



Digital technologies in the system of humanitarian education in the conditions of a physical university

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Abstract

Objective of the study was to determine the attitude of students and teachers of a sports university to the digitalization of the educational process in the framework of the study of the humanities and natural sciences.

Methods and structure of the study. To achieve this goal, a survey method was used. 125 students and 15 teachers of the Department of Social-Humanitarian, Pedagogical and Natural Sciences of the Tchaikovsky State Academy of Physical Culture and Sports took part in the survey.

Results and conclusions. As a result of the experiment, the attitude and degree of adaptation of students to various forms of education during the period of quarantine measures was determined. Most of them have successfully adapted to the transition to distance learning. The attitude of students to the use of digital learning technologies in the process of studying the humanities, natural sciences is determined. The prevailing number of students "rather agree" with the use of digital learning technologies, a little more than a quarter of all students surveyed chose the category "rather disagree". Assessing the changes in the quality of education of students during the period of quarantine measures, teachers generally noted its deterioration among students of our university. Teachers consider digital technologies as progressive, allowing to diversify and intensify the educational work of students, but only as an additional tool for educational activities.

Keywords: *digital technologies, humanitarian and natural science disciplines, distance learning.*

Introduction. Today, the process of digitalization has become an integral part of modern higher education. On the one hand, this is the training of highly qualified specialists to work in new sectors of the digital economy, on the other hand, the formulation of clear goals and objectives, as well as their consistent solution in relation to the problems facing the higher education itself, for example, increasing the prestige and competitiveness of education in general, reducing the burden on the subjects of the educational process, increasing the motivation to acquire knowledge and then, accordingly, reducing the proportion of lagging students.

The relevance of the introduction of modern digital technologies in higher education is indicated in the works of domestic researchers in the field of pedagogy of higher education (M.V. Alyushin, V.V. Grinshkun, G.A. Kruchinina, S.K. Pozdnyakova, I.V. Robert, T. N. Suvorova, B. E. Starichenko and others) [3].

Objective of the study was to determine the attitude of students and teachers of a sports university to the digitalization of the educational process in the framework of the study of the humanities and natural sciences.

Methods and structure of the study. To achieve this goal, a survey method was used. 125 students took part in the survey: 1st year students (60 people) and 4th year students (65 people), as well as 15 teachers of the Department of Social-Humanitarian, Pedagogical and Natural Sciences of the Tchaikovsky State Academy of Physical Culture and Sports. The study was carried out in four stages. At the first stage, the attitude and degree of adaptation of students to various forms of education during the quarantine period was revealed; at the second stage, the attitude of students to the use of digital learning technologies in the process of studying the humanities and natural



sciences was assessed; at the third stage, teachers assessed changes in the quality of education during the period of work in remote mode; at the fourth stage, the attitude of teachers of the humanities and natural sciences to the digitalization of the educational process was determined.

Results of the study and their discussion. The results of a survey aimed at identifying the attitude and degree of adaptation of students to various forms of education during the difficult period of quarantine measures showed the following.

To the question "How do you rate your ability to use a computer and the Internet?", in general, the respondents' answers predominate, indicating a high and good level of skills in using a computer and the Internet. The number of first-year students with a high and good level of computer and Internet skills is greater than 4th-year students by 10.1%.

To the question "What technical problems did you encounter during the period of distance learning?" students answered as follows: 4.8% of fourth-year students had problems with the Internet, 35.7% of fourth-year students and 25% of first-year students noted poor Internet speed, 7.1% of fourth-year students and 50% of first-year students noted the lack of the necessary device freshmen. Approximately the same proportion of both groups of respondents had no problems.

Analyzing the answers of students about the organization of the educational process during the period of quarantine measures, it can be stated that a greater number of fourth-year students (73.1%) adapted to the conditions of transition to distance learning as "good" and "excellent" compared to first-year students (58.3%).

It was determined that a significant part of the students of both the 1st and 4th courses went through the process of adaptation to distance learning well, in our opinion, this is due to the fact that senior students had a similar learning experience in a university environment earlier.

The second stage of the study, as mentioned above, was to determine the attitude of students to the use of digital learning technologies in the process of studying the humanities, natural sciences. To the question "Do you agree, in general, with the use of digital technologies in the process of studying the humanities and natural sciences?" the prevailing number of students (4th year - 37.9%, 1st year - 41.7%) noted that they "rather agree", slightly more than a quarter of all students surveyed (4th year - 29.4%, 1 2nd year student - 25%) stated that they "rather disagree".

Interesting and indicative, in our opinion, were the students' answers to the question "For what purpose

do you usually use LMS Moodle (EIOS educational platform) in the process of studying at a university?"

For two positions, the shares of answers to this question almost coincided: "I download educational and reference materials" (4th year - 22.9%, 1st year - 26.7%), "I do practical tasks, including homework" (4th year - 30.3%, 1st year - 33.3%). The priorities for 4th year students when working with LMS Moodle were determined as follows: "I turn to the teacher for help and reference information" - 17.4%, "I study theoretical material in the discipline" - 19.2%. First-year students identified the following answers: "I follow my progress in the grade book" - 20%, "I follow the news and announcements of the course" - 26.7%. But the need and the need to communicate with other participants in the educational process at the forum among the fourth-year students was noted by 0.9% of the respondents, among the first-year students, not a single person chose this option.

Such results are explained by students' doubts about the possibilities of digital technologies when presenting theoretical material in the humanities and natural sciences and performing laboratory and practical tasks, for example, to determine the anthropometric indicators of the body and the parameters of speed-strength fitness using scientific equipment. In addition, studying the attitude of students to the categories of "digitalization" and "digital technologies", we note that they did not quite accurately grasp the difference between these concepts.

In the student environment, the process of digitalization is perceived differently - some strive for interaction, cultural exchange and not only in the classroom, but also for extracurricular personal communication, for them digitalization at the communicative level creates a certain threat, others - in parallel with educational activities, continue to actively participate in carrying out their sports career, being at trainings, training camps or competitions in other cities and countries, for them, obtaining knowledge in a remote format opens up the opportunity for timely and high-quality mastering of educational material in the humanities and natural sciences [2].

Evaluation by teachers of changes in the quality of education during the period of work in remote mode (the third stage of the study) showed that, in general, they were unanimous and stated that the quality of education among students of our university was deteriorating - 70%, the category "improved" was noted by 15%, "remained unchanged" - 10%, 5% found it difficult to answer.



When answering the question "What do you see as the reasons for the change in the quality of education during the period of distance work?" teachers identified positive and negative factors influencing this process. The teachers attributed to the positive factors: increasing the personal level of ICT competencies; the possibility of using a variety of information educational resources, on-line platforms, etc.; increase in the activity of students who perform independent work in a timely and high-quality manner, etc.

Among the negative factors noted: insufficient understanding of the possibilities of digital technologies and educational resources presented on various information platforms for the courses being studied; low awareness of the ways and methods of using digital technologies; difficulties that arise in the formulation of tasks, excluding students from copying information from Internet sources; reduction of non-verbal communication with students to enhance their intellectual and creative activity; difficulties in implementing a student-centered approach and taking into account the psychological and pedagogical characteristics of students; low motivation and activity among students to study the discipline remotely, including at practical and seminar classes organized on Zoom platforms; a sharp increase in labor costs for checking the independent work of students, etc. [4].

At the fourth stage, in order to determine the attitude of teachers of the humanities and natural sciences to the digitalization of the educational process, teachers were asked to list the advantages and disadvantages of introducing digital technologies into the educational process, give examples and, if possible, comment on each of the positions.

Separately, we note that all teachers of the Department of Social and Humanitarian, Pedagogical and Natural Sciences, to a greater or lesser extent, used and continue to use teaching tools: Discord, Zoom, EIOS, instant messengers, social networks, networks, email mail, etc. [5].

After analyzing the information received, we can state: firstly, not all respondents have the same attitude towards those innovations that are associated with the digitalization of education. An opinion is expressed that the degree of use of digital technologies in teaching the humanities and natural sciences largely depends on the organization of their application (rules of use, ease of learning), on the views of the teacher himself on the results of organized in this direction, innovation, etc.

Secondly, when organizing the educational process and developing educational materials using digi-

tal technologies, teachers have to take into account both the general psychological and pedagogical features of modern students: instability and short-term attention, low level of concentration, fragmentation of images and, as a result, poorly developed imagination, inability to build logical reasoning, as well as specific features of students of our university: lack of perseverance, superficiality of judgments, low ability for critical thinking, insufficiently developed speech skills, etc., such realities require the teacher to use digital technologies in a balanced way and use them as a supplement to traditional ones.

Conclusions. For the majority of the students surveyed, who do not experience difficulties when using digital technologies, personal communication with all participants in the educational process remains a priority, and teachers consider digital technologies as progressive, allowing to diversify and intensify students' educational work, but only an additional tool for educational activities.

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