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**MODERN APPROACHES TO PROFESSIONAL TRAINING OF FUTURE TEACHERS (THE PERSONNEL RESERVE PROJECT)**

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**Abstract**

In the context of the digital transformation of general education, the successful professional activity of a modern teacher is not possible without strong motivation, cognitive and technological readiness to teach their subject in conditions of multitasking, uncertainty and situationality. At the same time, the modern education system puts forward certain regulatory requirements for the qualification and content of the professional activity of the teacher. All this imposes certain obligations on the university, which will organize the appropriate training of future teachers. The authors of the study analyze the Russian and foreign experience on the organization of effective training of the future teacher of the 21st century in the conditions of digital transformation of education. The article analyzes modern approaches to training future teachers, describes the results of their practical implementation. The article also presents the results of the survey, reflecting the state of motivational, cognitive and technological readiness of future teachers for professional activity in the digital educational environment. The presented results are the first stage of the project, the experience of which can serve as a reason for reviewing the content and organizational component of the professional training of future teachers.

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## 1. Introduction

The modern paradigm of higher pedagogical education is characterized by a shift in emphasis towards the practice-oriented training of future teachers for effective professional activities in a digital environment. Such focus is determined by essential problems associated with the gap between the traditional model of training future teachers and practical experience in obtaining professional pedagogical competences, as well as the requirements of employers and the professional expectations of students in pedagogical areas (Emelyanova, 2020; Kennedy et al., 2015; Patrusheva, 2015; Tumasheva, 2017).

According to Emelyanova (2020), there is a demand for young pedagogical personnel who, already at the final year of training, have “a scientific pedagogical, research, creative, reflexive, innovative type of thinking, an individual style of professional activities, a conscious need for continuous self-education” (p. 111).

This fact makes the role of the university especially relevant in the process of training pedagogical personnel, and also puts forward the tasks to strengthen the interaction with a professional educational environment in online and offline formats, and to create special conditions to improve the competitiveness of pedagogical graduates with a new view at their professional career (Nagovitsyn et al., 2019; Smith, 2016).

## 2. Problem Statement

In this regard, one of the leading trends in the training of pedagogical personnel has become a practice-oriented approach reflected in scientific discussions devoted to the problem of the implementation of the Strategy for the development of the system of continuous pedagogical education in the Russian Federation for the period up to 2030, in which activity-based forms of organizing an educational process are priority ones.

It is the practical training of future educators focused on their professional success in class and remotely that is considered as a chief goal of pedagogical education today. This key task is implemented through such strategic regulatory documents as *Federal State Educational Standard of Higher Education - Bachelor's Degree in the field of training 03.04.05 Pedagogical Education (with Two Training Profiles)* (2018) and *Regulations on the Practical Training of Students* (2020).

According to Margolis (2015), the format of practice-oriented learning allows correlating future professional activities with the norms established by the Standard, which, as a result, will allow ensuring full-fledged learning activities of students in the future. Despite the fact that certain content aspects of these documents are assessed ambiguously, most researchers note the free level of standardization of professional competences and the strengthened practice-focused component in the whole educational program as important changes (Mishin, 2018).

Currently, the scientific community is actively searching for ways to improve professional training in the context of higher pedagogical education and modern conditions of the digital educational environment. Today, issues of practice-oriented learning in the context of the digital pedagogy are in the field of vision of many researchers (Cherkasov & Cherkasova, 2021; Emelyanova, 2020; Malyavina,

2020; Margolis, 2015; Patrusheva, 2015; Tumasheva, 2017; and others). The purpose of these studies has become the creation of the educational environment in which the fundamental subject-based pedagogical education is combined with the involvement of students, future teachers, in active pedagogical activities by the most optimal way. Tumasheva (2017) highlights three main ways to realize practice-oriented learning. In the author's opinion, the first way is traditional for the system of pedagogical education and associated with immersion in the pedagogical environment during the training practice, the second way is oriented to the use of technologies and techniques simulating future professional activities, and the third way involves the formation of necessary professional competences directly in a professional environment (Tumasheva, 2017).

In modern studies there is a wide range of forms and techniques influencing significantly the practical training of students. Of special importance are works aimed at searching for methods and technologies of training teachers of the 21<sup>st</sup> century (Donina & Taykova, 2014), who have capabilities and willingness to apply digital educational resources, technologies of artificial intelligence, collect and analyze data in the conditions of network interaction of participants of the educational process, communicate with learners in social networks.

In her work, Patrusheva (2015) gives consideration to the organization of independent work which should provide for the opportunity of gaining professional experience due to "immersion in real or imitation mode". According to the author, one of the effective forms simulating professional reality can be interactive learning including such techniques as "professional test" and case-method (Patrusheva, 2015).

In their works, having analyzed scientific studies, Patrusheva (2015) and Shevtsova (2020) determine essential characteristics of the practice-oriented approach in higher education. According to the authors, these include:

- orientation of the training content to subject and function components of professional activities;
- assimilation of educational information through the practical application of knowledge and abilities in typical and non-standard situations while solving certain problems;
- orientation to solving training situations as closed to the real and professional ones as possible, constructed by methods of problem-oriented and project-based learning;
- gaining professional experience by students through "immersion" in a professional environment in the course of practical classes and various types of practices throughout the entire training period;
- using professionally oriented training technologies providing for the formation of universal, general professional, and professional competences in students (Patrusheva, 2015; Shevtsova, 2020).

The development of practice-oriented training models for future teachers poses the research problem of determining methodological approaches. Vedernikova et al. (2020) name the following basic approaches: an axiological approach aimed at learning a certain set of professional pedagogical values; a culture-based approach considering the modern education system as a condition for the formation of a person in culture; a competence-based approach realizing a social demand for training a specialist in a

specific professional area; an activity-based approach aimed at the inclusion of students in various professional activities.

One cannot but agree with the point of view of Makarenko (2016) that there is a necessity of considering professional pedagogical training through the prism of integration of different approaches. So, the author believes that the leading strategies of professional training are activity- and culture-based approaches. At the same time, an activity-based approach is integrated with a personal approach and focuses on the formation of professionally significant personal qualities in specific professional activities. A culture-based approach appears to be a conceptual basis, on which future teachers learn universal and national values (Makarenko, 2016).

Cherkasov and Cherkasova (2021) consider a situation-based approach focusing on the development of a personal and meaning sphere of the future teacher, mechanisms of formation of their personal experience. Along with the above approaches, in the theory and practice of the pedagogical education there exist other models of profession-oriented training of future educators. A number of authors indicate a special relation of practical training with “end-to-end project activities” which allows students to gain a “live” professional experience and to support their motivation which is an essential parameter in successful pedagogical learning (Emelyanova, 2021; Sirotová & Michvocíková, 2021).

Although there are a number of methodological approaches to pedagogical training, the problem of lack of readiness of novice teachers for independent pedagogical activities is still to be solved. To carry out the research, we selected an activity-based approach, and described the experience of training future teachers while implementing the *Personnel Reserve* Project.

### 3. Research Questions

In the course of the research, the following problems were to be solved:

- 1) To what extent are graduate students of pedagogical areas of bachelor's degree ready for independent pedagogical activity in the context of the digital transformation of education?
- 2) What expectations and difficulties did the respondents have while implementing the *Personnel Reserve* Project?

### 4. Purpose of the Study

During the coronavirus pandemics, a significant number of school teachers were absent from school due to high morbidity. Then Russian students were massively sent to school, thereby ensuring the continuity of the educational process. The replacement of teachers was performed within the Regional Project initiated by the administration of the region. The project was named *Personnel Reserve*. The replacement of school teachers by students can be viewed as the implementation of the activity-based approach during the training of future educators, which was not planned in advance, but caused by the situation. Students of Pskov State University and Yaroslav-the-Wise Novgorod State University, like many pedagogical students of other Russian universities, took an active part in the *Personnel Reserve* Project. The aim of the Project was to fully or partially replace the teacher for the period of their forced absence. In the Pskov and Novgorod regions, about 200 students took part in the Project.

## 5. Research Methods

To carry out the research, we used a method of immersion in pedagogical profession (activity). The method allows students to realize professional pedagogical experience in the context of specially organized activities and to assess their readiness for the future pedagogical activities under the conditions of education digitalization. The results were collected, analyzed and statistically processed using such methods as survey, observation, conversation.

## 6. Findings

Of the 186 students, future teachers of the Russian language, literature, foreign languages, history, social studies, mathematics, physics, etc., who took part in the *Personnel Reserve* Project, 138 people took part in the survey, of which 96 were bachelor's degree students of the final year, 42 were students of the pre-graduation year. The universities of the two regions received more than 200 applications from educational organizations to replace teachers during the coronavirus pandemic. 81.1 % of respondents indicated that they had previously been in practice or had experience in school. It should be noted that 47.8% of the surveyed students of pedagogical directions were sent to schools by the university, 34.8% of the students were volunteers, but 17.4% of the students of pedagogical directions could not replace teachers or refused to. In most cases, the refusal was associated with health concerns due to the presence of concomitant chronic diseases, but there were also cases of refusal to go to school. Often, the student who participated in the Project completely replaced the teacher, as indicated by 88.9 % of the participants, and fulfilled the teacher's load in full. Not all students were ready or motivated to teaching. This is evidenced by the answers to the question about the presence or absence of motivation before the start of the Project. 47.1 % of the surveyed project participants answered positively, 34% of the respondents gave a negative answer; 18.9 % of the respondents found it difficult to answer.

It should be noted that after the participation in the *Personnel Reserve* Project, the motivation for school teaching changed. 58.6% of the Project participants finally decided to link their profession with teaching. 32.8% of the surveyed students answered that they had not yet decided on their choice, but would like to link their future profession with education. However, 8.6% of the participants answered that they would like to try themselves in another profession.

Half of the Project participants replaced teachers for more than three weeks, 27.8% of the respondents were immersed in the profession for two weeks, the rest of the participants worked at school for a week. Students of pedagogical directions replaced subject teachers in full-time, remote and blended learning formats. During this period, methodological support to students was provided mainly by teachers or methodologists of the school, as well as university teachers (62.3%; 25.4%; 12.3% of respondents, respectively).

It should be noted that despite the moderate level of the motivation for teaching, the vast majority of the respondents (85.5%) noted the high level of university training, including the high level of subject knowledge. However, 30.4% of the future teachers experienced methodological difficulties when organizing the lesson. 21.7% of the respondents experienced difficulties of a technical nature when using

ICT and remote technologies. 13% of the Project participants noted that they had experienced difficulties of a psychological nature when communicating with children.

Answers to the question of what the respondents would like to change in the process of training future teachers at university are as follows:

- an increase in hours for practice;
- activation of academic mobility of students;
- active interaction with other universities;
- reduction of the period of theoretical training;
- an increase in the number of hours for learning educational digital technologies;
- an increase in the number of practical classroom lessons;
- an increase in the number of hours for learning disciplines of psychological and pedagogical block;
- an increase in the number of hours for learning the subject.

At the same time, the vast majority of the respondents (97.1%) noted the lack of teaching experience, almost half of the survey participants (48.5%) expressed the desire to cut hours for theoretical training in university and shift emphasis towards the study of digital educational technologies (81.1% of the respondents) and psychological and pedagogical disciplines (71% of the respondents). The respondents recommend strengthening the following important components of professional training of future teachers: academic mobility (38.4%) and interaction with other universities (24.6%).

Although the Project was of short duration, there was a slight positive dynamics of motivational, cognitive and technological readiness of future teachers for professional activities in the new conditions. The presented results are the first stage of the Project, the experience of which may serve as a reason to revise the content and organization components of the professional training of future teachers.

## 7. Conclusion

The research showed that graduate students of pedagogical directions are at different levels of motivational, cognitive and technological readiness for independent teaching in the conditions of the functioning and development of the modern education system. The research also showed the success of the *Personnel Reserve* Project, and was approved by its participants: pedagogical students, the teaching community, schoolchildren and their parents, directorates of educational institutions, regional administrations. The effectiveness of the Project is proven by the feedback from its participants.

The respondents named the following leading expectations from their future professional activities, identified during the implementation of the *Personnel Reserve* Project: prestige of profession of the teacher, the opportunity of professional self-realization and personal growth, digitalization of educational process, the opportunity of professional mobility, flexible working hours, and others. All this will serve as guidelines for further scientific discussions on the formation and improvement of main professional educational programs for training teachers.

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