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## DEVELOPMENT OF DIGITAL COMPETENCE OF TEACHER TO BE IN THE EDUCATIONAL SPACE OF THE UNIVERSITY

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**Abstract**. The aim of the study is to analyze the methods of forming digital competencies in students of humanities, teachers to be, at study in one of the universities in Russia. Thanks to the rapidly developing technologies, today's students are developing alongside with the digital world. The aim of our research was to study the level of mastering the digital technologies (computer, tablet computer, smartphones, Smartboards) by students, history and English teachers to be; to study the use and impact of digital, mobile applications in the classroom on the student's educational motivation, emotional state and remembering information. The experiment involved 60 students. The results of a sociological survey of students, future history and English teachers demonstrated students' certain digital competencies, as well as their readiness for mobile learning. The information obtained will serve as a guide and an understanding of what kind of strategies and technologies can be used in classrooms as part of training humanities teachers for meeting the needs of students of the new digital generation.

Keywords: digital generation, students, history and English teacher, classroom

**Introduction. Actualizing the problem.** At present, the creation of a digital economy requires an appropriate orientation of the education system, training a person who uses modern digital technologies in their activities. One of the competences that a new generation teacher needs to form is a "digital competence". We specify that by the concept of a "digital competence" we understand a confident and critical use of computer, mobile phone, tablet computer, smartboard by students. This competence is based on logical thinking, a high level of knowledge management and highly developed mastery of digital technology. We propose to include the following knowledge in this competence: understanding of the general structure and interaction of computer devices; understanding the difference between the real and virtual world; understanding of the potential of digital technologies for innovative activity; basic understanding of reliability of the information received, and the ability to use computer programs.

The importance of training teachers in the context of the education informatization was emphasized by

Lapchik, M.P. (2013) [1]. Gushchina S.M. (2017) [2] considered the formation of the digital competence of the teacher in the field of digital technologies important. Yachina N.P., Khurmatulina R.K. (2016) [3] focused their attention on the need for the formation of monitoring competence of the future teacher. Thus, in the classroom at the university when training teachers, it is necessary to form the key competencies that the teacher to be should master. This will influence students' success and their study results. The university classroom should meet the modern requirements and demands of the digital society. At present, it is impossible to train a competitive teacher without the formed digital competences. A university teacher should promote the development of students' digital competencies. Nevertheless, more often the digital competencies of the professor lag behind the competencies of students. To meet these requirements, it is advisable to talk about creating a special professionally oriented environment in the university that integrates into a set of inextricably linked information and technological components of the informatization of the learning process. This environment should be created in accordance with the following principles: the identification of the learner as an active subject of cognition; his orientation to self-education, self-development; reliance on the subjective experience of the learner, taking into account his individual characteristics; training in the context of the future professional activities. We believe that the study of disciplines in the training of the teacher to be at the classes should be accompanied by the formation in students of such important competences as the ability to design the learning process using digital mobile devices (video lectures, presentations, creation of electronic manuals, etc.)

**Materials and methods.** To solve the tasks and check the initial assumptions we used the following complex of research methods: epistemological analysis (methodological, comparative-contrastive analysis and synthesis of modern approaches in the university classroom for the formation of digital competencies of students, teachers to be); analysis of the scientific, sociological, pedagogical and methodical literature; the study and implementation of various approaches, programs, mobile devices for the development of students' digital competence, modeling of various approaches and pedagogical situations, understanding their own experience.

**Results.** As a result of conducting the sociological research and survey of 60 students to be history and English teachers, we came to the conclusion that 60 students, which is 100% of a sample list, are good at working with a desktop computer, since they acquired the skill of working with it at school. The skills of working with a tablet computer are not so good. Only 24 students, which is 40%, are familiar with the programs on the tablet computer; 80% of students are familiar with smartphone applications; 70% of students are able to work with a Smartboard. Not all the students have a new smartphone, and therefore they find it difficult to work with applications.



Fig. 1. Level of digital competences formation of the 1year students

Category 1 means computer, category 2 - tablet computer, category 3 - smartphone, category 4 - Smartboard.

When preparing for seminars, 5% of students use YouTube videos; 30% of students prefer to give a presentation, 65% of students present oral reports.

After the conducted research, we decided to give additional classes for one group of students on programs training for working with digital media. After their training, we came to the conclusion that students who are eager to study, process the information on how to work with digital media. They received the following results: Table 1.

Tab 1. Students' results in the course of "Technologies of forming the digital competence of the teacher to be"

Experience	Skills	Competences
technology for creating electronic textbooks and video lectures	to find and structure information for the creation of digital educational resources (DER)	ability to be at ease with the tools for creating digital educational resources (DER)
principles of creating control tasks (interactive tests and crosswords)	create different types of digital educational resources by means of tools	ability to distinguish the main types of DERs and apply them at the appropriate stages of the educational process organization
work with the collection of digital educational resources	use digital educational resources at all stages of the educational process organization for improvement of its effectiveness	the ability to design an educational process using information and communications technologies
designing an educational process using information and communications technologies		• the ability to develop DER to organize effective pedagogical interaction with students at all stages of the learning process.

Thus, the curriculum of future history and English teachers should include the study of programs on digital media, the knowledge of which will be useful to them in practical activities with students.

**Discussions.** Both Russian and foreign scientists devoted their work to the problem of the digital competencies formation. Gafurova, N.V. (2011) [4] created a methodology for teaching information technologies; Shmakova A.P. (2013) [5], Fedotova E.L. (2015) [6] indicate the importance of information technology in the future teacher's professional activities; Fross, K., Winnicka-Jasłowska, D., Sempruch (2018) [7] emphasize that activities related to the use of the network and new forms of work create new functional and spatial relationships and interactions in university buildings. At present, the process of obtaining knowledge occurs in different places - not only in lecture rooms, but also in social connections and in electronic form.

Cattik, M., Odluyurt, S. (2017)[8] in their study show how important it is for an educator to have a good knowledge of working with smartphones when teaching autistic children.

Quarles, A.M., Conway, C.S., Harris, S., Osler, J., Rech, L. (2017) [9] believe that today's digital classroom should incorporate modern learning strategies to get the students' interest. Students should study the latest digital / mobile technologies on a daily basis.

Maxwell, A., Jiang, Z.Email Author, Chen, C. (2017)[10] – the style of learning changes from generation to generation.

Jones, A., Bennett, R.(2017)[11] warn that in an effort to digitize the aspects of higher education in order to satisfy the increasingly diverse and large-scale university market, there is a fear that the best teaching and learning, based on good pedagogy, can be left behind.

Demarle-Meusel, H., Sabitzer, B., Sylle, J.(2017)[12] speak about the need to create a digital laboratory at the university, where students and teachers could study at any time. Horvath, I. (2016) [13] devoted his research to the digital life of students.

**Conclusion.** When organizing educational and research activities, it is advisable to use tablet computers, mobile applications, Smartboard in combination with circuit modeling systems in the educational and research environment, which will increase the level of information and digital competence of learners. This will help students to master natural scientific cognition methods and basic procedures for researching and processing information results. Students will be able to critically comprehend the results of the analysis of computer model of the researched process and will raise the level of understanding of theoretical material and its practical orientation. They will learn to create virtual experimental units and computer models of the phenomenon under study, etc. The experience of using information technologies changes the position of the teacher (he deepens professionalism, expands the scope of the perceptible), he stops to be a "source of knowledge", but becomes the author of the creative process of processing, using information and a more active participant in the formation of the future specialist's personality. At present, the teacher should plan, organize and guide the learning process in accordance with changing ideas about the readiness of the learner to perform professional functions and social roles, provide the conditions for preparing for life in changing socio-economic conditions, demonstrating the diversity of the application of information environments and the basic

knowledge gained. The study of new information environments makes it possible for the prospective specialist to identify the advantages and disadvantages of these programs and thereby determine the degree of their effective use in practice. As a result of the research, we came to the conclusion that it is necessary to teach the humanities students digital technologies in the classroom, since the level of their mastery of various programs on digital media is insufficient.

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