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# The Use of Information Technologies in the Teaching of Psychology at the University

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# The Use of Information Technologies in the Teaching of Psychology at the University

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#### **Abstract**

The use of distance education technologies has gained high popularity in recent decades and has been actively implemented in various educational organizations of the Russian Federation. It became especially relevant during a pandemic that limits the conduct of lessons in classrooms. Distance education is implemented on the principles of traditional Russian education through the use of information technology. The article reveals the problem of using information technologies and distance education in Russian universities, as well as the peculiarities of using distance learning technologies for psychology students in Russia during a pandemic. The principles of the organization of the educational process are given: the age characteristics of adolescent students, the characteristics of the leading activity at this stage, the characteristics of the educational and professional activity of students are described; disclosed employment opportunities when using distance education technologies; lists the computer programs used for the implementation of distance education and the training mechanism during a pandemic. The authors describe their work experience and the specifics of organizing a psychological support service based at the Department of Psychology and which has gained particular relevance during a pandemic when a change in the usual way of life and the transition to new ways of teaching and work could lead to stress among students, teachers and university staff. The advantages and disadvantages of using information technologies in education and distance learning in teaching psychology at a university are described.

**Keywords:** *information technologies in education, educational process, training, distance learning.* 

### Introduction

Computer technologies are rapidly developing, becoming more available and entering into all spheres of our life. Using information technologies is gaining popularity in universities. Information technologies of education are a set of methods and technical means for collecting, organizing, storing, processing, transferring and presenting information that expands people's knowledge and develops their ability to manage technical and social processes (Pashchenko, 2013).

This article reveals the following features of the use of information technologies in education:

- (i) the application of information technologies and distance education in Russian universities;
- (ii) the use of distance technologies in teaching psychology students at the university The remainder of this paper is organized as follows: section 2 describes the advantages of using distance technologies in education and the problems solved with them. Section 3 describes the limitations in the use of information technologies for teaching students at the university. Section 4 is devoted to a description of the features of distance education in teaching psychology at a university during a pandemic. Section 5 deals with the advantages and disadvantages of distance education.

# Opportunities with using information technology

At the present stage of the development of society, more and more attention is paid to the development of information technologies and their implementation in the daily life of every person. The introduction of information technologies in education is the most important condition for the transition of society to an information civilization and the formation of a global information space (Polat, 2020). Information technologies are becoming not an additional means of education, but an integral part of this process, making it possible to increase its efficiency, versatility, and convenience.

Modern information technology is a special term that characterizes the use of the latest achievements of science and technology in the field of organizing information processes. The main features of modern information technologies are interactive (dialog) mode of working with a computer, the integration (interconnection) of various software tools, the flexibility of the process of changing tasks and data through the use of a "friendly" interface, multimedia and communication tools (including video conferencing) (Fedorov, 2009).

Using information technology applications in education allows taking into account the individual characteristics and possibilities of students, provides access to educational materials, increases opportunities for delivery of the teaching materials. With the help of information technologies, the teaching process itself is significantly transformed and improved, increasing its efficiency and quality; the possibilities of presenting information, processing and storing it are increasing; the possibility of communication is expanding, automation of the process of assessing and monitoring student progress becomes achievable (Krasilnikova, 2012). The dissemination of the information technologies solves problems, among which – adaptation to the individual characteristics of a student, increasing the creative and intellectual component of education, as well as the introduction of distance learning technologies. Basic ways for informatization of education are hardware, software and content (Pashchenko, 2013). A computer, a printer, a projector, audio and video equipment, etc. are used as the hardware. Text editors, email clients, chat and online conferencing tools are widely used (Polat, 2020).

# Limitations in the use of information technologies for teaching students at the university

Disadvantages of using information technologies in the educational process are the possibility of technical failures; an increase in the time spent at the computer monitor. The use of information technologies in education can also affect the personality of

students (Nagaeva, 2011). The influence of the information technologies of education on the personality of a student can be expressed to a greater or lesser extent: from local, concerning a limited range of mental phenomena, to global, indicating a change in personality as a whole (Zakharova, 2003).

# Distance technologies in teaching psychology at the university during a pandemic

During a pandemic around the world, the question of providing safe and quality education has become acute, since face-to-face interaction could be dangerous for both students and teaching staff. This issue was relevant in Russian universities as well. A characteristic feature of education at Russian universities is the constant improvement of the educational process, the development, and the restructuring of society. In this situation, the most relevant and convenient methods have become distance education methods, which allow maintaining the interaction of a student and a teacher without face-to-face contact.

When organizing the educational process at this stage, much attention was paid to the age characteristics of students. The period of obtaining higher education falls on the stage of adolescence. At this age, focusing on the future, setting the tasks of professional and personal self-determination affects the entire process of mental development, including the development of cognitive processes. As a rule, it is at the student age that not only physical but also psychological properties and higher mental functions reach their maximum in their development: perception; attention, memory, thinking, speech, emotions. This period of life is maximally favorable for education and vocational training (Kocaspirova, 2005). Metacognitive skills (such as current self-control and self-regulation) are developed, which, in turn, affect the effectiveness of cognitive strategies. The mastery of complex intellectual operations of analysis and synthesis, theoretical generalization and abstraction, argumentation, and the proof is improving, systematic, stable, and critical thinking becomes characteristic. Special abilities associated with the chosen professional field are rapidly developing (Shapovalenko, 2021).

Educational and professional activity, according to the psychological periodizations of D. B. Elkonin and A.N. Leontiev, the leading activity of adolescent students (Shapovalenko, 2021), is a focus on professional development, high motivation for learning, and obtaining professional knowledge, skills and abilities. The use of information technologies in education is capable of fully ensuring the most high-quality and versatile personality development. In this case, such psychological structures as theoretical thinking, the foundations of a scientific worldview, self-consciousness are formed at a high level, and reflection is developed. These qualities allow students to take a responsible and attentive approach to the process of professional knowledge. The vision of oneself as a future professional is an indicator of a young person's connection with society, entering society.

Usually, in addition to training, students try to start working both in their future profession and in other types of work. During a pandemic, students could find jobs and work remotely. In this regard, one cannot but emphasize the obvious positive aspects of using distance education: it allows you to plan your own time, study regardless of location, and allows you to work and gain knowledge.

Distance learning is a technology of purposeful and methodically organized guidance of the educational and cognitive activity of students (regardless of the level of education they receive) living at a distance from the educational center (Fedorov, 2009).

Distance technologies have become widely used in Russia under pandemic conditions for the successful implementation of the educational process. They are based on the principles of traditional education, are implemented through the active use of innovative technologies. At the Vladimir State University, like at most Russian universities, during teaching students of the psychological department, the educational process realizes through the use of programs for the online conference: Microsoft Teams, Zoom, Cisco Webex Meetings, Moodle. According to the schedule, videoconferences were organized, during which there was interactive communication between lecturers and students. Students sent their homework to cite the distance educational center of the Vladimir State University, where lecturers can comment on the work and give marks.

Changes in the usual lifestyle, the transition to new ways of learning, and working during a pandemic could affect the psychological state of people and lead to panic, fear, a sense of uncertainty. In connection with the possible increase in psychological stress and stress among students and teachers, based on Vladimir State University during the pandemic, a psychological support service was organized for students, teachers, and university staff also implemented using remote technologies, namely, telephone communication and e-mail. Psychologists-consultants provided individual psychological assistance, processing each request received by a given schedule. Any resident of the city of Vladimir had an opportunity to ask a question by phone or by e-mail. The consultations were conducted anonymously, confidentially, and free of charge. Psychology students also took part in the work of this service: students were informed on social networks, notes on the current schedule, the contact information was published, master classes, popular science articles were posted.

## Advantages and disadvantages of distance education

Distance education has advantages:

- 1. Education became more available.
- 2. Permanent access to learning materials.
- 3. Distance education allowed students to study at their own pace.
- 4. Those participants of the educational process who could not attend due to geographic remoteness or for health reasons can attend classes.
- 5. Independent cognitive activity of the students effectively develops.

However, distance educational also has disadvantages:

- 1. The need for technical support for both lecturers and students.
- 2. Difficulties in adapting teaching staff and students to a new format, possibly low motivation among students to study due to high intensity of student's independent work (Krasilnikova, 2012).
- 3. Diminishing communication in the community among the students.

Distance education did not always fully realize practical and laboratory classes from the curriculum of the psychological department.

### Conclusion

The use of information technologies at the university in the preparation of students of various specialties, in particular, distance learning, has both advantages and disadvantages. Testing the effectiveness of distance education requires time, and at this stage, the quality of training of specialists can be judge hypothetically.

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