессиональной подготовки будущих специалистов физической культуры и спорта, авторами статьи проведен опрос студентов первого (бакалаврского) уровня по специальности 017 «Физическая культура и спорт» Национального университета «Полтавская политехника имени Юрия Кондратюка». В опросе приняло участие 187 соискателей высшего образования.

Поднятый научный вопрос вызвал активный интерес у соискателей образования, прошедших опрос о применении IT технологий в профессиональной подготовке будущих специалистов, которые, в основном, дали положительные ответы по поводу цифровизации образовательного процесса.

Нами выделены положительные моменты цифровизации профессиональной подготовки будущих специалистов физической культуры и спорта. Мы акцентировали внимание на том, что не стоит

забывать и о негативных последствиях цифровизации образования и пытаться обезопасить от них как соискателей высшего образования, так и преподавателей.

Подводя итог, что применение ИТ технологий, с целью цифровизации образования во время профессиональной подготовки будущих специалистов физической культуры и спорта, позволяет усовершенствовать образовательный процесс и обеспечить высокое качество предоставления образовательных услуг.

Ключевые слова: цифровизация образования, профессиональная подготовка, соискатели образования, специалисты физической культуры и спорта, ИТ технологии.

SS ՏԵԽՆՈԼՈԳԻԱՆ ԵՎ ԿՐԹՈՒԹՅԱՆ ԹՎԱՅԱՅՈՒՄԸ՝ ՈՐՊԵՍ ՖԻԶԿԱԿԱՆ ԿՐԹՈՒԹՅԱՆ ԵՎ ՍՊՈՐՏԻ ԱՊԱԳԱ ՄԱՍՆԱԳԵՏՆԵՐԻ ՄԱՍՆԱԳԵՏՈՒԹՅԱՆ ՈՐԱԿԻ ԳՈՐԾՈՆ

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Անվտիում

Ֆիզիկական կուլտուրայի և սպորտի ապագա մասնագետների մասնագիտական պատրաստման կրթական գործընթացի թվայնացման առնչությամբ կրթության դիմորդների վերաբերմունքը պարզաբանելու համար հեղինակները հարցում են անցկացրել Յուրի Կոնդրատյուկի անվան Պոլտավայի պոլիտեխնիկական ազգային համալսարանի 017 «Ֆիզիկական կուլտուրա և սպորտ» մասնագիտության առաջին (բակալավրի) կուրսի ուսանողների շրջանում: Հարցմանը մասնակցել է բարձրագույն կրթության 187 դիմորդ: Բարձրացված գիտական հիմնահարցը ակտիվ հետաքրքրություն է առաջացրել ուսանողների և խնդրվ հետաքրքրվող հետազոտողների շրջանում, որոնք լրացրել են SS տեխնոլոգիաների կիրառման հարցաթերթիկը, որտեղ հիմնականում տվել են դրական պատասխաններ կրթական գործընթացի թվայնացման վերաբերյալ: Հեղինակները կարևորում են ապագա ֆիզկուլտուրայի ու սպորտի մասնագետների մասնագիտական վերապատրաստման գործընթացի թվայնացման դրական կողմերը՝ ընդգծելով, որ չպետք է մոռանալ կրթության թվայնացման բացասական հետևանքների մասին և փորձել կանխարգելել դրանք: Հետևաբար ֆիզկուլտուրայի և սպորտի ապագա մասնագետների մասնագիտական վերապատրաստման ընթացքում կրթության թվայնացման նպատակով SS տեխնոլոգիաների կիրառումը հնարավորություն է տալիս բարելավելու ուսումնական գործընթացը և ապահովելու կրթական ծառայությունների որակը:

Բանալի բառեր՝ կրթության թվայնացում, մասնագիտական վերապատրաստում, կրթություն փնտրողներ, ֆիզիկական դաստիարակության և սպորտի մասնագետներ, SS տեխնոլոգիաներ:

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