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# НАУКОВО-ДОСЛІДНА РОБОТА СТУДЕНТІВ ЯК ЧИННИК УДОСКОНАЛЕННЯ ПРОФЕСІЙНОЇ ПІДГОТОВКИ МАЙБУТНЬОГО ВЧИТЕЛЯ

Збірник наукових праць

Випуск 22



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that is, to provide evidence of the student's success during a certain period of study. The authors include the following techniques of formative assessment: mini-review, mathematical dictation, maps of applied knowledge, weekly reports, assessment by levels.

*Keywords*: New Ukrainian School; Formative Assessment; TIMSS; PISA; Countries of the European Union; Forms of Assessment; Mathematics; Quality of Knowledge.

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#### DETERMINATION OF DIGITAL COMPETENCE OF TEACHERS OF MEDICAL INSTITUTIONS OF HIGHER EDUCATION IN THE PERIOD OF DIGITAL TRANSFORMATION IN EDUCATION

**Abstract.** The purpose of the study is to determine the perception of teachers of medical institutions of higher education of educational processes during the period of digital transformation in education. It is shown that the education system formed in the previous technological society does not meet the needs of modernity, the implementation of digital technologies and, in particular, the transition from the traditional «auditory» model of education to online education. The study used a non-experimental, descriptive design based on surveys of teachers of the Kharkiv National Medical University. The results show a positive correlation between the empowerment of digital pedagogy and the digital

environment, students' motivation for digital education, and recent changes in university teaching. The implementation of technological and organizational solutions in the field of education, aimed at adapting the educational system to the dynamically changing needs of the labor market and individualizing educational trajectories and increasing the involvement of students in the educational process are contribute to experience for self-learning and the promotion of initiatives that increase the level of development of digital competences of teachers.

*Keywords:* education, digital technologies, digital competence, medical institutions of higher education

Relevance of the research. The massive use of digital educational technologies during the pandemic and military aggression has significantly increased the demands placed on teachers and students of higher education institutions in their need to possess digital competences, which, in turn, made it necessary to formalize the educational process and led to the need to reflect all the rules and procedures in methodological recommendations, to ensure the same quality of student training as when using traditional educational methods. The question of the content of digital competences remained debatable for a long time. In particular, issues of information literacy [1; 2; 3], assessment, use and creation of information to achieve professional and educational goals were considered [4; 5]; private questions about the content of digital competences of teachers [5; 6]; organization of the process of training future teachers in digital competencies that ensure quality education of students [7; 8]. UNESCO has created the Competence Framework for Teachers in Digital and Information Education (ICT-CFT), which is a tool used to guide the initial and ongoing training of teachers in the use of information technology throughout the education system. ICT-CFT is designed to adapt to national and institutional objectives that are provides a renewed framework for professional and pedagogical evolution in the field of digital education, and includes the inclusive principles of non-discrimination, open and fair access to information and gender equality through technology-enabled learning, mobile technologies, the Internet of Things and open educational resources, with the aim of supporting the creation of inclusive knowledge societies [9].

The purpose of the article is to analyze the theoretical essence and content of the concept of digital competence; the acquisition of digital competence by teachers of medical institutions of higher education in Ukraine.

Research methods. In accordance with the logic of the research, a set of interchangeable methods was used to solve the tasks: theoretical and methodological analysis of the literature on the investigated problem; study of documents and regulatory materials that determine the content of digital competence formation; the analysis and synthesis of search results in information systems was carried out in order to determine the basic concepts of the study; methods of expert assessment, testing, questionnaires, observation, modeling, forecasting.

**Presenting main material.** Information was collected in the form of a survey of teachers of the Kharkiv National Medical University in the form of a questionnaire (n = 35), Kharkiv, June-August 2022. Participants were recruited by non-probability sampling, using availability as the main selection criterion. The academic degrees of all subjects were Candidate of Sciences, of which 88% were women and 12% were men. In general, all candidates had similar socio-demographic characteristics, and their age was mostly from 38 to 55 years old. The structure of the questionnaire included questions aimed at ascertaining the experience of the teachers of the higher educational institution in training medical students using digital technologies, teachers' experience in the use and development of digital educational materials; assessment of the level of competences in the use of new formats of conducting is busy. All questions were investigated of the questions in a Likert-scale from 1 (strongly disagree/little) to 5 (strongly agree/much).

It was established that the interaction between the teacher and the student is realized due to the technologies of the corporate electronic environment of the university, with the implementation of lectures and practical's in the mode of video format with online broadcasting. Task checking and feedback are implemented through communications, through the university's corporate e-mail, which contributes to the universalization

of methods of implementing the educational process and makes the communication format «student – teacher» uniform.

It was revealed that the accumulated experience of digital competences during the pandemic, namely, knowledge of services and technologies, the ability to use them, knowledge of the practical component of setting up services in accordance with the tasks to be solved, compliance with the principles of ethics, allowed teachers not to experience difficulties in mastering digital technologies. Nevertheless, the level of teachers' mastery of the indicated knowledge and skills shows that, to a greater extent, in relation to 70% to 30%, the skills to communicate using remote technologies and adjust the digital environment to personal needs are formed, and there is not enough competence in understanding technical and software setting up services, in particular the operation of the Moodle platform.

Participation in the preparation of digital learning materials can be considered in the area of digital methodology and didactic skills. Forced requirements for the creation of electronic training courses and the organization of contact work contribute to the accumulation of experience in the preparation of digital training. The results showed that every third teacher has mastered and consolidated the skills of developing video lectures and electronic textbooks. Comparative analysis of groups of teachers according to the criterion «work experience» did not reveal a direct relationship between the duration of work in the field of education and the creation of digital educational materials. Obviously, the accumulated practice contributes don't to a faster transfer of educational materials into digital format.

Conclusion. The introduction of digital technologies into the educational process in the conditions of a pandemic and war has created a new model of the educational process in the universities of our country. The experience of the pandemic allowed teachers and students to form an attitude towards online educational practices based on their own experience, as well as the possibilities and limitations of online education. Conducting work online, in a virtual educational space, often leads to the loss of the educational component necessary for the formation and

development of the personality of the future specialist. One of the most common misconceptions is the idea that the digitization of the educational process is the recording of video lectures by the teacher, followed by the placement of video materials on the educational platform of the university, for further independent training of students, which implies the removal of the teacher from the educational and pedagogical situation, with the loss, at the same time, of the student's subjectivity. Digital technologies will be useful and effective only if university teachers help students not only to learn themselves, but also to teach each other.

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# ВИЗНАЧЕННЯ ЦИФРОВОЇ КОМПЕТЕНТНОСТІ ВИКЛАДАЧІВ МЕДИЧНИХ ЗАКЛАДІВ ВИЩОЇ ОСВІТИ В ПЕРІОД ЦИФРОВОЇ ТРАНСФОРМАЦІЇ В ОСВІТІ

#### Батюк Л., Жерновникова О.

**Анотація.** Метою дослідження  $\epsilon$  визначення сприйняття викладачами медичних закладів вищої освіти навчальних процесів в період цифрової трансформації в освіті. Показано, що система освіти, сформована у попередньому технологічному суспільстві, не відповідає потребам сучасності, впровадженню цифрових технологій і зокрема переходу від традиційної «аудиторної» моделі навчання до онлайн-У дослідженні використовувався неекспериментальний, описовий дизайн на основі опитувань викладачів Харківського національного медичного університету. Результати показують позитивну кореляцію між розширенням можливостей цифрової педагогіки і цифрового середовища, мотивацією студентів щодо та останніми змінами в університетському цифрової освіти, викладанні. Впровадження технологічних та організаційних рішень у сфері освіти, спрямованих на адаптацію освітньої системи до динамічне мінливих потреб на ринку праці, індивідуалізація освітніх траєкторій та підвищення залучення студентів у навчальний процес, сприяють досвіду, самонавчанню та просуванню ініціатив, що підвищують рівень розвитку цифрових компетентностей викладачів.

*Ключові слова:* освіта; цифрові технології; цифрова компетентність; медичні заклади вищої освіти.