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## Teachers' Professional Difficulties in the Course of Implementation of Distance Learning in General Education Organizations

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### Abstract

The relevance of the problem is due to the need to systematize the professional problems of the teacher arising from the organization and implementation of the educational process in remote form. In the modern educational space, education along with traditional full-time forms can be carried out through e-learning, distance learning technologies implemented using information and telecommunication networks and resources (Federal Law of December 29, 2012 N 273). Moreover, the quality of education must comply with the requirements described in federal state educational standards. Mandatory conditions for the implementation of the educational process are measures to equip educational organizations with qualified teaching staff, their appropriate material and technical equipment and financial support (Order of the Ministry of Education and Science of Russia dated December 17, 2010). For the high-quality organization of the educational process in remote mode, pedagogical workers must meet the requirements of a professional standard, have a certain level of professional competence, and possess information technologies at a sufficient level (Professional standard, 2013). **The aim of the study** is to generalize the causes of professional difficulties of a teacher in the implementation of distance learning in a general educational organization, to determine the readiness of a teacher to implement distance learning. The article explores the experience of the Volga Region Center for Advanced Training and Professional Retraining the Institute of Psychology and Education of Kazan (Volga region) Federal University.

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**Research methods:** theoretical (analysis, synthesis, concretization, generalization, analogy method), diagnostic (questioning, interviewing, testing), empirical (studying the experience of educational organizations, normative and educational documentation, pedagogical observation).

The study was conducted among 318 teachers studying at the Volga Region Center for Advanced Training and Professional Retraining the Institute of Psychology and Education of Kazan (Volga region) Federal University. **Conclusions and recommendations.** The conducted study made it possible to generalize and systematize the professional problems of the teacher arising in the organization and implementation of the educational process in the distance form, to reveal the level of readiness of teachers to distance learning, to determine the main directions for solving the problem. **The results** of the study can be used in the organization and implementation of distance learning, allow us to outline directions for overcoming professional problems and improving the information competence of the teacher.

*Keywords:* distance learning, professional difficulties, informational competence, professional problems, distant learning technologies

## Introduction

### Relevance of the problem

In the modern educational space, education along with traditional full-time forms can be carried out through e-learning and distance learning technologies. In Russian legislation, distance educational technologies are understood to be educational technologies implemented with the use of information and telecommunication networks with indirect (at a distance) interaction between students and teachers. Moreover, the quality of education must comply with the requirements described in Federal state educational standards. In addition to the basic requirements of Federal state educational standards, which are requirements for the structure of educational programs and the results of their development, important are the requirements for the conditions for the implementation of the educational process. Mandatory conditions for the implementation of the educational process are understood as measures to equip educational organizations with qualified teaching staff, their corresponding material and technical equipment and financial support. Accordingly, for the high-quality organization of the educational process in the remote mode, teachers should meet the requirements of the standard for the staff, that is, have a certain level of professional competence, own information technologies at a sufficient level (Shaikhelislamov, 2019).

Modern trends in the development of education impose certain requirements on the level of information competence of a teacher, which is a prerequisite for achieving educational goals by distance learning. Obviously, achieving the level of information competence necessary for productive work in a remote environment is possible when the main participants in the educational process are prepared for this.

It should be noted that, despite the opportunities available practically since 2011 to implement the educational process through distance technologies, educational organizations of different levels did not implement information technologies in the educational process.

In the conditions of quarantine in schools, institutions of additional education, restrictions on traditional social communication of participants in the educational process, distance learning has become the only way to implement the educational process. And it is in these conditions that teachers faced many problems, including the lack of readiness of the educational system as a whole to fully introduce distance learning.

### **Purpose and objectives of the study**

The purpose of the article is to summarize the reasons for the teacher's professional difficulties in the implementation of distance learning in a general educational organization, to determine the readiness of a teacher to realize distance learning.

The objectives of the study - to summarize the problems of the teacher arising from the organization and implementation of the educational process in remote form; find ways to solve these problems; to disseminate the experience of Kazan Federal University in the implementation of advanced training programs in the remote mode.

### **Literature review**

An analysis of the literature showed that information competence is understood by researchers as the ability of an individual to independently seek, select, analyze, represent and transmit information. At the same time, important aspects of information competence are highlighted: possession of a sufficient level of knowledge from the field of computer science; computer skills; the availability of competencies in the search, analysis, use of information; application of information for the implementation of an educational or professional task; the manifestation of an active social position and motivation of subjects of educational activity (Vinogradova, 2012). According to Zimnyaya (2006), one of the most important characteristics of the professional level of a modern teacher is the possession of information technology (receiving,

processing, issuing information; converting information, knowledge of multimedia technologies, knowledge of Internet technologies, computer equipment, etc.).

In the current professional standard “Educator (pedagogical activity in the field of preschool, primary general, basic general, secondary general education) (tutor, teacher)” the informational competence of an educator is understood as the qualified use of information and communication technologies to solve professional tasks.

### **Methodology**

In the research process, the following methods were used: theoretical (analysis, synthesis, concretization, generalization, analogy method); diagnostic (questioning, interviewing, and testing); empirical (study of the experience of educational organizations, normative and educational documentation, and pedagogical observation).

### **Experimental study base**

The experimental base of the study was the Volga Region Center for Advanced Training and Professional Retraining the Institute of Psychology and Education of Kazan (Volga region) Federal University.

### **Research stages**

The study of the problem was carried out in three stages: at the first stage, a theoretical analysis of the existing methodological approaches in the psychological and pedagogical scientific literature, dissertations on the problem was carried out, the problem, purpose, and research methods were identified, a research plan was drawn up; at the second stage, a study was made of the level of readiness of teachers for the implementation of distance learning using methods of testing, questionnaires, pedagogical observation and self-observation of teachers; at the third stage, the research results were processed, generalized and summarized.

### **Findings**

Based on the system-activity approach, the main reasons leading to difficulties for the teacher in organizing and implementing distance forms of the educational process were summarized and systematized.

In the context of changes in the conditions for the implementation of the educational process, questions remained behind the scenes of the readiness for these changes of the key participant in the educational

process - the teacher himself, with his professional problems, barriers and difficulties arising in the course of activities. Researchers, among the main reasons for the emergence of professional difficulties of teachers in the new conditions, identify a complex of objective and subjective reasons (Volkova, 2017; Kuzmina, 1967; Safin, 2019).

The objective reasons for the implementation of the educational process in the remote mode, not depending on the teacher, but related directly to professional activities, can include the following:

- insufficient equipment of the educational material base of the educational organization in the field of information and communication technologies (the lack of mobile classes, personal computers, laptops for teachers, paid information resources (platforms), dedicated communication channels of sufficient power, educational and methodological support for distance education, etc.);

the complexity of the contingent of students (social status, material support for families of students, not allowing you to have at home an appropriate set of computer equipment for each child, etc.);

- overcrowding of classes (the inability to implement an individual approach due to the large number of students in the classroom, the need to differentiate material and tasks according to the level of development of students, etc.);

- social reasons related to the standard of living of the teacher (insufficient wages, difficult living conditions, the unsettled life of the teacher, which does not allow full and high-quality professional activities at home, etc.).

The subjective reasons for the teacher's professional problems in the implementation of distance education include problems that depend on the teacher's professional level:

- insufficient level of teacher training in the field of information and communication technologies, lack of pedagogical experience in this field and, as a consequence, inefficient use of pedagogical tools (uniformity of applied forms and methods, inadequate assessment of academic performance, communication problems, etc.) (Markova, 1993);

- the teacher's lack of expressed motivation for self-actualization, self-improvement, self-development, as the most important characteristics of the teaching profession, the knowledge of a new sphere of professional activity (Prokhorov, 2016);

- unexpressed emotional-volitional qualities of the teacher (due to dissatisfaction with the pedagogical

profession, overloaded with various kinds of reports, as well as randomness of professional choice, etc.) (Kuzmina, 1967).

Noting the objectivity of the existence of such problems as a different social status and material support for families of students, overcrowding in classes of secondary schools, especially in the urban environment, we single out the primary problem that needs to be quickly resolved is the insufficient equipment of the educational material base of the educational organization in the field of information and communication technologies. Undoubtedly, for the successful implementation of the task set for the education system - the organization of high-quality education in distance form, it is necessary to solve the problems of material and technical equipment of the educational process, taking into account the growing density of the information and communication environment. The practice of mass transition of the education system to distance learning has revealed the main existing problems. This is the impossibility of access (even with computer technology) to educational resources due to insufficient network capabilities, congestion in educational platforms, and the lack of methods for using information resources in the implementation of the educational process.

Together with the existing problems of an objective (at least from the point of view of the teacher) nature, the subjective problems of the teacher, expressed in his professional level, and the competence of the teacher in the field of distance education, require solutions.

Volga Region Center for Advanced Training and Professional Retraining the Institute of Psychology and Education of Kazan (Volga region) Federal University conducted a monitoring study of the state of readiness of teachers of the Republic of Tatarstan for the implementation of distance education in general educational organizations.

Based on the results of this study, we present some results characterizing the problem. At the beginning of the period of the general transition to distance learning (March 2020), the state of readiness for the implementation of distance education of 321 teachers of general educational organizations of the republic undergoing proficiency enhancement at the Volga Region Center for Advanced Training and Professional Retraining the Institute of Psychology and Education of Kazan (Volga region) Federal University.

Of the 321 teachers who carry out their professional activities in the education system on an ongoing basis, only 282 people (88%) use Internet resources (educational platforms, e-mail, etc.) in their daily practice. Note that 40 teachers (12%) do not use a computer in their work and its capabilities on the network at all or do it periodically, to compile reports or create only presentations on the computer. It is also noted that of the number of teachers using information network resources, only 33 teachers (10%) regularly carry out

their activities in educational process management systems.

In March 2020, out of 321 teachers, 129 teachers (40% of the total) noted that they use elements of various distance technologies in their work (a combination of various digital channels for communicating with students, websites of an educational organization, educational platforms, etc.). Even within various professional communities (methodological associations, various expert and creative groups of educators, etc.), only 113 educators (35%) use information technology for pedagogical communication (exchange of experience, ideas, materials on online platforms, resources, etc.).

When implementing the learning process in the classroom, 117 educators (37%) mainly use standard equipment, such as digital whiteboards and projectors, as they were previously poorly motivated to master new information technologies in general and remote in particular. As a result, only 25 teachers (7.6%) use digital information tools to implement innovative pedagogical strategies, new approaches to teaching in their subject.

We note that a teacher, who previously considered distance learning as an additional tool to the traditional full-time education, has suddenly experienced a complete transition to distance learning and needs to improve professional competencies, increase the level of motivation for this improvement, and remove barriers to successful teaching.

To solve this problem, the Volga Region Center for Advanced Training and Professional Retraining the Institute of Psychology and Education of Kazan (Volga region) Federal University has developed additional professional educational programs for advanced training for teachers of various educational organizations:

- “Digital technologies in the professional activities of scientific and pedagogical workers of higher education institutions in the context of digitalization of education”;
- “Formation of digital competence in various fields of professional activity” (digital technologies in interdisciplinary practices);
- “Modern approaches to the implementation of innovative educational technologies in accordance with the Federal State Educational Standard of Higher Professional Education”;
- “Information and communication technologies in the professional activity of a teacher in the context of the implementation of the professional standard “Educator”.

The main goals and objectives of the programs are to ensure the development of competencies necessary for the development of distance information and communication technologies, methods for their use and implementation in the educational process; mastering basic competencies in the field of applying modern information and communication technologies and digital educational resources; mastering the technology of creating distance educational content using modern digital educational resources for subsequent use within the digital educational environment of the school; improving the design techniques of the modern lesson in the information and educational environment.

These programs passed competitive selection and testing within the framework of the project “Improving the professional competencies of teachers in the context of digitalization of education” as part of the event “Training citizens in continuing education programs in educational institutions implementing additional educational programs and professional training programs” of the federal project “New Opportunities” for each "national project" Education ". During the training period for these programs from autumn 2019 to April 2020, more than 18,000 (eighteen thousand) teachers of educational organizations of the Russian Federation improved their competencies in the use of information technologies, the implementation of distance technologies in the educational process.

### **Recommendations**

A study of the psychological and pedagogical literature and the state of the implementation of distance technologies in the modern educational space allows us to state the insufficiency of special studies on the problem of organizing distance learning using information and communication technologies.

### **Conclusion**

Thus, it has been established that the successful implementation of distance learning in modern conditions is in the plane of solving the professional problems of a key participant in the educational process, the teacher, which exists for various reasons, and improving its professional information competence is a priority in modern conditions.

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