

# Devices in the Classroom: Learning Tool or Crib?

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## ABSTRACT

The digital environment and its supporting technical means surround us not only in everyday and professional life, it is impossible to ignore them and in the process of training at all stages of it. The teacher should not only “accept” the presence in class, but put various types of digital devices at the service of his or her tasks - formation of the competences of the future professional set by the Federal standards. Teachers’ understanding of the effectiveness of the use of various devices in the educational process dates back to the last decade of the 20th century, teachers were rather negative about them, classifying technical innovations as unauthorized sources of information. For the last decade the situation has changed, the digital environment and digital educational technologies have been formed on different continents, devices are not just legalized, but have become some of the most important tools in the process of education. This is evidenced by numerous articles by teachers at various levels of education. The authors see the purpose of the article in improving the quality of education by using mobile digital devices and increasing the competitiveness of graduates of Ural State Pedagogical University in the labor market. The methodology of the study focuses on the analysis of the use of digital devices in the process of contact with students of Ural State Pedagogical University in historical disciplines. The authors came to the conclusions that in modern conditions the use of mobile devices is part of the educational process, both in- and out-of-class, both educational and research. The teachers themselves should be aware of the possibilities of digital space, create a situation of successful use of devices, preparing special tasks for different types of educational and research activities.

**Keywords:** *device, competence approach, mobile device, training, project work, midterm control, independent work of students*

## 1. INTRODUCTION

The beginning of the 21st century is a time of dynamic dominants, the speed of obtaining and processing information determines the competitiveness of specialists in any field of production, social, and creative activity. Digital devices provide the high rate of development of society. Electronic devices surround us at work, at home, in public places, cultural and educational institutions, so it is impossible to exclude their use in a particular area of modern life, for example, in the system of education. For a teacher, digital competence is one of the key ones. No matter what subject area they work in, the teacher must be prepared for dynamic changes, including technological challenges.

It is impossible to imagine a teacher who is not able to extract information from its modern carriers, or who does not understand the difference between a web service, portal, site, blog, or does not use a cloud service or social networks. A teacher who does not keep up with technological progress, who refuses new technical opportunities for obtaining knowledge, becomes uninteresting for students. Digital technologies and devices should not cause resistance among teachers of different stages of education, it is useless to fight against

them, it is necessary to force them to solve a variety of educational tasks.

Understanding the role of digital information carriers in the learning process began with their widespread introduction into life. Initially, these were personal computers, digital cameras, later - tablets, finally, mobile phones and smart phones. Currently, devices have decreased in size, while increasing the memory capacity, communication and information capabilities, and finally they are available. Not only students but also primary school students have smart phones.

Initially, teachers were wary of digital media, seeing them as a kind of crib rather than a helper. Teachers were afraid that devices gave students ready-made information without any effort on their part. However, over time, it became clear that progress does not need to be fought, it is necessary to find methodological techniques for purposeful use of gadgets and devices. This, for example, was written by the teacher of Vladimir Industrial College A. S. Volkova [15]. Her article brought up the issue of increasing the mobility of all participants in the educational process as the use of digital carriers of information becomes more widespread. Training has moved beyond the classroom, it is no longer limited by the bells notifying the start and the end of the class.

In the works of a number of authors, the question of the impact of devices on the educational process was raised,

some positive and negative sides were identified [2, 8, 11], a number of authors suggested focusing on the use of digital tools for organizing independent work of students, forming appropriate tasks [6].

The search for methodological methods of using personal digital devices has become relevant not only for teachers in Russia, the geography of research is very wide: Italy, the United Arab Emirates, Slovakia, the United States, Turkey, South Korea, etc.

The approaches of theorists and practitioners of digital education are different, some look upon the problem globally. For example, our Slovakian colleague Vera Kachinova believes that the use of devices contributes to the formation of such personal qualities as “critical thinking, socially significant qualities and persistent positive value habits of the individual” [4]. Teaching in educational institutions in the UAE has also led to a conclusion about increasing interactivity in the educational process, especially when there is an interactive learning platform [12]. Colleagues from Russian University of Economics named after G. V. Plekhanov drew attention to the digital competence of teachers themselves “to establish and maintain contacts with students” [14].

Teachers from South Africa noted that the use of smart phones, on the one hand, enables to create conditions for joint or network learning, organization of collective work. On the other hand, personal digital means of communication make it possible to save education expenses on the part of the university [5]. Colleagues from North America went even further, emphasizing the possibility of using devices to internationalize education [7].

If we talk about applied use, the range of proven technologies is large. A group of Turkish teachers created three digital stories about countries, nature and sports to learn English. According to the authors of the technology, it significantly increased the motivation of students, their confidence in their success in the process of “learning vocabulary, writing and speaking skills in the process of education” [3]. Andrea Nardi and Maria Ranieri from the University of Florence suggest using the capabilities of digital equipment to manage and monitor the educational process for the organization of midterm control of students [9]. Teachers in South Korea successfully use the “Smart Classroom Response System”, which allows each student to get feedback by giving an answer to a question with the help of a smart phone [13].

Students note that they use portable personal digital tools to work with search engines, digital libraries, and the wiki environment. It is they that help to build an individual learning trajectory [1].

We agree with the colleagues who use digital information carriers in their practice and theoretically justify this experience. Currently, specialists in all subject areas are building the educational process, focusing on the use of mobile devices by students, including while the classes in humanities.

## **2. PURPOSE OF THE STUDY**

The authors of the article aim to identify technologies for improving the effectiveness of the educational process in higher education through the use of mobile digital tools that will strengthen the position of the future teacher both in the labor market and in professional activities.

## **3. METHODS OF RESEARCH**

In the process of teaching the basic discipline “History” in the field of training “44.03.05 - Pedagogical education”, there are a number of serious problems: short-term study of the course (one semester, 32-48 hours), poor basic knowledge after graduating from secondary school. Training of high school students actually has a subject-oriented character, since students give preference to those subjects that they will have to take within the unified state exams. Unfortunately, history is not included in the list of the most popular subjects, so its study is mostly formal. In this regard, it is necessary to use a wide range of methodological techniques to increase students’ “interest in the subject, to ensure the formation of the competence set by the Federal state standard: “the ability to analyze the main stages and patterns of historical development of society for the formation of a citizenship” [10].

The staff of the Department of Russian history of Ural State University has developed a set of tasks for independent work of students, which involve the use of various educational materials displayed in databases of electronic libraries, on historical servers and websites. Students can perform these tasks on their mobile devices at any time of the day, either inside or outside the University. When getting acquainted with various sources of information, they pay attention to the subjectivity of the presentation of information by different authors, the dependence of ratings on the source of information, be it a scientific publication, a textbook, a website or a universal Internet encyclopedia with free content, like Wikipedia.

Another type of extracurricular research work is the participation of students in project and / or competitive work initiated by both the teacher and the students. Projects enable to expand the horizons of the studied discipline, delve into the details of the processes and events being studied, and assess their specifics at the regional level.

## **4. THE RESULTS OF THE STUDY**

USPU students took part in a number of educational projects, for example, “We are uralians (here - from Ural)”, which focused on the numerous peoples of the region, both native and formed diasporas as a result of forced or labor migration. In the course of their work, the participants got acquainted with the cross-cultural diversity of their fellow countrymen, forming a tolerant perception of social, cultural and personal differences.

Interesting for students was a project in which they immersed themselves in the daily life of the town of Sverdlovsk (Yekaterinburg) during the Great Patriotic War. The work was based on digitized materials of the wartime periodical press, so the researchers just had to use any device to collect the necessary information displayed on the Internet.

In the 2018-2019 academic year, first-year students took part in the 20th all-Russian competition of historical research papers “Man in history. Russia 20th century”, which drew their attention to the lives of their countrymen and relatives in different periods of the history of their homeland. Working within the framework of this project, on the one hand, made it possible to understand the significance of such “simple” heroes who live next to you, to preserve the memory of them. On the other hand, the authors had to work with various gadgets in order to clarify information about national events, save documents and photos in digital format, and arrange their work as an electronic document or presentation.

## 5. CONCLUSION

The modern educational system, its goals and attitudes indicate the need to reconsider the attitude of the teacher to various devices that students use in the learning process. We should give up the prejudices and wariness about them and make friends with them. The teacher should clearly understand what types of educational work can and should be implemented with the help of electronic devices, they should also prepare tasks that would initially be focused on inclusion of personal devices, and easily navigate a wide range of servers and sites on the academic discipline.

The practice has shown that the effectiveness of mastering the academic discipline of the humanities cycle is associated with a large saturation of information that does not make sense to memorize by heart, but you should know where it is easy to get and how to interpret it. The students make extensive use of digital carriers of information during the midterm control (tests, papers, case assignments, etc.), in the process of performing different

As part of the classroom work, we encourage students to use mobile devices when solving tasks of a testing or analytical nature, as well as while working with a historical source. In the latter case, the paper carrier has given way to the electronic one, which also increases the environmental culture of the future teacher. Many teachers see the current control only as a way to identify weaknesses in the student’s knowledge, training, and categorically do not recognize their right to “call a friend”, i.e. a legal opportunity to turn to additional sources of information. We see this approach as a day gone by. Searching for answers even to a test question forces the student to view several sites in a very fast mode, simultaneously “hooking” some additional information. The student compares it, evaluates it, and makes HIS or HER choice. The teacher should remember that in order for this form of work to be effective, the tasks should be prepared in the ideology of training, not testing, i.e. developed in the concept of a competence-based and activity approach.

types of seminars, and in extracurricular activities. We work on a broad range of skills of processing information and contribute to the development of universal competences of a future teacher, prescribed by the Federal state educational standard 3++: “able to do search, critical analysis, and synthesis, to apply a systematic approach to solve problems”.

At the same time, we certainly understand the importance of the role of the personality in the educational process, the influence of direct communication on the perception of educational material, and the involvement of students in various forms of extracurricular work in various subject areas.

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