CONTINUOUS TEACHER EDUCATION IN RUSSIA

HISTORY, CURRENT PRACTICES AND FUTURE DIRECTIONS

EDITED BY
ROZA A. VALEEVA
AYDAR M. KALIMULLIN

Continuous Teacher Education in Russia

This book is an outstanding contribution to the global literature on teacher education. It is the most comprehensive and thorough account of the origins, development and direction of travel of teacher education in Russia. With its emphasis on the continuous nature of teacher learning and support it offers a model for scholars, policymakers and practitioners around the world to consider and to learn from. Aydar Kalimullin and Roza Valeeva are to be congratulated for drawing together such a range of work with their colleagues at Kazan Federal University. The book provides evidence of why and how KFU has become such a leading provider of teacher education not only in Russia, but with influence in many other countries.

—***Ian Menter***,
Emeritus Professor of Teacher Education,
University of Oxford, UK

This book thoroughly looks at continuing teacher education in Russia and draws on historical developments, theoretical foundations and practical complexities that shape the landscape of teacher preparation and advancement within the broader context of the educational sector. In nine carefully crafted chapters, the reader embarks on a journey through time from the beginnings of teacher education in the 18th century to the contemporary challenges and future possibilities shaping today's teaching landscape. Each chapter is a beacon of knowledge, focusing on a specific aspect of teacher education through rigorous scholarship and depth of experience.

Collectively, these chapters offer a symphony of knowledge, each contributing a unique melody to the overarching narrative of continuous teacher education in Russia. As such, the book stands as a testament to the enduring commitment of educators and policymakers to foster excellence in teaching, nurture a culture of lifelong learning and embrace the rich diversity that defines the Russian educational landscape. It provides a valuable resource for understanding the historical evolution, current state and future prospects of teacher education in Russia while also offering insights and recommendations for enhancing the quality and relevance of teacher training programs. With its scholarly depth, empirical richness and visionary outlook, this book is not merely a scholarly endeavour but a guiding light for educators, policymakers and researchers alike, paving the way for a brighter future in teacher education.

Thus, it is with great enthusiasm and conviction that I endorse this remarkable book for publication, confident in its potential to inspire, educate and empower generations of educators in Russia and beyond.

—*Dr Manpreet Kaur*
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Continuous Teacher Education in Russia: History, Current Practices and Future Directions

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Foreword

The title chosen by the authors – *Continuous Teacher Education in Russia* – well illustrates the scope of this important book. As the contributors point out, in recent years, developments in the country have been substantial. The overall guiding framework, which has been in existence since the 1970s, has been associated with the OECD's notion of 'lifelong learning'. Thus, teacher education in Russia is conceptualised to be not only about pre-service professional preparation but also about ensuring that there is continued updating of teachers' academic and professional knowledge and skills. In opening up new perspectives for the English-speaking reader, the book is also timely as it opens up new perspectives notwithstanding the reality that the world is getting ever smaller with globalisation and transnational knowledge circulation taking place like never before thanks to much travelling and the use of ICT.

Four aspects of the book are particularly valuable. First, the topics covered range widely. Thus, while the work is not part of series *Emerald Studies in Teacher Preparation in National and Global Contexts*, it is certainly an excellent companion to the associated volumes. Secondly, the authors are able to draw on their close knowledge of Russian history, culture and contemporary developments in providing an outstanding context to their exposition. On that, they look at the past not for its own sake but so that it can help them raise key issues central to current debates about teacher education. Thirdly, the authors make use of a wealth of sources, many of them hitherto little used by scholars located in Western Europe and North America. Finally, the authors, due to their extensive work with fellow academics located in China, the United States, Great Britain, Germany and many other countries, have produced a work that allows one to engage in cross-cultural and cross-national comparison and contrast on teacher education in Russia.

Overall, this is a stimulating, very scholarly and thought-provoking book and should be widely read and quoted. For my own part, it is a work that reinforces my own long-standing view of the importance of considering the historical antecedents of contemporary developments in education if we are to understand the current situation properly. It also reinforces my growing appreciation of the view that people from across nations need to listen to one another so that they can move from what are sometimes parochial positions to a space where exchanges of these positions are valued.

Professor Emeritus Tom O'Donoghue
The University of Western Australia

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Introduction and Overview

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The Russian education system solves the problems of pedagogical training and assistance to the timely professional development of teachers in accordance with the conditions of social development. Teacher education in Russia has become the subject of considerable reform over recent years. The requirement for the continuity of such pedagogical training, continued updating of the knowledge and skills of teachers within the framework of the 'lifelong education' paradigm, was put forward in the 1970s of the last century. Today, it is gaining popularity and relevance in teacher education. The central idea of continuous education is the development of a person as a subject of activity and communication throughout his life. This idea, realised by society, is a system-forming factor of continuous education and comes down to the concept of a 'learning society'. Continuous education increases the possibility of extending the propaedeutic training and professional activity of the teacher. The system of continuous teacher education as a whole includes a variety of forms and types of activity aimed at satisfying various requests for expanding, deepening and improving the professional competencies of a teacher throughout the course of their careers. Considering continuous teacher education as a developing, multi-level system, several stages can be distinguished: (1) pre-professional (school); (2) basic professional (college and university); (3) advanced training (institute/centre for advanced training, scientific and methodological work and self-education); (4) postgraduate (postgraduate study and doctoral studies). All these stages are focused on the formation of general cultural and general scientific training in the teachers. The main advantage of continuing education is the possibility of endless development of teachers' personal potentials.

The book is an edited collection of chapters which examines the history, recent developments and directions of modernisation of the Russian continuous teacher education. It aims to be the definitive English language text on this topic and will draw on scholarly expertise in Russia and will locate the policies and practices that are discussed within the context of global reform of teacher education. The book is a result of one of the rare English-language studies on teacher education in Russia, which is entirely prepared by Russian scholars. The significance of their

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work resides in several aspects. Firstly, the editors and authors of the book are practising educators training future teachers in one of the leading Russian institutions of higher education. Secondly, the members of the research team have been participants in practically all the modernisation processes that have taken place in teacher education in recent times. Thirdly, the editors of this book have previous experience of participating in comparative projects, allowing them to generate insight into the specifics of the national model of teacher education from an international perspective.

The interest in the case of Russia in the global educational space can be explained primarily by the originality of its system due to the richness of national culture, its spirituality, social orientation and focus on continuous development. It is a noteworthy historical and cultural paradox how the largest country in the world developed one of the most centralised and unified systems of teacher training.

The preparation of this work was preceded by close co-operation between the authors and international scholars in the field of education. It was developed in line with the general course of interaction between Russian universities and the world pedagogical community. To a greater extent, it touched upon the participants of the large-scale state programme to improve the international competitiveness of the best Russian universities among the world's leading scientific and educational centres (Project 5–100). The greatest success in the subject area 'education' was demonstrated by Moscow State University, Higher School of Economics and Kazan Federal University (KFU). However, the latter, which is represented by the authors of this book, has shown impressive achievements in the field of teacher training. Moscow State University, Higher School of Economics mainly specialised in philosophy, economics and sociology of higher education in general (Gafurov & Kalimullin, 2022).

KFU, which is one of the three largest centres of teacher education in Russia, has essentially become in the last decade the first Russian university to present the national model of teacher training and research in this field to the international scientific community in a large-scale and comprehensive manner. This was manifested first of all in joint research with scientists from China, the United States, Great Britain, Germany and many other countries, in reports at the world's leading scientific conferences of the world (WERA), European (ECER), British (BERA), American (AERA) Associations of Educational Researchers, Association for Teacher Education in Europe (ATEE) and others.

Ultimately, international scientific interaction has contributed to the reputation of KFU, which was the first Russian university to be ranked among the top 100 best higher education institutions in the world in the Times Higher Education (THE) ranking in the subject area 'education' (2020). Currently, according to such a private indicator of THE rating as 'international outlook', KFU is among the 30 best educational institutions in the world. Scientific interest in the university reflects not only the significance of its educational and research activities but also attention to the state and reforms in the field of teacher training in Russia.

In the context of the uniqueness of national teacher education systems, the question inevitably arises as to which of them were the product of independent evolution and which were the result of borrowing or copying from more economically, politically and culturally developed countries. Although it is most likely that there are practically no unique systems of teacher education. The cyclical nature of the historical process has left its mark on the cultural progress of humankind. In the course of its evolution, there has been a repeated shift of centres of science, education and culture from one continent to another, from one country to another. The first highly developed civilisations of antiquity in Egypt, China and India were replaced by the ancient world, and then came the heyday of Western Europe. Its 'golden age' began with industrial revolutions, which entailed major changes in science and education. Teacher training could not stay aside from these processes, as each new century geometrically increased the need for educated people. The number of educational institutions of various types, especially for general education, grew, urgently requiring specialised training for them. Gradually, specific forms and content of education, including pedagogical education, were formed in a number of leading countries. For example, the educational experience of Great Britain, France, Prussia and a number of other countries had a noticeable influence on the rest of the world.

For this reason, it is impossible to assert the absolute autochthonousness of national teacher education systems. As noted above, they are the product of a synthesis of the specific historical and sociocultural conditions of one's own country and the external experience that came from other international systems. This is another argument for the study of the stated problem, as the nature of these borrowings often involved political, economic and cultural aspects of interaction between countries. For example, one cannot deny the influence of the British education system on numerous colonies of the United Kingdom, including North American territories at various times. It is also worth mentioning the Prussian model, which developed in parallel with it, and which had an obvious impact on the development of the educational system of the United States, pre-revolutionary Russia and a number of other countries in the 19th century. Very often, educational reforms developed within the framework of political and economic unions and organisations, the participants of which inevitably acted within the framework of a common strategy or developed within the framework of the leading country. The most convincing examples of the last century are the Council for Mutual Economic Assistance, which united socialist countries after the Second World War under the aegis of the Soviet Union, and the created at the end of the 20th century European Union. In this respect, the history of the Soviet model of teacher training remains underestimated in terms of its prevalence in the world. Nevertheless, its influence in the post-war decades spread not only to the 15 now independent post-Soviet states but also partially to some countries in Central and Eastern Europe, Asia, Africa and Latin America. They are a clear example of how the Soviet Union influenced numerous national teacher training systems in the face of the confrontation between two world systems. On the other hand, the processes of transformation of the Soviet model itself under the

influence of international trends that unfolded in Russia after the 1990s are no less interesting.

Despite the country's accession to the Bologna Declaration, increased academic mobility and research contacts, there have been few English-language studies on Russian teacher education in recent years. They have mostly focused on specific issues that do not allow to understand all the details of the national continuum of teacher education. The editors of this book, Roza Valeeva and Aidar Kalimullin, have been working step by step for several years to bring their idea to life. The main emphasis was on co-operation with scientists from universities in different countries and the implementation of projects together with them. In this interaction, they not only gained knowledge about how teacher education is organised in the world but also presented the Russian experience to the international scientific community.

One of the first steps was World Education Research Association – International Research Network (WERA-IRN) project by scholars from 14 countries, Knowledge, Policy and Practice in Teacher Education: A Cross-National Study, led by Maria Teresa Tatto and Ian Menter (Tatto & Menter, 2019). In the chapter 'Learning to Teach in Russia: A Review of Policy and Empirical Research', Valeeva and Kalimullin (2019) briefly reviewed the historical evolution of teacher education policy in Russia. Next, the empirical results of a major project to modernise teacher education were analysed. It was carried out between 2014 and 2017 as part of attempts to implement the 'Concept of Supporting the Development of Teacher Education'. Considerable attention was paid to the influence of regional and national policies as well as direct institutional structures and social groups on the process of effective learning to teach. In conclusion, the authors emphasised the relevance of the teacher education reform in Russia, taking place amid the background of the country's increased integration into the international scientific and educational space.

The next stage was manifested in the book 'Teacher Education in Russia: Past, Present and Future' (Menter, 2019). It was edited by the British educator and humanist scholar Ian Menter. As the initiator and leader of many international comparative studies of teacher education, he was one of the first to urge colleagues to study the Russian experience without political context. This philosophy arguably reveals the face of a true educator who seeks to separate politics from science as much as possible. This approach is critical for pedagogy, the most important task of which is to make education better, more accessible and more humane.

It is no coincidence that the work of a teacher is highly respected in all countries of the world, regardless of political structure, ethnic, religious and cultural differences. However, in real life, social sciences including pedagogy are extremely dependent on politics. This very often leads to a distorted understanding of national educational systems. That is why Ian Menter's scientific activity can serve as an example of an objective and impartial researcher who strives to be as truthful as possible in his research. Today, his words are more relevant than ever:

> By ensuring that Russian voices are to the fore of our account, we may avoid the western tendency of what Smith (2019) dubbed *The Russia Anxiety*, this being the title of his book in which he traces the origins and developments of western perspectives on Russia as a country that is not to be trusted. He notes the paradox of our (western) deep admiration for the music, theatre, and literature of Russia, while at the same time thinking of the country as 'a unique menace'. Certainly, it is my expectation that western readers of the present volume should find the accounts of Russian teacher educational developments not only fascinating but exciting and stimulating – and far from menacing.
>
> (Menter, 2019, p. 5)

Most of the chapters in Teacher Education in Russia: Past, Present and Future were authored by Valeeva and Kalimullin. In a socio-historical approach, they examine the evolution of teacher education since the late 18th century in the context of changes in politics, economics and culture. But it covers mainly the issues of the initial teacher education, and it only partially illuminates the components of the system of the continuous teacher education. The Russian case is a deeply significant example of 'vernacular globalisation' and reveals many important insights into the major themes in continuous teacher education.

One of the components of continuous teacher education in Russia – induction of novice teachers in the professional pedagogical environment – was described earlier by the authors of this volume in the comparative book 'Teacher Induction and Mentoring' (Mena & Clarke, 2021). The chapter covered the development of Russian innovative organisational models of advanced training for novice teachers at the regional and municipal levels (Valeeva et al., 2021).

The editors of this book participated in one more international comparative study on teacher education, presenting their analyses of the transformation trends of teacher education in five post-Soviet states – Russia, Belarus, Kazakhstan, Moldova and Ukraine – in the period from 1991 to 2020 (Kalimullin & Valeeva, 2022). They revealed the evolution of Soviet identity in teacher education and the reasons for preserving some of its characteristics amid reforms in a number of post-Soviet independent countries over the last three decades. In light of this, teacher education is considered as a major geopolitical resource in the Eurasian space, which enhances co-operation within an international organisation – the Commonwealth of Independent States (CIS) consisting of several post-Soviet countries. The current trend supporting this point is the increased export of Russian educational services to a number of Central Asian countries and Belarus.

The past, present and future of teacher education in Russia was the subject of a chapter in the recent book *The Palgrave Handbook of Teacher Education in Central and Eastern Europe* (Kowalczuk-Walędziak et al., 2023). Valeeva and Kalimullin emphasised the reforms of teacher education in Russia. This justifiably required a brief historical excursion and an analysis of the current structure of the national teacher education system, including a review of state educational standards and approaches to teacher professional development. The authors provided

a critical analysis of the existing contradictions and problems associated with the transformation of teacher training in the early 21st century (Valeeva & Kalimullin, 2023).

In conclusion, the authors consider the directions of further development of teacher education in Russia. The text of the chapter 'Teacher Education in Russia: The Current State and Development Prospects' allows comparing the training of Russian teachers with colleagues in the profession from 20 Central and Eastern European countries. Of particular interest is the comparison of the trajectories of development of this sphere in the countries that were under the influence of the Soviet model after the 1990s. This enables to see the difficulties in their integration into the unified European educational space. Characterising the prospects for further transformation, Valeeva and Kalimullin are in solidarity with their colleagues participating in the project. They point to the increasing role of global, national and regional challenges, including the globalisation of education and the need to strengthen the link between research, policy and practice.

Thus, by exploring various historical stages and aspects of the teacher training system in Russia, the authors have come closer to achieving their main goal of presenting a complete picture of continuous teacher education in the country. Therefore, this book logically arises out of a collaboration between the editors, Roza Valeeva and Aydar Kalimullin, and colleagues at KFU in Russia, who have been leading a major teacher education reform project for the past decade.

The main themes are the history, current practice and future directions for Russian continuous teacher education. The chapters will consider the relationship between research, policy and practice and examine the respective influences of the former Union of Soviet Socialist Republics (USSR), of processes of wider reform in the Russian Federation since 1990s. The overall aims are to provide a critical insight into the structure and development trajectory of continuous teacher education in Russia and to offer an analysis of the processes of change that are under way. This will demonstrate the wider significance and distinctiveness of the Russian 'case' in teacher education reform, in the context of the globalisation of education. It is better to learn from the mistakes and achievements of others, or as the Russian proverb goes – don't step twice on a rake.

The book begins with introduction of the history of Russia's teacher education since the 18th century till present times. The next part is devoted to the general characteristics of continuous teacher education. The third chapter describes the role of pre-professional development of future teachers in pedagogical classes. The fourth part reveals the specific Russian phenomenon of the secondary vocational teacher education. The fifth chapter covers the ways of assuring variability and flexibility of the higher teacher education in Russia. Special attention in the sixth chapter is paid to the models of novice teacher induction in Russia. The issues of training of highly qualified personnel in postgraduate and doctoral studies are revealed in the seventh chapter. The eighth chapter seeks to reveal many important insights into processes of teachers' professional development. The multi-ethnic nature of Russia, the multinational composition of pupils with whom the teacher works in a school and the nearest ethno-cultural social environment suggest a certain readiness of teachers to work in an ethno-cultural

environment. The last chapter of the book will be devoted to this aspect of the continuous teacher education in Russia. The book is providing new perspectives that are likely to be of interest to education scholars, policymakers and practitioners on an international scale.

Analysing the current state of teacher education in Russia, we can forecast what kind of teacher will come to school. What will be the results of their work in teaching and educating the next generations of citizens of the country? The world has repeatedly experienced shocks, demonstrating numerous examples of how yesterday's friends became enemies and vice versa. Today, we all live in hope for a peaceful and prosperous life, for the achievement of which scientists must do their best. Our contribution to this goal is to promote a better understanding of each other through our research.

We thank the Emerald Publishing team for the opportunity to present the Russian system of continuous teacher education to the international scientific community.

References

Gafurov, I., & Kalimullin, A. (2022). Kazan Federal University: A case study in reform. In I. Menter (Ed.), *Teacher education in Russia: Past, present, and future* (pp. 128–151). Routledge.

Kalimullin, A. M., & Valeeva, R. A. (2022). Teacher education in post-Soviet states: Transformation trends. In I. Menter (Ed.), *The Palgrave handbook of teacher education research* (pp. 1–20). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-59533-3_65-1

Kowalczuk-Walędziak, M., Valeeva, R. A., Sablić, M., & Menter, I. (Eds.). (2023). *The Palgrave handbook of teacher education in Central and Eastern Europe*. Palgrave Macmillan.

Mena, J., & Clarke, A. (Eds.). (2021). *Teacher induction and mentoring. Palgrave studies on leadership and learning in teacher education*. Palgrave Macmillan. https://doi.org/10.1007/978-3-030-79833-8_1

Menter, I. (Ed.). (2019). *Teacher education in Russia: Past, present, and future*. Routledge.

Tatto, M. T., & Menter, I. (Eds.). (2019). *Knowledge, policy and practice in teacher education: A cross-national study*. Bloomsbury Academic.

Valeeva, R. A., & Kalimullin, A. M. (2019). Learning to teach in Russia: A review of policy and empirical research. In M. T. Tatto & I. Menter (Eds.), *Knowledge, policy and practice in teacher education: A cross-national study* (pp. 193–212). Bloomsbury Academic.

Valeeva, R. A., & Kalimullin, A. M. (2023). Teacher education in Russia: The current state and development prospects. In M. Kowalczuk-Walędziak, R. A. Valeeva, M. Sablić, & I. Menter (Eds.), *The Palgrave handbook of teacher education in Central and Eastern Europe* (pp. 455–479). Palgrave Macmillan.

Valeeva, R. A., Kalimullin, A. M., Baklashova, T. A., & Latypova, L. A. (2021). Novice teacher induction in Russia: Management and mentoring. In J. Mena & A. Clarke (Eds.), *Teacher induction and mentoring. Palgrave studies on leadership and learning in teacher education* (pp. 1–25). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-79833-8_1

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Chapter 1

Historical Development of the Continuous Teacher Education in Russia

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Abstract

This chapter will explore the main historical trends of the continuous teacher education development in Russia since the 18th century till present. Continuous teacher education in Russia has been a historically changing problem. Its roots lie in the end of the 18th century but its further formation relates to the emergence and development of open comprehensive schools and the spread of general education and opening the universities throughout the country in the 19th century. At the same time neither in the 18th nor the 19th centuries, teacher education in Russia could not be considered as a system, since its structure did not yet have orderliness, stability, constancy and integrity, even at a minimal level (various educational institutions were abolished and closed, teacher education was just beginning to appear in the regions). Thus, the formation of teacher education as a system fell on the border of the 19th–20th centuries. The topic of continuous teacher education in the USSR received impetus since 1986, when the requirements of scientific and technological revolution determined the task of creating a unified system of continuous education in the Soviet Union. At the same time, the continuous education was not recognised as a guiding principle of the teachers' professional development, although de facto it already existed in the 1920s. The phenomenon of continuity in teacher education, understood as the totality of means and forms of obtaining and deepening teacher education throughout life, existed as early as the beginning of the 20th century.

Keywords: History; continuous teacher education; pedagogical classes; secondary vocational education; initial teacher education; post-graduate education

Continuous Teacher Education in Russia, 9–30

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Introduction

In order to have a complete understanding of the subject under study, it is necessary to find out the origins, the reasons for its emergence, to determine the main stages of its development, their characteristics and to establish the current state of the subject in the light of the historical perspective of its movement. In this regard, there is a need for an objective, substantiated assessment of the historical experience of solving the problem of the continuous teacher education in Russia. Underestimation of historical experience creates a breeding ground for subjectivism and voluntarism in the development of theory, and overestimation, exaggeration of it leads to dogmatism, subordination of living thought to a ready-made scheme (Ravkin, 1985). Ravkin (1985) considers it very important to identify trends in the development of the theory and practice of continuous teacher education, because 'in a retrospective study … not so much important are specific facts …, their description, as the analysis of trends in the development of this experience…, the identification of the most progressive traditions' (p. 53), and what is of lasting importance both now and in the future. It is especially important in the sense that on the basis of the identified trends it becomes possible to develop a forecast for the future – 'one of the surest ways to look into the future, into the tomorrow of school and pedagogy in a scientific way' (p. 52).

Historical and pedagogical analysis of the problem requires taking into account another important provision: the development of theoretical ideas cannot be considered without analysing their implementation in practice. Otherwise, it will be impossible to judge their practical value and make conclusions about the trends in the development of pedagogical experience (Sergeev, 1997). With these provisions in mind, we turn in this chapter to the analysis of the history and the main stages of development of the theory and practice of continuous teacher education in Russia.

The structure of this chapter is as follows. It has five sections according to the structure of the continuous teacher education. The central focus is on the complex history of the continuous teacher education in Russia since the 18th till the end of the 20th century. We first cover prerequisites, birth and development of the pre-professional teacher education in Russia. In the second section, we describe the tendencies of the secondary vocational teacher education development. Next, the chapter explores the evolution of teacher education in higher educational institutions. Then, we reveal the establishment of the Russian system of professional development of pedagogical staff. The last section is devoted to the history of post-graduate teacher education. Essentially, the present chapter traces the particular ways in which continuous teacher education in Russia was established historically.

Historical Development of Pre-Professional Teacher Education in Russia

Pre-professional teacher education in Russia has a long history; it is characterised by the presence of a number of stages. Thus, it is reasonable to specify the end of

the 18th century as the period of their active formation. This is due to the fact of studying pedagogy in theological seminaries, pedagogical classes of the Smolny Institute of Noble Maidens, which was established on 16 May 1764 by the decree of the Russian Empress Catherine II. The institute was divided into two halves: Nikolaevskaya and Aleksandrovskaya. The first half was for the daughters of hereditary nobility of high rank. The Aleksandrovskaya half trained daughters of squireens (small landed nobles) and priests. It also had a school for girls of the bourgeois class, which trained future educators and teachers. This school became the beginning of teacher training in Russia. Teachers, governesses and also teachers for the Smolny Institute were trained here. By the end of the 18th century there also studied noble class girls (Klarin et al., 2007). In 1803, a Pepinier class was opened in this institution to train school dames, governesses and teachers (Ponomaryova & Horoshilova, 2008).

The year 1859 can be considered the starting point for the appearing of pedagogical classes in Russia. It was the year when the great Russian teacher Konstantin Ushinsky created the first pedagogical class of its kind at the Smolny Institute for Noble Maidens. The creation of the first pedagogical class, its goal and mission were based on the fundamental principle of professional orientation of education towards the teaching profession. The methodology for organising teaching in pedagogical classes was developed by K.D. Ushinsky and was reflected in his author's programme. This programme became widespread in Russia and was used in many educational institutions of that time. According to the programme, students had the opportunity to thoroughly become familiar with pedagogy and didactics, not only in theory but also in practice. The course was designed for 2 years of study, where the first year was theoretical, the second – practical (Flerov, 2006, p. 71).

The Directorate of Women's Educational Institutions at the Government agency of Empress Maria Institutions recognised the importance of the Ushinsky reform. Based on transformations he had undertaken, the government intended to transform educational institutions on a new pedagogical basis (Mishina, 2003, p. 51).

At the beginning of 1960s of the 19th century, the pedagogical departments existing at the women's gymnasiums of the Government agency of Empress Maria Institutions were transformed into pedagogical classes (Panachin, 1979, p. 98). Pedagogical classes became increasingly widespread at the end of the 19th century. Thus, in 1870, there were put into action new Regulations approved by Imperial consolidation on the creation of pedagogical classes at women's gymnasiums of the Public Education Ministry. The Regulations specified the role of women's gymnasiums. They acted as a comprehensive base for the development of relatively cheap training of public teachers and especially teachers of progymnasiums and gymnasiums teachers of junior classes. The document also presented the qualifications acquired by graduates upon completion of the pedagogical class (the title of a home tutor or a governess). It should be noted that the governess certificate was the highest that existed in Russia for female teachers (Ariskin, 2005, p. 12). The study process and training there were organized on the best for that time seven-year comprehensive base (in the case of two preparatory

classes, even nine-year). Teachers, who graduated from the gymnasium, had great advantages compared to graduates of teachers' seminaries, whose general educational preparation was significantly lower (Emelyanova, 2018; Shamahov, 1953, p. 5). In 1874, a special 'Regulation on the Pedagogical Class' (also called 'Regulations on the 8th grade') was adopted (Derevickij, 1902, p. 44). The eighth grade was intended for practical familiarisation of students with teaching activities. Girls were often entrusted with supervising the junior classes, and in some, especially in private gymnasiums, even conducting daily lessons. Upon completion of the pedagogical class, girls received the title of a governess or a tutor. Similar classes, but with a 2-year course, were established at some women's institutes. In 1899, the 'Curriculum and programmes of academic subjects for the 8th extra class of women's gymnasiums of the Moscow educational district' was published. These regulatory documents regulated the activities of pedagogical classes in the country in the historical period before the October Revolution of 1917.

Pedagogical classes received their next round of development in the 1920s. They were created in the so-called experimental demonstration schools at institutes of public education (higher pedagogical educational institutions created in the USSR on the basis of universities and pedagogical institutions which trained educators for general education and vocational schools of all types and educational institutions). In 1920, there were about 160 of them in the country.

Since 1923, experimental demonstration schools have been replaced by 10-year schools with a pedagogical focus, whose graduates could teach in primary classes after graduation. Creation of these pedagogical classes on the basis of 10-year schools became a measure to solve the problem of a severe shortage of teaching staff in the country. Due to the shortage of teachers, duration of their training in technical schools was reduced; short-term teacher courses with the training programme of several months became more popular.

Since the 1940s, pedagogical classes in women's schools were created to train teachers, as well as future mothers. Women's schools appeared in the USSR in the late 1930s–1940s of the last century and in many ways repeated the practices of separate education for boys and girls in pre-revolutionary Russia (Goncharova, 2013). At the level of education policy, the Soviet school was increasingly turning to the experience of tsarist gymnasiums and borrowing their accoutrements (uniforms, bows, etc.).

The post-war period of pedagogical classes development in Russia is characterised by the priority of vocational guidance, as a system of scientifically based measures aimed at: preparing young people to choose a profession, considering the characteristics of individual and socio-economic situation in the labour market, and assisting young people in professional self-determination and employment. The end of the 1950s–the beginning of the 1960s became for the country an important stage in the career guidance development. The Academy of Pedagogical Sciences of the USSR opened a research institute for labour training and vocational guidance, where an experiment was launched on organising differential training in schools (Tarlavskij, 2012).

In the 1960s, pedagogical classes as an element of the vocational guidance system started implementing pre-specialty (pre-professional) training in secondary schools with a focus on teaching professions, aiming students towards pedagogical universities. The problem of pedagogical classes was increasingly considered from the point of view of professional pedagogical orientation. This was confirmed by the scientific research of Uspensky (1967). It reflected the focus on solving various problems in theory and practice of vocational guidance for high school students in the pedagogical field. The specifics of pedagogical classes were in effective professional self-determination based on the educational cluster 'school–university'. The work system was focused on achieving quality and positive results in the professional self-determination of students. Therefore, such work required coordination of the actions of all involved entities: students and their families, educational institutions.

In the 1970s, Moscow State Pedagogical Institute named after V.I. Lenin opened pedagogical classes in schools, where students underwent teaching internship for the purpose of pedagogical career guidance. A legal basis was also created for the opening of pedagogical classes in schools (regulatory and methodological letter of the USSR Ministry of Education 'On strengthening the work of secondary schools, public education bodies, teacher training institutes to orient students to teaching professions', 1979) (Yakimov, 2020).

The 1980s are characterised by the wide spread of pedagogical classes in the country, accompanied by the systematic implementation of a large number of theoretical and applied works to study this phenomenon. The ideas of psychologist E.F. Zeer became widespread. Zeer identified the stages of professional development of an individual. According to the scientist, at the age of 12–16 years, students experience the optation stage. This stage is characterised by professional intentions, choice of the path of vocational education and training, educational and professional self-determination (Zeer, 1999).

In the 1990s, pedagogical classes in Russia were developed according to author programmes. One of these programmes was created by E.M. Ibragimova (Kazan scientific school). It was an integrated course 'Pedagogy of student's individuality' for students of pedagogical classes (Ibragimova, 1999). The priorities of the programme included reliance on the processes of self-knowledge, self-development, self-determination of schoolchildren, choice of topics interesting for students regardless of their future profession, familiarisation with various teaching methods – useful in the profession and everyday life (individual and collective creative activity, associative techniques, business games, brainstorming, etc.). The programme was also aimed at developing the communicative, organisational, and creative abilities of students, and provided expansion and deepening of contacts between students of specialised pedagogical classes with teachers and students of pedagogical educational institutions. Classes for pedagogical class students were designed to prepare students for practice; content of the lessons did not duplicate the university pedagogy course, but had certain things in common (Noskova, 2015).

History of the Secondary Vocational Teacher Education

The role of teachers' seminaries and teacher's institutes in formation of a system of secondary vocational teacher education was highly important. During the 18th−19th centuries, there was an acute problem of training teachers who would implement the educational standards of their time. K.D. Ushinsky said that 'the most significant drawback in the matter of Russian public education is the lack of good mentors, specially trained to fulfill their duties' (Ushinsky, 1974a, p. 36).

In 1779, a teachers' seminary was established in Moscow University (the first in Russia) with a 3-year training period, which trained teachers for gymnasiums (Moscow and Kazan) and boarding schools. The St. Petersburg Main Public School was opened in 1783 with the aim of training subject teachers and mastering in practice 'ways of teaching' – teaching methods. The teachers' seminary was separated from the St. Petersburg Main Public School in 1786 (it trained more than 400 teachers until 1801). At the same time, there was a 'Statute on Public Schools…', establishing that, in addition to general education training, students must be prepared 'for teaching positions…' (Antologiya pedagogicheskoy mysli Rossii XVIII v., 1985, p. 237).

The social problem of teacher education as a need of society appeared with the development of comprehensive schools in Russia in the 19th century and the inevitability of mass education. In 1803, the 'Preliminary Rules of Public Education' were adopted and legally formalised. Then, in 1894, the 'Charter of Educational Institutions Subordinate to Universities' was developed, according to which persons wishing to be teachers could study for a teaching position in a gymnasium (Khrestomatiya po istorii pedagogiki,1938, p. 217). The development of these documents was carried out by the best scientists in Russia, who understand the need for changes in the structure, organisational forms and content of teacher training in the adequate dynamics of social relations.

At the very beginning of the 19th century Russia experienced the first liberal-democratic education reform, which showed the urgent need to regulate pedagogical training at the state level. Based on its results, various activities were carried out aimed at creating a system of teacher education. In 1803, the teachers' seminary again became a gymnasium, and in 1804, it was transformed into the St. Petersburg Pedagogical Institute. In 1816, the pedagogical institute was delegated the rights of a university with a 6-year term of study for teacher training. In 1817, its branch appeared with a 4-year period of study, and in 1819 the Pedagogical Institute became St. Petersburg University, where, in 1822, the Teachers' Institute began its activities. According to the rules of Teachers' Institute students were engaged in 'pedagogy or, in other words, the way of teaching' under the guidance of teachers (Eskin & Zinevich, 1973). Teachers' institutes became a dead-end form of pedagogical education, as until 1917 their graduates were deprived of the opportunity and right to enter higher educational institutions.

Theological educational institutions were also involved in training personnel for schools at that time. They were ordered to 'send seminarians to fill teaching positions…' (Medynskiy, 1936, p. 104). Graduates of theological schools had to study often individually or in groups at churches and at home.

The quality of pedagogical training of teachers in the first third of the 19th century was insufficient. Educational institutions for future teachers were aimed only at familiarising themselves with 'pedagogical and didactic rules', visiting lessons given by more experienced teachers, and conducting 'demonstration' lessons. That study 'did not give future teachers knowledge of the complete system of upbringing and education of youth, which is why they could only imperfectly adapt teaching methods to the age, concepts and abilities of students' (Eskin & Zinevich, 1973, p. 273).

The insufficient training of teaching staff is explained by the existing understanding of teacher's work as an art, when teaching activity was associated exclusively with the teacher's creative abilities and pedagogical talent, which can easily be developed in teaching practice and studying the relevant standards. K.D. Ushinsky noted that practicing teachers did not sufficiently recognise the need for theoretical knowledge and 'spoke of pedagogical theory with contempt and even harbored some strange hostility towards it, although they didn't know the names of its most important figures or knew only by hearsay' (Ushinsky, 1974b, p. 14).

The most noticeable changes in teacher education began at the end of the 19th century due to significant school reforms, and, as a result, appearance of an extensive system of secondary teacher education. The key components of that system were special pedagogical educational institutions, pedagogical classes, teacher courses, as well as other various forms of training, intended mainly for the training of elementary school teachers.

The training of secondary school teachers was carried out on a regular basis and through several trajectories.

First of all (and above all) through specialised professional pedagogical training, mainly in teacher seminaries, church teachers' schools and 'second-grade' schools.

In teacher seminaries (with a training period of 4 years), subordinate to the Ministry of Public Education, the education programme included religious instruction, history, literature, arithmetics, Russian and Church Slavonic languages, natural science disciplines (physics, geography), pedagogy, methods of teaching the Russian language and arithmetics, drawing, singing.

Teacher seminaries opened in the second half of the 19th century were subordinate to zemstvos (an analogue of modern municipal educational organisations). The training period was 7 years due to an increase in the number of subjects taught (anatomy, physiology, law and other subjects were included in the curriculum).

In church teachers' schools (with a 3-year duration study), the training programme included main subjects such as religious instruction, church history, Church Slavonic language, church singing and icon painting.

'Second-grade' teacher schools (with a duration of study from 1 to 3 years) were created to train teachers of 'literacy schools', primarily in remote areas of the Russian Empire. This trajectory of teacher education was focused on teacher training for a specific type of primary school, academic disciplines were strictly lined up in its educational and organisational hierarchy.

Another trajectory of teacher training for primary schools was integrated into the programme of incomplete secondary education, which was especially reflected in diocesan schools and girls' gymnasiums. Within this trajectory, the key model of teacher education was the organisation of pedagogical hearings. The content of the hearings included special pedagogy programmes aimed at familiarising students with the features, functions and tasks of the pedagogical process, its terminology and expanding pedagogical erudition.

Special pedagogical classes were created in which the study of pedagogy and didactics was mandatory, when the teacher recommended to his students a certain chapter of pedagogical literature for independent reading, after which the necessary explanations and practical recommendations were given. During didactics lessons, under the guidance of a teacher, textbooks 'with the best existing' methodological works were examined in detail. To complete practical tasks in pedagogy, students worked as educators in a girls' gymnasium, during passive practice they observed younger schoolchildren and attended lessons, gave trial lessons, which determined the level of methodological and pedagogical training of the student.

There were also created special pedagogical classes with mandatory study of pedagogy and didactics, when a teacher recommended to his students a certain chapter of pedagogical literature for independent reading, with further necessary explanations and practical recommendations. During didactics lessons, under the guidance of a teacher, textbooks with the best methodological works were examined in detail. To complete practical tasks in pedagogy, students worked as educators in a girls' gymnasium, observed younger schoolchildren and attended lessons during internship, held trial lessons, demonstrating the level of methodological and pedagogical training.

There was also a trajectory of pedagogical education focused on pedagogical courses (1–3 years of study) for primary school teachers, providing, in addition to general education, professional pedagogical training. In 1907, special rules were developed for pedagogical courses with 2–3 years of study. The basis of this model was, first of all, the division of classes into theoretical and practical, as well as the introduction of teaching internship with 'exemplar lessons' preparation and their subsequent analysis. The content of the training included compulsory study of general education subjects, pedagogy, learning theory, hygiene, primary education methods with additional study of music, manual labour and agricultural work.

The further development of secondary vocational teacher education in the first half of the 20th century is associated with increased attention and a key emphasis on advanced specialty option. Pedagogical technical colleges and normal schools began to prepare primary school teachers, which were supposed to provide '… completed education of a qualified practitioner…' (Gainanova & Tkachenko, 2002, p. 5). Different preparation levels of applicants (on the basis of basic general or secondary general education) made it possible to formulate curricula with different periods of study (4 years and 2 years) for future kindergarten teachers and future primary school teachers. By the middle of the 20th century, there

appeared extra-mural secondary vocational pedagogical education for working population, which shows a growing interest in this area.

In 1987, secondary vocational educational institutions (including pedagogical ones) acquired the opportunity to influence the content of students' training, receiving the right to develop 10–15% of a curriculum. Gradually, a unified system of secondary vocational pedagogical education in Russia was formed with the opportunity to obtain a profession without leaving work and, in the future, adherence to the principle of continuation. In 1992, the law 'On Education' raised the question of the level of secondary vocational education.

University Teacher Education Historical Development in Russia

Higher teacher education in Russia has been a historically changing issue. Its roots lie in the end of the 18th century but its further formation relates to the emergence and development of open comprehensive schools and the spread of general education throughout the country in the 19th century. In 1779, a 3-year teachers' seminary (normal school) was opened at Moscow University, training a small number of teachers for Moscow and Kazan gymnasiums (Menter, 2022). Another increase in the need for teachers in the 1780s pointed to the insufficiency of one pedagogical college at Moscow University. The college trained only a small number of teachers for Moscow and Kazan gymnasiums and several private boarding schools. Unfortunately, the college's activities were not widespread, and 3 years after its establishment it had only about 30 students.

At the end of the 18th century, the need for teachers increased greatly because of the opening in 1786 of major public schools in 26 provinces, and in 1788 in the remaining 25 provinces in every city (Russian Laws, 1830). In 1786, the Charter of Public Schools was developed to unify and regulate such educational institutions.

Gafurov and Kalimullin (1922) consider that

> It is a unique example of combination and interconnection of school and teacher education in Russia. For the first time in the Charter, state requirements for teachers were presented. However, these requirements contained some religious components. In particular, it was noted that the teacher is not only an instructor, but mainly an educator, and therefore should have "Christian piety, kindness, courtesy, diligence … and indulgence towards children. This position obliges one to be skilful in what children should be taught".
>
> (Gafurov & Kalimullin, 1922, p. 17)

An important stage in the formation of teacher education in the country was the establishment of teacher training colleges at large state schools. However, the scale of their activities gradually ceased to meet the needs of such a huge country. For example, the pedagogical college in Moscow for 16 years from 1786 to 1802

trained 86 teachers for small public schools. The college in St. Petersburg for 18 years of its existence from 1783 to 1801 trained 425 teachers for 52 largest public schools in Russia. In 1803, it was transformed into the Petersburg Pedagogical Institute. In turn, in 1819, the St. Petersburg University was established on the basis of the Institute. At the beginning of the 19th century, their transformation into gymnasiums began (Panachin, 1979).

In 1804, the Russian universities adopted a new Charter, according to which a Pedagogical Institute with a 3-year training programme was to be established at each university. In 1859, the teacher training institutes in the universities were closed. Reform in the 1860s of the Russian public administration entailed school reform that touched on all parts of the educational system of Russia. Teachers' seminaries and schools became the most common type of teacher training institute (see sector 2 of this chapter). Universities were still training teachers for gymnasiums and real schools. Instead of pedagogical institutes 2-year teacher training courses opened at the universities which were compulsory for all young people who wanted to become teachers ('Candidates for teachers'). In 1872, a number of teachers' institutes were opened, but they did not have the full status of a higher educational institution and did not give the right to enter the universities and other higher schools.

The beginning of 20th century was marked by the *development of the concept of university teacher education*. The situation in the field of education during the years of formation of Soviet power was not in the best condition. This is evidenced by the statistical data on the level of the population literacy: in 1897 the percentage of the literate population was 24% (Svavitsky & Svavitskaya, 1926). Naturally, in these conditions, the primary task was to eliminate illiteracy.

From the first days of the October Revolution, one of the priorities was the radical restructuring of the entire system of public education. The Bolsheviks were well aware of the primary value of the school as a means of propaganda and dissemination of communist ideology. Such changes in education as a whole affected the teaching staff and their training. To meet State's need for the elimination of illiteracy, in the context of the increasing number of schools and universities, there was a necessity for a larger number of teachers. Thus, there arose a question of revising the structure, standards and programmes for training teachers in the country. In turn, Voitekhovskaya (2011) and Zhelvakov (1947) note that trained teachers became the most numerous group of the new Soviet intelligentsia. 'Mass' and 'availability' were the guiding principles of building a new system of teacher education.

The first All-Russian meeting on pedagogical education, held in 1918, approved the following types of educational institutions: partially pre-revolutionary teachers' seminaries were transformed into 4-year teachers' institute (3 years of training session and 1 year of internship), and it was also recommended to establish two pedagogical academies. Later teachers' institutes were renamed into teacher training institutes (they later became pedagogical institutes). They trained pedagogical personnel for technical schools and universities. By the middle of 1919, there were already 32 pedagogical institutes (Panachin, 1975, p. 29). One of the first large Soviet pedagogical university was the Academy of Communist Education named after N.K. Krupskaya.

In 1919, a new type of higher pedagogical educational institution was organised – the Institute of National Education (INE). These were multidisciplinary educational institutions with 3 to 4 years of study, with the goal of 'unified and centralised' training of specialists for schools, out-of-school institutions and public education authorities. According to the project, each INE was supposed to have at least five departments: preschool, first-stage school, second-stage school, labour and extracurricular. Some INEs created departments of aesthetic education, physical education and defectology. Former teachers' institutes and seminaries served as the basis for the INE. Despite a number of successes that the Soviet government managed to achieve on the way of training qualified teaching staff, there were some specific problems of that period: insufficient number of scientific and pedagogical personnel and students, lack of training equipment supply, underestimation of lectures, insufficient communication of institutions with schools. INE existed till early 1921 (Panachin, 1975, pp. 29–30). After the closure of the INE, higher teacher education was provided in the Russian Soviet Federated Socialist Republic (RSFSR) mainly by two types of educational institutions – pedagogical institutes and pedagogical departments in classical institutes.

In 1930–1931, all pedagogical departments in classical institutes were reorganised into pedagogical institutes. Those, in turn, were of the following three groups: agro-pedagogical (trained teachers for rural youth and rural 9-year schools), industrial-pedagogical (prepared teachers for factory 7-year schools and secondary schools), psychological and pedagogical (prepared teachers of pedagogical disciplines for technical schools, defectologists, inspectors). The agro-pedagogical and industrial-pedagogical institutes were again transformed into ordinary pedagogical institutes a year later. The number of pedagogical institutes in the RSFSR increased from 18 to 62, and the number of students in them increased from 16,097 to 40,398 people. In 1930s pedagogical institutes and teacher institutes were opened in all the autonomous republics (Vasilyev, 1966).

In 1932, a new regulation on pedagogical institutes was adopted, from now on they included full-time and part-time departments, as well as extramural courses. In 1934–1935 in connection with the introduction of universal 7-year education and an urgent need for personnel, 2-year teacher institutes were established. They gave incomplete higher education on the basis of secondary school and allowed graduates to enter a university for completing their education. In 1938, a decree on extramural learning was issued, it declared new curricula and cancellation of tuition fees. In 1945, new terms of study for extramural students were established: 5 years in pedagogical institutes and 3 years in teacher institutes (Panachin, 1975, p. 64).

By 1950s, teacher institutes and pedagogical institutes along with pedagogical universities prepared teachers for secondary schools and high schools. After 1956, teacher institutes that gave incomplete higher education were reorganised into higher education establishments. Pedagogical institutes adopted 5-year study plan and began to prepare multi-specialised teachers for the work in 5–10 grades. Each student had to master two specialisations. These institutes opened departments that prepared primary school teachers with higher education (Shcherbakov, 1968; Slastenin, 1976).

Since 1964, pedagogical institutes have combined a 4-year period of study with training for one specialty and a 5-year period for two specialties and more for small schools. In 1974, teacher training was carried out in 199 pedagogical institutes, and 63 universities. Only 5–10% of the Russian teachers were trained in classic universities and 90–95% of them trained in the pedagogical institutes (Panachin, 1975, p. 93; Slastenin, 1976, p. 42).

Analysing the successes and shortcomings of pedagogical education of that period, Isaev (1993), Shiyanov (1991), Bolotov (2001), and Menter et al. (2017) conclude there was a need for an urgent revision of the teaching staff training. Thus, the necessity for radical changes in goals, structure, contents and methodology in teacher education became apparent in December 1988 when the Plenum of the Central Committee of the Communist Party noted the need for an organic combination of the unity of goals and objectives of education with the diversity of schools, the flexibility of curricula and programs, relying on advanced teaching practice, innovative methods of teaching and upbringing. This required the transformation of the system of training and retraining of teaching staff (Isaev, 1993). Its main tasks were connected with radical changes in goals, structure, contents and methodology of teacher education. In 1990s, some of the pedagogical institutes were reorganised into pedagogical universities (Menter et al., 2017). The state policy in the field of teacher education was aimed at transforming the roles and functions of universities and other educational institutions which prepared teachers. Classical universities slowly moved away from teacher training; specialised pedagogical educational institutions managed this function.

The 1990s were tense because of collapse of socialism, the fall of the Soviet Union, development of new political and economic systems. Depoliticisation, democratisation and the decentralisation of teacher education became the main trends.

Establishment of the Russian System of Professional Development of Pedagogical Staff

Training and advanced training of Russian teachers in pre-revolutionary times was carried out in various forms. The earliest form of teacher training was pedagogical councils, which were introduced at each gymnasium in 1828. At first, they were mainly concerned with solving organisational and economic issues, without affecting the educational process. Later, pedagogical councils began to discuss methods of teaching and education, ways to improve the state of education. In addition, conferences, meetings and seminars that took place in every district and province served to improve the qualifications of teaching staff.

Teachers' congresses were one of the important forms of the social and pedagogical movement in Russia, as they contributed to the development of pedagogical ideas and teachers' collaboration, and stimulated creative search and exchange of experience. The first congresses were held in the 1860s. On the initiative of the local authorities (zemstvos), their work was combined with the

organisation of teacher courses. The congresses content included issues of increasing the teachers' level of proficiency, methods and techniques of teaching and educating students. By the beginning of the 20th century teachers' congresses were already approaching the courses in topic and duration (Panachin, 1975).

From the middle of the 19th century, pedagogical courses in Russia were aimed to improve the qualifications of teachers. Since the educational and material base for advanced training had not been created, the bases of schools and teacher seminaries were used to conduct courses. The number of course participants gradually expanded. In 1875, the Ministry of Public Education issued 'Rules on carrying pedagogical courses'. According to the rules, the courses content must be strictly supervised. By the beginning of the 20th century, the courses were under control of the Central Bureau of the Union of Teachers and Secondary School Workers with the aim of promoting scientific and pedagogical communication between teachers. Courses lecturers were professors and teachers from higher educational institutions. The course programme included, in addition to theoretical lectures, practical classes, excursions and interviews. It was allowed to conduct courses over 2 or 3 years, but within different programs, so that students could comprehensively supplement their education. Programmes of temporary courses and lesson plans for seminars on permanent courses were developed with the participation of representatives from teachers. In connection with the growing desire of teachers to be 'aware of modern trends in the areas of scientific knowledge related to school affairs' in 1914, at the All-Russian Congress on Public Education, the content, organisational forms, goals and objectives of advanced training courses for teachers were established, and general requirements for a teacher were also formulated.

Pedagogical societies were a unique form of expanding professional knowledge of teachers. They were created in central cities and on the outskirts of Russia, and by 1902 there were more than 70 such societies in the country. They published their own journals, and stocked teachers' libraries and were organised on the principle of subject-methodological associations.

Pedagogical museums also served to improve the qualifications of teachers. The first centre for scientific, pedagogical and methodological work with teachers was the St. Petersburg Pedagogical Museum of Military Educational Institutions, created in 1864 (at first it was called the 'Central Depot of Educational Institutions'). The museum had stationary and travelling thematic exhibitions and organised public lectures. Pedagogical museums also operated in other Russian cities. In 1890, there were 10 of them, and by 1903 there were 67. Many of them, in addition to lecturing and methodological work, distributed literature and collected various pedagogical relics and memorabilia (Panachin, 1979).

Thus, professional development of teachers in pre-revolutionary period was decentralised, did not have state support, and activity of the teaching community was not welcomed by the tsarist government.

During the Soviet period, the system of advanced training for teaching staff acquired the status of a state structure in the field of education, and then became the main structural link of the federal-regional system of further vocational teacher education. The history of the development of the advanced training

system for teaching staff during the Soviet period can be considered in three main stages: 1917–1920s, 1930–1950s and 1960–1990s (Munchinova, 2013).

The first stage (1917–late 1920s) represents a period of reorganisation of organisational forms of advanced teacher training inherited from past experience for teacher training of the new Soviet school. It was the period of formation and development of advanced training as a state education system, and emergence of the first state institutions involved in problems of teacher training. The main task of advanced training during this period was to prepare teachers for the role of active promoters of the socio-political ideas of the Soviet government in the localities. To create new teaching personnel, pre-revolutionary forms of advanced training were used – various types of pedagogical courses, congresses and conferences. By the end of the 1920s, varieties of organisational forms were replenished with extra-mural courses, on-the-job and general cultural excursions, workshops, internships, and different collective (general methodological work in schools) and individual (self-education) forms of work. Congresses and conferences of teachers, tasks and directions of their work have acquired national significance (Khudominskiy, 1986).

Thus, by the beginning of the second stage (1930–1950s), the main features of the advanced training system were formed, which became the basis for its further development: the goals and objectives of continuous and planned educational activities (determined by the state and social requirements for school and teachers and uniting the work in the centre and locally); content, organisational forms and methods of work used at all levels of the system; teaching staff and student population of the system; material and financial conditions ensuring the functioning of the system in the centre and locally.

At the second stage of development of the system of advanced training in the Soviet period is characterised by the ongoing work to improve general educational and ideological-political level of teachers. The methodological component of the system, though, was already noticeably strengthened:

- holding the classes on mastering the technologies of pedagogical work and practical skills;
- actualising the problem of studying, generalising and promoting advanced pedagogical experience;
- certificating for the title of primary and secondary school teacher in order to improve educational work at school and master professional skills of teaching staff;
- creating teacher training institutes in the regions, territories and autonomous republics of the country, the main task of which was to unite the staff of methodologists in single centres for the comprehensive and systematic improvement of the public education workers qualifications.

Despite the war period of 1941–1945, the work of the advanced training system and the analysis of its activities continued. In January 1944, the position of a research assistant was abolished in teacher training institutes and the position of a

methodologist was introduced. The main structural units of the institutes were educational and methodological classrooms, and the main organisational forms of work with teaching staff were evening and Sunday courses, summer courses, conferences, seminars, workshops and lectures.

By the end of the 1940s, it was determined that teachers, in order to improve their qualifications, must undergo monthly courses at the advanced training institute once every 5 years. The courses were focused on the study of Marxist–Leninist theory, consideration of current problems of pedagogy and psychology, theory and methodology of the subject. At the same time, partly extra-mural courses for teachers and school administrators were established in advanced training institutes.

By the beginning of the third stage (1960–1990s), the process of forming the most important structural and functional components of a unified all-Union (state) system for the development of teaching staff was practically completed: there were 160 teacher training institutes in the country. In subsequent years, there was the development of methodological classrooms as structural links in the system of advanced training, and improved the federal-regional system of further vocational pedagogical education.

In 1969, an institute for advanced training of teachers of pedagogy and psychology was created at the Academy of Pedagogical Sciences of the USSR. It had a faculty for advanced training of management personnel for the ministries of education of the union and autonomous republics, regional departments of public education. In 1985, the Institute was reorganised into the All-Union Institute for Retraining and Advanced Training of Scientific, Pedagogical and Management Personnel of Public Education. Since 1972, advanced training faculties have been created at universities and pedagogical institutes to train school principals, their deputies, and employees of city and regional departments of public education. A little later, teachers' courses were also introduced in universities and pedagogical universities. A network of people's universities for pedagogical knowledge was also created in the country. In 1976, in order to improve the management of the system of advanced training for employees of educational institutions, the position of Deputy Minister for Personnel was introduced in the Ministry of Education of the USSR, and in the personnel department, there were created a division for advanced training and also a scientific and methodological council. The USSR Ministry of Education developed, approved and put into effect regulatory documents on all issues of advanced training of teaching staff in the country (Khudominskiy, 1986).

By the end of the Soviet period, an educational field was formed in teacher training institutes, which included a system of courses (monthly off-the-job courses, long-term part-time, methodological and thematic seminars, workshops, lecture series, educational individual and group consultations, etc.), educational and methodological development of curriculum and lecture material for teaching staff in their territorial affiliation, educational and methodological work with teachers (visiting and analysing lessons and extracurricular activities of teachers, participation in school teacher councils, participation in organisation of regional and local scientific and practical conferences, pedagogical readings,

exhibitions, etc.), publishing manuals, collections and brochures on the best practices of teachers in the region, conducting experimental work (Munchinova, 2013).

In the post-Soviet period (1990s–present), in connection with the restructuring of state and public administration in the country and fundamental changes in the content, structure and methods of managing the state education system, the introduction of new educational standards, a new stage of reform and modernisation of the system of advanced training in accordance with the requirements of the country's social life.

Postgraduate Teacher Education

Postgraduate teacher education is considered in Russia as a system for training scientific and pedagogical personnel for higher education institutions (Shmigelskaya, 2021).

The main elements of the existing system of training pedagogical and scientific personnel arose in Russia in the 18th century and went through a number of periods in their development, due to the stages of development of the Russian state. Conventionally, we can distinguish three periods of formation and development of the system of training scientific and pedagogical personnel: (1) pre-Soviet (1753–1917); (2) Soviet (1918–1990); (3) post-Soviet (from 1991 to the present).

Postgraduate professional teacher retraining for higher education teachers also went through its own stages of development. To form and strengthen the teaching corps at Moscow University, a 2-year teachers' seminary was organised from 1779 to 1784. For the same purpose, pedagogical institutes with 3-year retraining of university graduates began to function at the Moscow, Kharkov, Kazan, Dorpat (Tartu) and Kiev universities from 1804 to 1859.

Since the second half of the 19th century, students, after completing their basic educational programme, were assigned to a professor and became a kind of graduate students. Such professional pedagogical training became the prototype of pedagogical graduate school and was quite long, taking up to 9 years.

In 1907, by the decision of the All-Russian Congress on Pedagogical Psychology under the League of Education, the Pedagogical Academy was created on the basis of Pedological courses (organised by Pedagogical Museum of the Main Directorate of Russian Military Educational Institutions). It was the 'highest courses' of the department of the Ministry of Public Education of the Russian Empire for training of 'experienced and knowledgeable experimenters on pedagogical issues', highly qualified experts on various issues of public education.

Establishment of a Postgraduate School as a System for Training Scientific and Pedagogical Personnel in the USSR

In 1923, the People's Commissariat of Education of the RSFSR approved the Regulations on the procedure for retaining students at higher educational

institutions to prepare them for scientific and pedagogical activities. This document can be considered the first in the list of normative legal acts regulating the state system of training scientific and pedagogical personnel. In terms of their status, rights and characteristics of hiring, the students who were left at universities to prepare them for scientific and pedagogical activities were close to current postgraduate students.

The official status of a postgraduate was assigned to students in 1925 after the People's Commissariat of Education of the RSFSR (Narkompros) approved the Regulations on the procedure for training scientists at higher educational institutions and research institutions. This Regulation provided theoretical classes in one of the socio-economic disciplines, the study of foreign languages, methodological and pedagogical work at the department, research work and practice, and for the first time, writing and public defence of a dissertation. The adoption of this document actually laid the foundations for the state system of training scientific and pedagogical personnel in the USSR. That is why 21 January 1925 is considered to be the 'birthday' of Russian postgraduate school, and the day itself, January 21, is the day of a postgraduate student.

Subsequently, in the 1930s, the Institute of Postgraduate Studies was formed, having the characteristic features of individual work plan for the postgraduate student, strict attendance at compulsory classes, assignment of a postgraduate student to a supervisor, etc. At the beginning the scientific supervisors of postgraduate students mentored them on a voluntary basis, then, from 1932, they were paid for this work.

During these same years, pedagogy, for the first time in world practice, received the status of an independent science in Russia. The branch 'Pedagogical Sciences' appeared with a list of scientific specialisations – pedagogy, paedology, psychology. In the USSR, targeted large-scale training of postgraduate students in pedagogy and paedology began. For example, in 1929, 102 postgraduate students studied at pedagogical faculties, institutes and research pedagogical institutions mastering pedagogy and paedology, 64 of them studied at the second Moscow State University (now Moscow State Pedagogical University).

On 13 January 1934, the Council of People's Commissars of the USSR adopted Resolution No. 78 'On the training of scientific and pedagogical workers' which determined the procedure for graduate enrolment, the procedure for training postgraduate students and finally introduced the practice of preparing and defending theses based on the results of postgraduate studies. However, postgraduate education was established only in those universities and research institutes that had highly qualified scientific personnel and appropriate equipment (libraries, laboratories, testing stations, etc.). According to this resolution, each graduate student had to carry out scientific and educational work according to an individual plan, which main content was student's independent research and teaching work. Individual plans for graduate students were developed by universities based on the instructions of the All-Union Committee for Higher Technical Education under the Central Executive Committee of the USSR, or on the basis of instructions from the relevant people's commissariats.

Since 1967, the best graduates of higher education were allowed to start postgraduate education immediately after graduation, which increased the influx of young people into science.

Opening and Development of Postgraduate Schools in Pedagogy

The Decree of the Council of People's Commissars of the RSFSR 'On the organization of the Academy of Pedagogical Sciences of the RSFSR', published on 6 October 1943, was of significant importance in the development of a system of training scientific and pedagogical personnel for universities and research institutes in pedagogy through postgraduate and doctoral studies. According to this document, the Academy of Pedagogical Sciences of the RSFSR was charged with:

- scientific development of issues of general pedagogy, special pedagogy, history of education, psychology, school hygiene and methods of teaching basic disciplines in primary and secondary schools;
- training through postgraduate and doctoral studies of scientific and pedagogical personnel for universities and research institutes in pedagogy and psychology (Kononova, 2005).

Following this, pedagogical postgraduate schools began to emerge in institutions of higher pedagogical education throughout the country. This led to the fact that the system of training scientific and pedagogical personnel in the field of pedagogy began to develop in two types of institutions:

(1) in the relevant research institutes of the Academy of Pedagogical Sciences of the RSFSR (USSR);
(2) in institutions of higher education with teaching specialisation (Vorontsova, 1997).

The main criterion for opening postgraduate courses in universities and research institutes was the availability of a scientific and technical (laboratory) base for conducting scientific researches, as well as the availability of highly qualified scientific personnel to carry out scientific supervision. At the same time, the quota of graduate students for universities were formed by the Ministry of Education, and the contingents (control figures) of graduate students for scientific research institutes were formed by the Academy of Sciences (Shmigelskaya, 2021).

In subsequent years, the list of scientific specialties was gradually specified. The following main areas of pedagogical research were introduced: preschool pedagogy, speech therapy, history of education, pedagogy with specific methods, psychology, oligophrenopedagogy, deaf pedagogy and typhlopedagogy. These scientific specialisations clearly delineated areas of scientific researches and contributed to the development of pedagogical science.

In 1958, a new nomenclature of scientific specialties in pedagogy was introduced, expanding their number to 27. The list included such specialties as special

pedagogy and special psychology, history of physical culture, children's literature, library science and bibliography, etc. As a result, such fragmentation had a negative effect both on quality and on quantity of theses submitted for defence, and led to the need to revise the list of specialties aiming at their enlargement and integration (Kononova, 2005). By 1972, out of the previously existing 27, there were formed 8 specialties, incorporating the main directions of pedagogy. Further, until the break-up of the USSR, scientific specialties in pedagogy practically did not change, having only editorial clarifications.

Conclusion

Continuous teacher education in Russia passed a difficult path, transforming at every stage, factoring in objective circumstances in the country, as well as the needs and requirements of society. A structure of continuous teacher education, types of educational institutions, duration of training changed in accordance with the requirements of that time. This made it possible to ensure implementation of the state policy course aimed at providing educational institutions with competent qualified teachers and, in general, development of the state within the framework of the new industrial era. An important role in this process was played by understanding of the importance and flexible approach to training teachers who were considered as a fundamental component for guaranteed development of education.

Thus, the network of diverse institutions of teacher education in Russia served as the basis for the establishment of the continuous teacher education system in Russia. This system was characterised by a number of systemic features: numerous constituent elements, a common goal, a unique structure, a connection with the external environment and functional signs. The organisation of teacher education in pre-revolutionary period was not yet distinguished by a special integrity, but the totality of its elements can already be considered as a system of low level of organisation (which is conditioned by its being at the stage of its formation, rather than active development).

An important feature of the system of teacher training in the Soviet period of its development was continuity. In this chapter, the above-characterised forms of pre-professional, professional and post-professional teacher education represent institutionalised forms of continuous education: from school education (pedagogical classes existed in gymnasiums) to postgraduate education (Pedagogical Institute, Pedagogical Academy, etc.). Self-education of teachers as a task of a number of institutions and network associations represented the main form of non-institutionalised continuing education.

References

Antologiya pedagogicheskoy mysli Rossii XVIII v. [*Anthology of pedagogical thought in Russia in the 18th century*]. (1985). Pedagogika. https://djvu.online/file/MLqDJK08J68jB

Ariskin, V. G. (2005). Zhenskoe professional'noe obrazovanie v Rossii v konce XIX-nachale XX vv. [Women's vocational education in Russia at the end of the 20th and beginning of the 20th centuries]. *Pedagogicheskie nauki*, (5), 11–19.

Bolotov, V. A. (2001). *Teoriya i praktika reformirovaniya pedagogicheskogo obrazovaniya v Rossii v usloviyakh sotsial'nykh peremen* [*Theory and practice of the teacher education reform in Russia in terms of social change*]. Doctoral Dissertation, Russian State Pedagogical University named after Herzen.

Derevickij, A. N. (1902). *Zhenskoe obrazovanie v Rossii i za granicej. Istoricheskie spravki i prakticheskie ukazaniya* [*Women's education in Russia and abroad. Historical information and practical instructions*]. Tipografiya Isaakovich i Bejlejson.

Emelyanova, N. R. (2018). Pedagogicheskiye klassy pri zhenskikh gimnaziyakh kak fenomen Rossiyskoy sistemy obrazovaniya vtoroy poloviny XIX v. [Pedagogical classes at women's gymnasiums as a phenomenon of the Russian education system of the second half of the 19th century]. *Vestnik Kemerovskogo gosudarstvennogo universiteta. Seriya: Gumanitarnyye i obshchestvennyye nauki*, (3), 20–25.

Eskin, M. I., & Zinevich, N. A. (1973). Vyssheye pedagogicheskoye obrazovaniye [Higher pedagogical education]. In A. I. Piskunov (Ed.), *Ocherki istorii shkoly i pedagogicheskoy mysli narodov SSSR. XVIII v. – pervaya polovina XIX v.* [*Essays on the history of school and pedagogical thought of the peoples of the USSR. XVIII century – First half of the 19th century*] (pp. 271–272). Pedagogika.

Flerov, A. P. (2006). Konstantin Dmitrievich Ushinskij. *Pedagogika*, (2), 71–76.

Gafurov, I. R., & Kalimullin, A. M. (1922). Teaching and teacher education in pre-revolutionary Russia. In I. Menter (Ed.), *Teacher education in Russia: Past, present and future* (pp. 11–40). Routledge.

Gainanova, O. V., & Tkachenko, E. V. (2002). *Pedagogicheskiy kolledzh v regional'noy sisteme obrazovaniya* [*Pedagogical college in the regional education system*]. Ventana-Graf.

Goncharova, G. D. (2013). *Period razdel'nogo obucheniya v SSSR v 1943–1945 gg. i ego otrazhenie v literature i kinematografe* [*The period of separate education in the USSR in 1943–1945 and its reflection in literature and cinema*]. Izdatelskii. dom Vysshej shkoly ekonomiki.

Ibragimova, E. M. (1999). *Nepreryvnaya doprofessional'naya i professional'naya pedagogicheskaya podgotovka uchitelya* [*Continuous pre-professional and professional pedagogical training of teachers*]. Publishing house of KSPU.

Isaev, I. F. (1993). *Teoreticheskiye osnovy formirovaniya professional'noy pedagogicheskoy kul'tury prepodavatelya vysshey shkoly* [*Theoretical foundations of the formation of the professional pedagogical culture of the teacher of higher education*]. Doctoral Dissertation, Moscow Pedagogical State University named after V.I. Lenin.

Khrestomatiya po istorii pedagogiki [*Reader on the history of pedagogy*] (*4 Volumes*). (1938). Uchpedgiz.

Khudominskiy, P. V. (1986). *Razvitiye sistemy povysheniya kvalifikatsii pedagogicheskikh kadrov sovetskoy obshcheobrazovatel'noy shkoly (1917–1981 gg)* [*Development of a system for advanced training of teaching staff in Soviet secondary schools (1917–1981)*]. Pedagogika.

Klarin, V. M., Piskunov, A. I., & Plohova, M. G. (2007). *Istoriya pedagogiki i obrazovaniya: ot zarozhdeniya vospitaniya v pervobytnom obshchestve do konca 20 v.* [*History of pedagogy and education: From the origins of education in primitive society to the end of the twentieth century*]. TC Sfera.

Kononova, S. V. (2005). *Stanovleniye i razvitiye gosudarstvennoy sistemy podgotovki nauchnykh kadrov cherez aspiranturu v Rossii (1918–2004)* [*Formation and development of the state system of training scientific personnel through graduate school in Russia (1918–2004)*]. Doctoral Dissertation, Stavropol State University.

Medynskiy, Ye. N. (1936). *Istoriya russkoy pedagogiki s drevneyshikh vremen i do Velikoy proletarskoy revolyutsii* [*History of Russian pedagogy from ancient times to the Great Proletarian Revolution*]. Uchpedgiz.

Menter, I. (Ed.). (2022). *Teacher education in Russia: Past, present and future*. Routledge.

Menter, I., Valeeva, R. A., & Kalimullin, A. M. (2017). A tale of two countries – Forty years on: Politics and teacher education in Russia and England. *European Journal of Teacher Education*, *40*(5), 616–629. http://dx.doi.org/10.1080/02619768.2017.1385060

Mishina, T. N. (2003). *Gumanisticheskie idei obrazovaniya i vospitaniya zhenshchin v Rossii II poloviny XIX-nachala XX veka* [*Humanistic ideas of education and upbringing of women in Russia on the half of the 20th and early 20th centuries*]. Doctoral dissertation. Pyatigorsk State Linguistic university.

Munchinova, L. D. (2013). Periodizatsiya razvitiya sistemy povysheniya kvalifikatsii uchiteley v Rossii [Periodization of the development of the teacher training system in Russia]. *Diskussiya*, (8), 138–143.

Noskova, T. N. (2015). *Pedagogika obshchestva znanij* [*Pedagogy of the knowledge society*]. Publishing house RSPU named after Herzen.

Panachin, F. G. (1975). *Pedagogicheskoye obrazovaniye v SSSR: vazhneyshiye etapy istorii i sovremennoye sostoyaniye* [*Teacher education in the USSR: The most important stages of history and modern state*]. Pedagogika.

Panachin, F. G. (1979). *Pedagogicheskoye obrazovaniye v Rossii. Istoriko-pedagogicheskiye ocherki* [*Teacher education in Russia. Historical and pedagogical essays*]. Prosveshcheniye Publ.

Ponomaryova, V. V., & Horoshilova, L. B. (2008). Zhenskoe obrazovanie [Female Education]. *Bol'shaya rossijskaya enciklopediya*, *10*, 37–38.

Ravkin, Z. I. (1985). Istorizm kak metodologicheskiy printsip pedagogiki [Historicism as a methodological principle of pedagogy]. *Sovetskaya pedagogika*, *10*, 47–54.

Russian Laws. (1830). https://archive.org/details/sim_russian-laws_1830_5

Sergeev, N. K. (1997). *Nepreryvnoye pedagogicheskoye obrazovaniye: kontseptsiya i tekhnologii uchebno-nauchno-pedagogicheskikh kompleksov: (Voprosy teorii)* [*Continuous pedagogical education: Concept and technologies of educational, scientific and pedagogical complexes: (Theory issues)*]. Peremena.

Shamahov, F. F. (1953). Pedagogicheskie (vos'mye) klassy zhenskih gimnazij Zapadnoj Sibiri [Pedagogical (eighth) classes of women's gymnasiums in Western Siberia]. *Uchenyye zapiski Tomskogo gosudarstvennogo pedagogicheskogo instituta*, *10*, 47–102.

Shcherbakov, A. I. (1968). *Formirovaniye lichnosti uchitelya sovetskoy shkoly v sisteme vysshego pedagogicheskogo obrazovaniya* [*Formation of the Soviet school teachers in higher teacher education*]. Doctoral Dissertation, Leningrad.

Shiyanov, E. N. (1991). *Teoreticheskiye osnovy gumanizatsii pedagogicheskogo obrazovaniya* [*Theoretical bases of the teacher education humanization*]. Doctoral Dissertation, Moscow Pedagogical State University.

Shmigelskaya, A. P. (2021). Key points of training scientific and pedagogical staff in postgraduate school from 20th century to present. *International Journal of Humanities and Natural Sciences*, *5–1*(56), 242–248. http://doi:10.24412/2500-1000-2021-5-1-242-248

Slastenin, V. A. (1976). *Formirovaniye lichnosti uchitelya sovetskoy shkoly v protsesse professional'noy podgotovki* [*Formation of the Soviet school teachers in the process of vocational training*]. Prosveshcheniye Publ.

Svavitsky, N. A., & Svavitskaya, Z. M. (1926). *Zemskaya dvorovaya perepis'. Uyezdnyye svedeniya 1880–1913 gg* [*Zemsky household census. Uyezd findings of 1880–1913*]. Tsentral'noye statisticheskoye upravleniye.

Tarlavskij, V. I. (2012). Professional'naya orientaciya v Rossii: vchera i segodnya [Career guidance in Russia: Yesterday and today]. *Bereginya.777.Sova*, *1*(12), 135–140. https://cyberleninka.ru/article/n/professionalnaya-orientatsiya-v-rossii-vchera-i-segodnya

Ushinsky, K. D. (1974a). Proyekt uchitel'skoy seminari [Project of a teacher's seminary]. In K. D. Ushinsky (Ed.). *Selected pedagogical works* (Vol. 2, pp. 36–65). Pedagogika.

Ushinsky, K. D. (1974b). O pol'ze pedagogicheskoy literatury [On the benefits of pedagogical literature]. In K. D. Ushinsky (Ed.). *Selected pedagogical works* (Vol. 1, pp. 13–31). Pedagogika.

Uspensky, V. B. (1967). *Pedagogicheskiye problemy vyyavleniya i razvitiya u starsheklassnikov prizvaniya k professii uchitely* [*Pedagogical problems of identifying and developing among high school students a vocation for the teaching profession*]. Doctoral Dissertation Academy of Pedagogical Sciences of the USSR.

Vasilyev, K. I. (1966). *Ocherki istorii vysshego pedagogicheskogo obrazovaniya v RSFSR (1918–1932)* [*Essays on the history of higher teacher education in the RSFSR (1918–1932)*]. Centralnoye chernozemnoye knizhnoye izdatelstvo.

Voitekhovskaya, M. P. (2011). Razvitiye form professional'nogo pedagogicheskogo obrazovaniya v Rossii v pervoy chetverti XIX veka [The development of the form of professional pedagogical education in Russia in the first quarter of the 19th century]. *Vestnik TGPU*, *13*(115), 11–16.

Vorontsova, V. G. (1997). *Postdiplomnoye obrazovaniye pedagoga: gumanitarno-aksiologicheskiy podkhod* [*Postgraduate education of a teacher: Humanitarian-axiological approach*]. Doctoral Dissertation, Institute of Adult Education of the Russian Academy of Education.

Yakimov, O. G. (2020). Pedagogicheskie klassy kak sociokul'turnyj i social'no-ekonomicheskij fenomen v istoricheskom aspekte. *Vestnik Chuvashskogo gosudarstvennogo pedagogicheskogo universiteta im. I. Ya. Yakovleva*, *2*(107), 235–240.

Zeer, E. F. (1999). Psihologiya professional'nogo obrazovaniya–novaya otrasl' prikladnoj psihologii [Psychology of vocational education – A new branch of applied psychology]. *Obrazovanie i nauka*, *2*(2), 105–116.

Zhelvakov, N. A. (1947). Nachalo stroitel'stva pedagogicheskogo obrazovaniya (1917–1920) [The beginning of the construction of pedagogical education (1917–1920)]. *Sovietskaya pedagogika*, *10*, 71–80.

Chapter 2

General Characteristics of Continuous Teacher Education in Russia

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Abstract

In the context of a developing society and ever-increasing requirements for the level of education of citizens, the issues of training teaching staff capable of effectively solving professional problems in constantly changing circumstances becomes especially relevant. This, in turn, actualises the issues of such a system of teacher education ensuring the constant professional growth of teachers during the entire period of their active pedagogical activity. Such a system implies the possibility for a person to carry out continuous improvement in the field of professional pedagogical activity, which in modern scientific literature corresponds to the concept of 'continuous education'. It is interpreted as a process of increasing the general and professional educational level of a person, developing appropriate abilities throughout life. The purpose of the chapter is to analyse the structural and functional characteristics of the system of Russia's continuous teacher education and its status and personality subsystems. The structure of the system of continuous teacher education is revealed, and the structural and functional characteristics of the status and personal aspects of this system are identified and described.

Keywords: Continuous teacher education; pedagogical classes; secondary vocational education; initial teacher education; post-graduate education; structural and functional characteristics

Introduction

'The future does not come, it is created'. It is one of the major theses of our time. The only way to move into the future of education is through continuous

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improvement and development, which is linked to lifelong learning and continuous education. If we try to distinguish between these concepts, lifelong learning will emphasise self-development, and continuous education will emphasise the ability of the state to ensure the individual's aspiration for lifelong learning.

The demand for continuing education is linked to the processes of globalisation and the resulting socio-economic, socio-cultural and geopolitical transformations. They affect all spheres of life, leaving open the question of the change of the human being himself, requiring new approaches to the assessment of his role in the modern world.

Modern Russian society is oriented towards dynamic economic and social development. The most important factor of such development is education since the realities of the 21st century require a person to have knowledge from many fields of science, as well as skills of self-education and self-improvement. As Slastenin notes, 'education takes one of the first places in its importance for fostering of a modern personality adapted to today's technological society' (Slastenin, 2011, p. 6).

Since the mid of the last century, continuing education has been known as a scientific category, reflecting both the organisational education system and the process itself. The updating of knowledge, in particular professional knowledge, the content of relevant training and retraining is initially determined by the needs of the economy in competent professionals and specialists. Emphasis on these tasks pushes the idea of personal development, its moral upbringing to the background.

The original idea of continuing education today – qualification and professional growth throughout life – no longer seems as obvious as in the recent past. The profound tasks of lifelong learning, once concomitant, are turning into priority tasks, namely the 'advancement' of the individual to self-development, readiness to create, develop and mobilise internal resources for personal improvement in a wide range of moral, general cultural, social, communicative and professional qualities.

It should be the first need of society and the concern of the human being himself for everything is created by him and in his name. In this vein, a new principle of lifelong education – subject-oriented educational process – begins to manifest itself. A new principle of lifelong learning – the subject-centredness of the educational process, from which the reforms of institutions and educational practices should be based, is beginning to emerge.

The education system solves the tasks of pedagogical training and promotion of timely professional development of teachers in accordance with the conditions of social development. The requirement of continuity of such pedagogical training, continued updating of teachers' knowledge and skills within the paradigm of 'lifelong learning' was put forward in the Soviet Union in the 1980s. Today, there is a time-tested system of continuous teacher education in Russia. Its traditions are strengthened and developed considering the challenges to which modern secondary and higher schools must respond. This chapter covers the structural and functional characteristics of the system of Russia's continuous teacher education, its status and subsystems.

The chapter has three sections. We first analyse different points of view on the concept of 'continuity' in education and identify the most relevant principles of continuity from Russian research perspective. In the second section, we describe essential characteristics of continuous teacher education. Next, the chapter reveals structural and functional characteristics of the system of Russia's continuous teacher education.

The Concept of Lifelong Learning in Russian Research Perspective

Recognition of the problem of continuous education in Russia dates back to the mid-1960s, when socio-economic conditions in the country changed. During this period, there was an increase in the pace of scientific and technological progress, accompanied by continuous and significant changes in engineering, technology and economics of production, requiring continuous professional development of workers and specialists.

In the middle and second half of the 1970s, the first works on the problems of lifelong learning appeared in the Soviet pedagogical literature. Professor Darinsky (1975) introduced the concept of 'lifelong education' into Soviet pedagogy for the first time. He considered continuing education as a system of education, unified and coordinated in terms of organisation and content, allowing each person to develop and improve himself throughout his life in accordance with his aspirations, opportunities and abilities.

Since the 1980s, the issues of practical application of the idea of lifelong learning have been actively discussed. Before that, they had only a theoretical approach. Basically, the issues of lifelong learning related to the functioning of its individual components were considered: general education schools, institutions of vocational, secondary specialised, higher education, activities of extracurricular universities.

In the opinion of Onushkin and Ogarev (1995), lifelong education is conceived as gradual and holistic in its elements lifelong process that ensures the progressive development of the creative potential of the individual and comprehensive enrichment of their spiritual world. Its main stages are: (a) training, upbringing and development of a person, preceding his entry into independent life – childhood and youth education; (b) learning activities during adulthood, combined with various types of practical activities – adult education.

The category of lifelong learning originally characterised two phenomena – pedagogical concept and the field of practice. There are three main points of view on this problem. The first belongs to the supporters of the 'ancient' origin of the idea of lifelong learning (Darinsky, 1975; Yagodin et al., 2005). They believe that the idea of lifelong learning has existed as long as human society.

Adherents of the second point of view associate the emergence of this idea with the modern era characterised by active development processes in the spiritual, social, industrial and scientific–technical spheres (Kuptsov, 1987; Osipov, 1989). Likholetov (2002) notes that in the conditions of Russia's transition to the market,

when it is necessary to develop creative abilities of trainees, a person in the modern innovation economy should learn continuously.

The third point of view is that although the idea itself has existed in pedagogy for quite a long time, the type of practice corresponding to it has emerged recently (Rogov, 1999; Vershlovsky, 1987; Zinchenko, 1991).

The implementation of the concept of lifelong learning in Russia has gone through a number of stages, with the transition to each accompanied by an attempt to redefine the concept (Arnautov & Sergeev, 2001).

The first stage is attributed to the 1950s and is called the statement stage (Osipov, 1989). Continuing education was initially considered as the issue of adult education; its purpose was considered as compensation for shortcomings, omissions of previous training or replenishment of knowledge in connection with new requirements of life and profession. However, the limitations of this approach led to the emergence of the point of view of continuing education as a system, organically combining adult professional education with general education. The main focus became not only 'adaptation' to the profession, but the creation of the basis for successful adaptation to life in a constantly changing society.

In the second stage (1960s), continuing education was regarded as a mechanism for upgrading qualifications.

In the third stage (late 1960s), continuing education is recognised as a necessity for obtaining 'job qualification' – the qualifications required to work in various industries.

In the fourth stage (since 1970s), emphasis is put on 'life qualification' – education designed to adapt a person to life in modern society (Onushkin & Ogarev, 1995). In the 1970s, it was recognised that the problems of lifelong learning cannot be solved without special development of its methodological, psychological, pedagogical, organisational, managerial, economic and legal aspects. Of primary importance for solving these problems was the interpretation of the continuity of education principle. Most often it was considered as a requirement for the systematic improvement of knowledge, skills and abilities, when education is not interrupted when a person begins their labour activity.

Thus, the Russian system of continuous education underwent changes both formally (institutionally) and substantively throughout the history of Russian education development. Despite the fact that, in general, the institutions of lifelong learning have been formalised, the goals, objectives, orientation and subjects of implementation have been defined in the basic normative documents, the process of formation of the system is not yet complete. This interpretation of the principle of continuity is associated with the characteristic of its time length, largely due to the fact that initially the idea of lifelong learning was associated only with adult education and was carried out on understanding of the adult education functions. Researchers highlighted the following functions: economic, socio-economic and social (Onushkin & Ogarev, 1995); economic, socio-political and socialisation (Vershlovsky, 1987); compensatory, adaptive and developing (Gershunsky, 1990; Vladislavlev, 1978).

The allocation of these functions made it possible to specify tactics and develop specific educational technologies. At the same time, it is impossible not to see the

danger of technocratic limitation, which is inevitably caused by the orientation of the educational process to the upcoming role of the individual in social production. Modern society needs people who realise their place in the changing world.

A different interpretation of continuity is necessary, which implies the integrity of the educational process, the integration of all its stages and their orientation to the main priority of education – the personality. The fundamental works of Nechaev et al. (1989) and Gershunsky (1990) were devoted to this subject. They developed a new understanding of a unified system of continuous education as a set of state and other educational institutions that provide organisational and substantive unity and continuity of all links of education, jointly and in a coordinated manner solving the tasks of upbringing, general education and professional training of a person.

Essential Characteristics of Continuous Teacher Education

In order to understand how fully the Russian system of teacher education is implementing today the principle of continuity, it is necessary to address the essence of the question: what is the essence of continuous teacher education? Answering this question, we must state that, despite the abundance of works in this field, there is no unified position on the understanding of this phenomenon.

Based on the analysis of modern Russian studies, Kalinnikova (2005) identifies five relatively independent approaches to the understanding of the principle of continuity in teacher education.

The first approach considers continuing teacher education as the unity of formal (institutional) education and non-formal (self-education), as the creation of broad conditions for continuous self-development of a teacher (Kosogova, 1999; Potashnik, 1999; Shcherbakov, 2004).

The second approach considers continuity as the focus of all elements of the educational system on a holistic, developing personality (Alferova, 1998; Arnautov & Sergeev, 2001). But within the framework of this approach the principle of continuity of education is mixed with the principle of personal orientation, it is lost in it.

The third approach identifies the continuity of teacher education with its succession, with the absence of gaps in its separate stages (Matrosov & Braichev, 2000; Sgonnik, 2004). This approach is the most frequently used in publications on the issue of continuous pedagogical education. In this case, the essence of the principle of continuity is reduced to one of the possible forms of its manifestation in practice, as we shall see in two further cases.

The fourth approach identifies the continuity of teacher education with its adaptability (Matushansky, 2000; Slastenin, 2011). According to this approach, continuity of teacher education provides a graduate of teacher training institutions with more effective adaptation to the labour market in constantly changing socio-economic conditions.

The fifth approach identifies continuous teacher education with the unity of general and professional components in teacher training (Baiborodova, 2017; Tsiulina, 2015). According to this approach, continuous teacher education is

designed to ensure the unity of the goals of socialisation and professionalisation, development of teacher's personal and professional qualities, key, basic and functional competencies.

Summarising, Kalinnikova (2005) defines the essence of the principle of continuity in teacher education as follows:

> Continuous teacher education is one of the leading means of implementing the person-centred paradigm of teacher education, which is a system of conditions for ensuring the continuity of professional and personal development of a teacher, namely, the continuity of all stages of professional and pedagogical training and professional development; the unity of formal and informal professional and pedagogical self-education; the unity of general (general cultural, general developmental) and professional education; continuous renewal of all elements of the teacher education system in accordance with the changing conditions of life.
> (Kalinnikova, 2005, p. 189)

Matushansky (2000) identifies the principles of designing a system of continuous teacher education: the principle of continuity of teacher training, retraining and professional development, in turn, determines the principle of the stepwise nature of continuous education (consistent ascent from lower qualification and position levels to higher ones); the principle of combining continuity and discreteness is due to the fact that in the process of continuous education periods of self-education alternate with periods of institutionalised education; personalisation principle.

According to Piskarev (2002), the basic principles of designing a system of continuous teacher education are the principle of democratism (allows for the possibility of access to different organisational forms of education), the principle of horizontal integration (assumes the possibility of education in state structures and beyond), the principle of institutionalisation (reflects the need to create new institutionalised forms of the system), the principle of relevance (ensures the significance of continuous education) and the principle of selectivity.

Tsiulina (2015) regards important in the design of the continuous teacher education system the principle of variability in the choice of the educational process actors' interaction resources. These resources are selected in accordance with the purpose and strategic objectives of interaction. The main rule of interaction is the value-sense equality of the actors.

These principles in determining the outcomes of continuing teacher education will be able to influence the management of its quality.

The Structure of the System of Continuous Teacher Education in Russia

In the conditions of developing society and ever-increasing requirements to the level of education, the problem of training of pedagogical stuff capable of

effective solution of professional tasks in constantly changing circumstances becomes especially urgent. This, in turn, urges the issues of such a system of teacher education, which could provide continuous professional growth of teachers throughout the period of active pedagogical activity.

Based on the provisions described above, we will characterise the system of continuous teacher education in Russia. We consider this phenomenon as a dynamic, variable, open, socially, personally and practically oriented pedagogical ecosystem, the implementation of which is ensured by state and public institutions. The goal of this system is to create favourable conditions for the development of a teacher in different periods of life (professional training, professional activity).

This goal is disclosed in the tasks, which can be divided into three groups:

(1) tasks reflecting the interests of the state (establishment of conditions for ensuring every person's right to lifelong learning; a system of state and non-state educational organisations engaged in training, advanced training, retraining of teaching staff; favourable provisions for social and professional development of teachers);
(2) tasks related to the interests of society (development of mechanisms for the expanded reproduction of professional and cultural potential of society and the country; models of preservation, development and cross-fertilisation of pedagogical experience of different national cultures on the basis of universal and pedagogical values);
(3) tasks determined by the interests of the individual (satisfaction of cognitive demands and spiritual needs of a teacher, development of their abilities through the integration of formal, non-formal and informal education).

The specificity of the goal and tasks of the system under consideration determines its structure. It is important to note that the composition of this system should include elements related not only to the development of future teachers' professional knowledge, skills and abilities but also to their personal development, the formation of professionally and personally significant qualities. In this connection, two interrelated but relatively independent subsystems are identified in the structure of the system of continuous teacher education characterising the personal and status aspects of teachers' professional development. Each of these subsystems has its own structure and functions.

The *status aspect* is related to the teacher's advancement in the levels of professionalism and the teacher's mastering of the profession in the process of education and independent practical activity. This aspect is implemented through teacher education in educational organisations of various levels, the activities of which are associated with the development of educational programmes of training, professional development and retraining in the chosen profession. In addition, the status aspect of continuing teacher education may include a pre-professional stage, which implies training in specialised teaching classes of gymnasiums, lyceums.

Thus, the structure of the status aspect of the continuous teacher education system can reasonably include pre-professional education (the stage of professional orientation – acquaintance with the content of the teaching profession, professional requirements for a teacher, opportunities for obtaining this profession, acquisition of initial professional skills, pedagogical experience); professional education (the stage of professional teacher education itself – secondary vocational teacher education); higher education – (mastering professional competences necessary for independent pedagogical activity); stage of professional perfection (supplementary pedagogical education and professional development – improvement of professional knowledge, skills and abilities, professional and personally significant qualities). This stage may also include professional retraining if a teacher has to change the profile of pedagogical activity due to any circumstances.

It should be noted that teacher progression through the levels of pedagogical education is possible through formal (training in educational institutions in accordance with the state educational standards and programmes), non-formal (training in state and public educational institutions providing professional development and retraining programmes) and informal education (individual self-educational activities of a teacher related to improving the level of their theoretical and practical readiness for professional activity).

The *personal aspect* of the continuous teacher education system characterises progressive changes in the teacher's personality, in particular, in the level of their readiness for pedagogical activity (from the level of professional literacy to the level of professional mastery and culture) (Gershunsky, 1998). The level of elementary and functional professional pedagogical literacy characterises the initial stage of a teacher's personality development, which implies the formation of initial knowledge, skills and abilities and personality qualities necessary for subsequent deeper pedagogical education (Perminova, 2004). Thus, mastering pedagogical literacy means the minimum necessary level of readiness of a person to carry out independent pedagogical activity.

The stage of professional pedagogical competence is associated with the formation of such professionally, socially and personally significant qualities on the basis of pedagogical literacy that allow a teacher to realise themselves in various types of pedagogical activities and effectively solve pedagogical tasks (Gershunsky, 1998; Ippolitova, 2015).

The stage of mastering the pedagogical culture implies that the teacher is not only aware of the available pedagogical values but is also able to adequately assess their personal participation in the development of the education system, pedagogical theory and practice.

Thus, the teacher's progression through the stages of professional and personal transformation reflects the structure and content of the personal aspect of the system of continuous teacher education, providing solutions to the problems of personal characteristics development and professional improvement of the subject of pedagogical activity in different periods of their life.

The unified implementation of the components of the continuous teacher education system ensures the success of teacher training and allows to create conditions for self-realisation of a teacher on the basis of continuous self-improvement.

Conclusion

To conclude this chapter, we reflect on three main themes identified in the case of Russia.

(1) The organisation of continuity in the training and professional development of teaching staff is one of the important conditions for improving the quality of professional education and the implementation of state educational policy in the field of education. Different variants of interaction and ensuring continuity of activities will make it possible to expand the capacity of individual organisations and increase efficiency of the development of the human resource potential of the education system in the regions.
(2) The system of continuous teacher education in Russia is a dynamic, variable, open, socially, personally and practically oriented pedagogical ecosystem, the implementation of which is ensured by state and public institutions. The goal of this system is to create favourable conditions for the development of a teacher in different periods of their career (pre-professional, professional training, professional activity). The structure of the system of continuous teacher education is represented by two interrelated subsystems – personal and status aspects.
(3) When organising continuous teacher education, it is necessary to take into account a number of problems that exist at the present stage of its development: insufficient progression of scientific and methodological foundations for diagnosing the quality of teacher education; low efficiency of management of the system of continuous teacher education; poor consideration of the needs of secondary schools in the formation of the content of teacher education; inadequate level of support and stimulation of fundamental and applied research development of scientific schools and scientific directions in the system of teacher education; imperfect mechanism of development, approbation and implementation of successive state educational standards of all levels of continuous teacher education.

References

Alferova, G. A. (1998). *Formirovaniye u budushchego uchitelya gotovnosti k nepreryvnomu obrazovaniyu* [*Formation of the future teacher's readiness for continuous education*]. Doctoral Dissertation. Volgograd State Pedagogical University.

Arnautov, V. V., & Sergeev, N. K. (2001). Istoriya i sovremennoye sostoyaniye nepreryvnogo obrazovaniya [History and current state of continuing education]. *Prepodavatel*, (2), 4–11.

Baiborodova, L. V. (Ed.). (2017). *Nepreryvnoye pedagogicheskoye obrazovaniye: problemy, opyt, perspektivy* [*Continuous pedagogical education: Problems, experience, prospects*]. Izdatel'stvo Yaroslavskogo gosudarstvennogo pedagogicheskogo universiteta im. K.D. Ushinskogo. https://elibrary.ru/download/elibrary_35372314_15377480.pdf

Darinsky, A. V. (1975). Nepreryvnoye obrazovaniye [Continuing education]. *Sovetskaya pedagogika*, (1), 23–27.

Gershunsky, B. S. (Ed.). (1990). *Perspektivy razvitiya sistemy nepreryvnogo obrazovaniya* [*Prospects for the development of the continuous education system*]. Pedagogika.

Gershunsky, B. S. (1998). *Filosofiya obrazovaniya dlya XXI veka* [*Philosophy of education for the 21st century*]. Sovershenstvo.

Ippolitova, N. V. (2015). Lichnostnyy aspekt realizatsii printsipa nepreryvnosti v professional'nom obrazovanii [Personal aspect of the implementation of the principle of continuity in professional education]. *Vestnik YUUrGU. Seriya «Obrazovaniye. Pedagogicheskiye nauki»*, (1), 7–12.

Kalinnikova, N. G. (2005). Nepreryvnoye pedagogicheskoye obrazovaniye kak paradigma [Continuing pedagogical education as a paradigm]. *Znaniye. Ponimaniye. Umeniye*, (3), 186–189.

Kosogova, A. S. (1999). *Stanovleniye pedagoga: problema tvorcheskogo samovyrazheniya* [*Becoming a teacher: The problem of creative self-expression*]. Irkutsk State Pedagogical University Publ.

Kuptsov, O. V. (1987). Nepreryvnoye obrazovaniye: podkhody i resheniya [Continuing education: Approaches and solutions]. *Vestnik vysshey shkoly*, (9), 34–39.

Likholetov, V. V. (2002). *Teoriya i tekhnologii intensifikatsii tvorchestva v professional'nom obrazovanii* [*Theory and technologies of creativity intensification in vocational education*]. Doctoral Dissertation, Russian State Vocational and Pedagogical University.

Matrosov, V. L., & Braichev, G. G. (2000). O realizatsii printsipa nepreryvnosti obrazovaniya [On the implementation of the principle of continuity of education]. In Problemy i perspektivy pedagogicheskogo obrazovaniya v XXI veke [*Problems and prospects of pedagogical education in the 21st century*] (pp. 242–244). Moscow, Prometey.

Matushansky, G. K. (2000). K kontseptual'nym osnovam sistemy nepreryvnogo obrazovaniya vuzovskikh prepodavateley [On the conceptual foundations of the system of continuous education of university teachers]. *Alma mater*, *11*, 40–41.

Nechaev, N. N., Verbitsky, A. A., & Yurisov, V. A. (1989). *Kontseptual'nyye osnovy perekhoda k nepreryvnomu obrazovaniyu* [*Conceptual foundations of the transition to lifelong education*]. Research Institute of Higher School.

Onushkin, V. G., & Ogarev, YeI. (1995). *Obrazovaniye vzroslykh: mezhdistsiplinarnyy slovar' terminologii* [*Adult education: Interdisciplinary dictionary of terminology*]. Rossiyskaya Akademiya Obrazovaniya. Institut obrazovaniya vzroslykh.

Osipov, V. G. (1989). *Sotsial'no-filosofskiy analiz sovremennoy kontseptsii nepreryvnogo obrazovaniya* [*Social and philosophical analysis of the modern concept of lifelong education*]. Publishing house of the Academy of Sciences of the ArmSSR.

Perminova, L. M. (2004). *Samoidentifikatsiya uchitelya: opyt didakticheskoy refleksii* [*Self-identification of a teacher: The experience of didactic reflection*]. St. Petersburg Academy of Postgraduate Pedagogical Education.

Piskarev, N. N. (2002). *Nepreryvnaya podgotovka uchiteley osnov bezopasnosti zhiznedeyatel'nosti* [*Continuous training of teachers in the basics of life safety*]. Doctoral Dissertation. Tula State Pedagogical University.

Potashnik, M. M. (1999). Ponyatiye «kachestvo obrazovaniya» [The concept of "quality of education"]. *Narodnoye obrazovaniye*, (7), 27–30.

Rogov, M. G. (1999). *Tsennosti i motivy lichnosti v sisteme nepreryvnogo professional'nogo obrazovaniya* [*Values and motives of the individual in the system of continuing professional education*]. Doctoral Dissertation, Kazan State Technological University.

Sgonnik, L. V. (2004). *Professional'no-lichnostnoye razvitiye uchitelya v sisteme nepreryvnogo pedagogicheskogo obrazovaniya* [*Professional and personal development of a teacher in the system of continuous pedagogical education*]. Doctoral Dissertation. Institute of General Education, Ministry of Education and Science of the Russian Federation.

Shcherbakov, Y. U. I. (2004). *Teoriya i praktika razvitiya vysshey pedagogicheskoy shkoly v usloviyakh sovremennoy Rossii* [*Theory and practice of development of higher pedagogical school in the conditions of modern Russia*]. Doctoral Dissertation, Institute of General Education of the Ministry of Education and Science of the Russian Federation.

Slastenin, V. A. (2011). Bolonskoye soglasheniye: kurs na integratsiyu [Bologna Agreement: Course towards integration]. *Pedagogicheskoye obrazovaniye i nauka*, (8), 4–7.

Tsiulina, M. V. (2015). Nekotoryye aspekty problemy nepreryvnogo pedagogicheskogo obrazovaniya [Some aspects of the problem of continuous pedagogical education]. *Sovremennyye problemy nauki i obrazovaniya*, No. 1(Part 1). https://science-education.ru/ru/article/view?id=18251

Vershlovsky, S. G. (1987). *Obshcheye obrazovaniye vzroslykh: stimuly i motivy* [*General adult education: Incentives and motives*]. Pedagogika.

Vladislavlev, A. P. (1978). *Nepreryvnoye obrazovaniye: Problemy i perspektivy* [*Continuous education: Problems and prospects*]. Molodaya gvardiya.

Yagodin, G. A., Tarasova, N. P., & Purtova, YeYe. (2005). Nepreryvnoye obrazovaniye v oblasti ustoychivogo razvitiya: Nauchno-metodicheskiye osnovy i realizatsiya v shkol'nom i vuzovskom obrazovanii [Continuing education in the field of sustainable development: Scientific and methodological foundations and implementation in school and university education]. *Ekologicheskoye obrazovaniye: do shkoly, v shkole, vne shkoly*, (1), 5–10.

Zinchenko, G. P. (1991). Predposylki stanovleniya teorii nepreryvnogo obrazovaniya [Prerequisites for the formation of the theory of continuous education]. *Sovetskaya pedagogika*, (1), 81–87.

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Chapter 3

Pre-Vocational Teacher Education: Development of Pedagogical Classes in Russia

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Abstract

Pedagogical classes within the general secondary education system in Russia have been practised for almost two centuries. They have been recognised as an effective teacher training method in complicated stages of national history and as a part of the vocational guidance of school students. Modern pedagogical classes, on the one hand, can be a significant element of the system of continuous teacher education. On the other hand, they contribute to the understanding of the meaning and content of the teacher's profession, and solve the problems of vocational guidance and professional identity. The purpose of pedagogical classes of the late 20th to early 21st century is to have students prepared for choosing a teaching profession and further study in teacher training institutions and universities.

Keywords: Pedagogical classes; general secondary education; vocational guidance; teaching profession; professional identity

Introduction

Modern pre-vocational teacher education in Russia is the first stage in the system of continuous education of a teacher. It is simultaneously an additional education to the general school education. Pre-vocational teacher education is designed to provide vocational guidance to school students (Bajborodova & Belkina, 2021). This can serve as initial professional training on the basis of basic general education. The main pre-vocational education institution in Russia is general education schools. They provide education and training of students in pedagogical

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classes. A pedagogical class is a specialised class in a Russian secondary school, which is aimed at familiarisation of students with pedagogical practice, orientation of students to teaching professions, basic training in pedagogy and psychology.

The Russian system of pre-vocational teacher education correlates, to a certain extent, with the international standards set in this field. Pre-vocational education or training is designed to introduce students to the work environment and prepare them to enter vocational or technical education programmes (Bajborodova, Bataeva, et al., 2021; Nurjanah & Ana, 2022; Yusop et al., 2022). However, it is important to note that successful completion of such programmes does not necessarily result in a vocational or technical qualification. Pre-vocational education is inherently a binary opportunity for the professional formation and development of secondary school students. They acquire professional skills and more consciously choose a profession (Afanasyev et al., 2019).

The content and nature of modern pre-vocational education in the world are predetermined by the context of the country, the peculiarities of the development of the teacher education system as a whole and its historic premises. The history of pre-vocational training shows that initially it was designed for those students who did not intend to move to an advanced level of education or enter a higher education institution. They were supposed to finish school at the age of 16 and look for a job (Wolf, 2011). Thus, it can be said that initially the objectives were the early vocationalisation of students at the secondary school educational level, which implied the following:

- the choice of a profession by the student, considering their capabilities and abilities;
- mastering a set of rules and regulations of the profession;
- development and realisation of themselves as professionals.

There were certain disadvantages of early professionalisation of students in the general educational organisation, namely

- quality control risks of professional education in a general education organisation;
- insufficient professional qualification of school graduates;
- complexity of linking secondary school education with the vocational training of a professional, etc.

Vocationalisation enabled to optimise the costs of vocational education (Darling-Hammond, 1990), to make the process of vocational guidance and education closer and faster, as well as to address the lack of skilled workers (Macdonald, 1999).

Pre–vocational education, including teacher education, has defined the modern context of teacher education in secondary schools. Several countries have abandoned such a pre-vocational model due to the insufficient level of student

competencies at the end. It was further impossible to realise professional teaching without students obtaining advanced qualifications.

Nowadays there are systems of continuous teacher education, where pre-vocational education is the most important element of it, a complete stage of the professional identity of a high school student. Professional identity is characterised by the active motivation of students to choose a learning profile. A number of researchers speak about the full-fledged formation of extra-functional skills in students in this case, including basic and special knowledge, value orientations, attitudes and communicative skills (Bajborodova, Serebrennikov, et al., 2021). These are those personal qualities that in the long run determine the core of professional pedagogical activity (Skudareva, 2011). Such systems include teacher education in Russia, in the formation of which pedagogical classes played a critical role.

The present chapter is divided into three sectors. The first sector describes the essence of the methodology of pre-vocational teacher education organisation. Sector two reflects the Russian concept of specialised psychological and pedagogical classes, and their essence. Sector three introduces the most well-known Russian models of pedagogical classes and their analysis.

Methodology of Pre-Vocational Teacher Training in Russia

Pedagogical classes in the modern system of continuous teacher education in Russia are a phenomenon of the professional identity of a student as a future teacher. The result of this activity should be its status (position, significance and prestige) in the professional community and society as a whole (Yakimov, 2020). The Ministry of Education of the Russian Federation has prioritised the country's inclusion in the top 10 in terms of the quality of general education in 2021. Therefore, greater attention is paid to the education of teachers in higher educational institutions and advanced education institutions, as well as to the establishment of 5,000 specialised pedagogical classes on the basis of Russian schools.

There is currently a common understanding between scientists and practicing teachers in Russia regarding the quality organisation of pedagogical classes. It is generally recognised that it is impossible to achieve it without school–university cooperation and the development of school–university partnerships. A strong, advanced school–university partnership, implying network interaction between the participants of academic activities, contributes to the solution of the professional identity of students of educational organisations. Pedagogical classes, as a form of organisation of comprehensive pre-vocational teacher education, allow to implement a targeted intensive vocational guidance of high school students (10th and 11th grade, age 16–17) to the profession of a teacher (Bajborodova & Belkina, 2021), the methodology of organisation of which will be presented further.

The methodology of organisation of pre-vocational education in Russia is predetermined by the role and importance of this institution for the state and society. It is important to note that the Russian system of continuous teacher

education is the most important factor in social development. There is currently a change of focus, and the content of teacher training, reflecting the new realities of modern society. There has been a decline in the prestige of the profession of teacher among young people in recent years for a number of reasons (Tolkova & Troshina, 2018). There is a rather large gap between the number of graduates of teaching faculties of Russian universities and the actual need for teachers at the Russian school. Therefore, society and the education system are reconsidering the importance of pre-vocational education for students. The national priority is to increase the number of graduates who plan to tie their future careers with the education system and to increase the number of so-called non-accidental students in higher education, whether it is a classical university or a university for teacher education.

Therefore, it is crucial to organise vocational guidance work to identify and develop high school students who have an aptitude for teaching. A conscious effort in educational organisations aimed at pre-vocational teacher education, implemented at the national, regional and institutional levels, helps to raise the prestige of the profession of a teacher. Furthermore, it can help students to make an informed choice of a professional teacher education institution, as well as to build a system of support for the professional identity of students interested in the profession of teacher.

The goal of pre-vocational teacher education is defined by Russian scientists and practicing teachers as the formation of professionally important motives, qualities, skills and abilities of educational and organisational activities in students. It is important to provide the efficiency of choosing applicants to teacher education organisations in this regard.

The goal of pre-vocational teacher education at schools is defined by a number of functions. First and foremost, it is a diagnostic function. It implies that the competent organisation of pedagogical classes at school results in the following:

- identifying and accounting for the age and individual characteristics of students,
- identifying their professional aptitudes,
- guiding the process of students' achievements tracking, ensured by their professional and educational profiles, which are developed by them under the guidance of supervisors (e.g. school teachers, university lecturers).

The second pre-vocational training function is the *motivational function*. Through it, school students form a system of motivation for a conscious choice of the profession of teacher (Belkina, 2019).

The motivational function of students' training in pedagogical classes is connected with its *incentive* function. Through it, a system of incentives for students is created (Gumerova, 2001), and their professionally important qualities, activity and independence are displayed.

There is also an *educational* function of pre-vocational teacher education. It involves the formation of a system of psychological and educational knowledge,

skills and abilities in students. Moreover, it implies mastering a set of professional qualifications that allows one to carry out socially significant and socially educative activity (Luzhetskaya & Pashchenko, 2021).

The *upbringing educational* function of pre-vocational teacher education is also emphasised by a number of scientists (Bajborodova, Gruzdev, et al., 2021). This function is aimed at the development of professionally significant qualities of personality of pedagogical classes students, i.e. love for children, tolerance, responsibility and empathy.

Pre-vocational education also provides an opportunity to adjust the content of education and individual plans of students. Thus, the *corrective function* of pre-vocational education is enclosed therein. In this case, supervisors consider the personal characteristics, needs of students and their professional outlook. The corrective function makes it possible to regulate the education process considering the intermediate results of the diagnostics of students.

It is essential to provide the conditions that promote personal and professional identity as early as at the high school level in the organisation of the work of the pedagogical classes. A qualified educational interaction of all participants of the educational process based on the activity approach and the regime of open dialogue is one of such conditions. In compliance with this condition, the formation of a communicative culture of participants takes place. This manifests the *communicative* function of pre-vocational teacher education.

Characteristic of pre-vocational teacher education predetermines the approaches to its organisation *subject-oriented* (Zhurat et al., 2022) and *practice-oriented* activity (Brouwer et al., 2022; Dilafruz, 2023). The subject-oriented approach enables to include students in a variety of activities, namely, academic, quasi-professional and socially important. It is important to emphasise that these activities are related to the future teaching profession. The students are also trained in goal–setting, learn to define general and specific tasks for the future of activity, to build educational and professional plans. The subject-oriented approach helps students to realise creative projects in cooperation with their supervisors.

The design of educational content in the pedagogical classes based on the subject-oriented approach implies the mandatory development of the student's own individual educational programme. A student has the right to independently determine the format of pre-vocational education, and means of assistance from supervisors and other experts involved in the process of education.

Students of the pedagogical classes have the opportunity to evaluate all types of their own activities, their educational achievements, to compare their results with the results of others, to be a full participant in a dialogue with classmates, and supervisors, to be responsible and independent in organising activities and events.

The practice-oriented approach implies the transfer of psychological and educational knowledge, which the student learns in the process of pre-vocational teacher education, into practical action. A theory becomes a means of solving practical problems related to teacher training. A method of teaching trials is

actively used, students of the pedagogical classes are involved in the mentoring of younger students.

Students of pedagogical classes can participate in school camps organised within the school during the school vacations for primary and secondary students, as well as the practice of upbringing educational work related to the organisation of various activities in the school (sports events, work projects, cultural events, etc.).

Subject- and practice-oriented approaches provide pedagogical reflection of educational activity, stimulate self-education of students, promote variability of education, make a free and independent choice of profession, and choose content and format of education within the framework of pre-vocational training at school.

It is necessary to account for changes in the requirements for professional teaching activity when selecting the content of pre-vocational pedagogical classes. Therefore, the content of pre-vocational teacher education is open-ended. The content of pre-vocational education is sometimes dynamically transformed to ensure its adaptation to new approaches and requirements for education.

Pedagogical casuistry, i.e. case studies of real teaching situations together with supervisors, seems to be valuable in pre-vocational teacher training. Students discuss together and justify their proposals for overcoming the professional problem they have encountered in practice. An important role here is also played by pedagogical tests, which allow to confirm or refute the hypothesis put forward jointly. Education then becomes more practice-oriented and applied in nature.

It is necessary to emphasise the role of a supervisor, senior and experienced, whose main task is not so much to give a finished formula to the student, who has once, somewhere, worked for someone, but to teach the student to make independent personal decisions regarding the educational process, flexibly responding to the situation, taking into account the conditions of the context. The system thinking of the student will be developed this way (Monat & Gannon, 2015).

The selected content of pre-vocational education teacher education, organised mainly in high schools in Russia, is implemented through various technologies, forms and methods of teaching. To realise the set tasks, it is advisable for teachers working with pedagogical classes to focus on active technologies (Chance & Furlong, 2022). They allow transforming theoretical knowledge into practical wisdom more successfully, taking into account the peculiarities of the teaching team, approaching individually to each student of pedagogical classes. It is important to develop creative abilities in students, and nurture independence and responsibility, taking into account their age, needs and zone of nearest development.

Russian teacher education practice, including pre-vocational education, is increasingly focusing on reflection (Beauchamp, 2015; Körkkö et al., 2016). The share of problem-based, discussion-based methods and technologies used in the educational process is increasing. Reflexion promotes in-depth, grounded research and project activities of novice teachers.

The Russian experience of organising pre-vocational training of pedagogical staff is largely based on the personal potential of the supervisor. Meetings with

interesting and favourite teachers, and representatives of pedagogical dynasties are practised. In this case, the invited teacher can fascinate the students of pedagogical classes, and tell about his/her experience, taking into account their age characteristics. The students of the pedagogical classes are offered to collect information about the invited teacher in advance, in the form of summarising the results of the conversation after the meeting, creating a video library of meetings or a photo album, and issuing a newspaper is thought over.

There is a risk of students copying role models of their teachers in supervising activities. These models, however, are not always correct and must be tested to prove their effectiveness. That is why, in this case, the supervisor's role is of greater value:

> 'I act this way – evaluate my actions – make your own decision – act on your own – evaluate the result of the action' rather than
> 'I act this way – this is the right decision – act as I do'.

By obtaining non-intuitive, yet substantiated confirmation of the validity of the supervisor's actions, the pedagogical classes student can more boldly, with minimal risks, 'try on' the role models of an experienced teacher.

Situational tasks, and case studies, often used in Russian schools, play an important role in the implementation of pre-vocational teacher training. The training format, analysis of educational situations (Wang et al., 2018), which involves supervisors from the university and school, is used. Not only the analysis of the situation and the search for a solution but also its actual use is prioritised. In this case, it is interpreted as a socio-professional trial, when a life situation is specially planned and then played out by the participants of training under the guidance of teachers.

To date, there are various models of pre-vocational education of teachers in the Russian Federation. The most common model, the model of pedagogical classes, involves the education of a group of children of relatively constant composition under an additional general education programme developed taking into account the specifics of the conditions of the educational organisation and the needs of students. High school students receive pre-vocational education at the expense of resources of profile and elective courses, extracurricular activities, additional education, etc. The basics of psychological and pedagogical knowledge in an entertaining form and educational pedagogical (socio-pedagogical, organisational) practice are compulsory for study.

Pedagogical classes in Russia are of a variable nature, differentiated at both regional and institutional levels. Some of them are created on the basis of general educational organisations, some of which are part of the structure of higher education institutions. Here, students who have passed vocational guidance tests and interviews and have shown an aptitude for the profession of teacher are united by the organisation's management and supervisors into a single group (sometimes of different ages) to study a teacher education profile in the 10th–11th grades (terminal classes of general education schools in Russia).

A number of pedagogical classes are created on the basis of teacher education colleges and teacher education universities. In this case, students wishing to prepare for admission to a professional pedagogical institution are trained under the guidance and with the participation of specialists of this organisation.

Teacher pre-vocational education can also be carried out in pedagogical classes (or groups) opened on the basis of organisations of additional education. Here, training, implemented under an additional general education programme, is combined with creative activities in creative associations of their choice.

In the case of rural schools, students have a chance to receive pre-vocational education on the basis of a municipal district. Also professionally determined high school students can be trained on the basis of a support school with the involvement of specialists from schools and professional organisations.

The work of pedagogical classes in Russia is also organised on the platform of federal universities, which may include their own schools that act as a practice base (Gafurov et al., 2018). Interaction with them is realised in the conditions of school–university partnership.

Each school–university partnership is unique, including the composition of the subjects. In some regions of Russia, local governments are actively involved in this process and regulate the activities of pedagogical classes. In some regions of the Russian Federation, the main strategy of pedagogical classes development is determined by the university together with the school management.

Students of pedagogical classes are selected on the basis of an interview, and applicants also undergo a questionnaire. Education lasts for 2 years and takes place in the 10th and 11th grades of secondary school. These classes are graduation classes. Both university teachers and school teachers teach in pedagogical classes. The content of training and the volume of hours are determined by those responsible for the process of pre-vocational teacher training and are fixed in the training plan. Often a non-profit agreement on joint activities is signed, which is agreed upon by the head of the school, university and local authorities.

The choice and structuring of learning content in pedagogical classes emphasises pedagogical interaction, and methodology of teaching the subject. The use of interactive forms of teaching is a priority.

Education in the pedagogical classes is implemented according to the exemplary working programs. They allow implementing different formats of education taking into account the peculiarities of the educational organisation, and conditions of school–university partnership. For example, in the 10th grade students can study the basics of the theory of teaching, and in the 11th grade – the basics of the theory of education. The programme specifies the planned results of mastering the subject

- personal results (e.g. formation of cooperation skills, readiness for independent, creative activity, the ability for education and self-education, informed choice of future profession, etc.);

- meta-subject results (e.g. ability to set goals independently, plan ways to achieve them, ability to take into account the opinion of other participants in the educational process, make decisions, etc.);
- subject results (e.g. understanding of the main normative acts in the field of education, terminological bases of pedagogy and education, ability to solve practical problems on the basis of understanding the basics of the theory of teaching and education, etc.).

The content of the working programme in grade 10 may include topics such as Regulations of the professional activity of a teacher, Teacher's mission, A tour through the history of education, The essence of the basic concepts of education, Basics of the theory of learning. In the 11th grade students study, for example, topics such as Values as the basis of personal education, Organisation of educational work with a children's group, The main directions of a teacher's activity, etc.

Along with teacher training, psychological training of novice teachers can also be carried out. Research projects by students of pedagogical classes are becoming more and more widespread, the results of which are reported at conferences, including those at the national level, and published in journals in co-authorship with supervisors.

Russian scientists and practicing teachers have created a textbook for pedagogical classes named 'Fundamentals of pedagogy and psychology' (V. Basjuk, E. Kazakova, E. Brel, etc.) with a digital supplement in the form of author's video lectures, tests for self-checking to comprehensively provide educational and methodological materials for the process of pre-vocational pedagogical training in 2023 (Basjuk et al., 2023). The unique nature of this textbook lies in the fact that it conveys scientific and pedagogical experience and modern pedagogical technologies to students. The expected learning outcomes include the acquisition of skills that will enable pedagogical classes students to

- grow in the profession;
- develop communication skills;
- discover one's own potential;
- understand and get to know other people,
- develop cordial relations.

Thus, the modern system of pre-vocational teacher training in Russia is implemented through the work of pedagogical classes created on the sites of schools and other educational organisations. When selecting the content and choosing educational technologies, each organisation determines its strategy independently, taking into account the conditions of school–university partnership. Higher schools can also act as an initiator of pedagogical classes at the sites of their partner schools. At the level of educational authorities, the Ministry of Education of the Russian Federation, the Ministry of Science and Higher

Education of the Russian Federation, normative–legal acts regulating the activities of pedagogical classes in the city, region and country are adopted.

The variability of the organisation of pedagogical classes in Russia, and the variety of formats of pre-vocational teacher education do not mean that the system is fragmented. To date, the Russian Federation is implementing a unified national concept of profile psychological and pedagogical classes, the essence of which will be presented in the next section of the chapter.

Russian Concept of Specialised Psychological and Pedagogical Classes: Essential Characteristics

Since 2021, the Ministry of Education of the Russian Federation has approved the concept of specialised psychological and pedagogical classes in Russia, which form the basis of pre-vocational teacher education (hereinafter referred to as the Concept). The Concept is the basic document of the project on the development of pedagogical classes in the country, its provisions are increasingly being implemented in the practice of pre-vocational teacher training. The need to make conceptual decisions in this area was caused by a number of problems of the national order.

- the need to create and maintain a national system for identifying and training a talent pool of people-centred vocations (in education, medicine, social work);
- lack of trained teachers;
- high expenses incurred by the state for professional retraining of specialists (change of profession) after graduation from educational programmes of professional education.

The Concept was also designed to address a range of issues at the regional and municipal levels, such as

- increase the quality of education of graduates who are able to make an informed choice of the sphere of future professional educational activity and are prepared for the digital environment;
- improve the quality of professional training of specialists who have chosen teaching by vocation;
- reduce the dropout rate of students in teacher training and young teacher graduates in the first 3 years of their teaching career;
- development of social partnership between educational organisations and society.

The authors of the Concept justify its relevance by appealing to the acute problem of the lack of competent specialists in people–centred sectors of the economy. This issue is largely related to the process of selection, training and support of pedagogical staff. Modern teenagers, having many opportunities for self-development, sometimes get lost in large streams of information, make

mistakes with the choice of life path. The abovementioned actualises the importance of special support for students at the stages of building a professional and educational trajectory. Surveys conducted by the Russian Public Opinion Research Centre testify to the demand of high school students for additional skills. Young people aged 14–17 would like to take courses to improve personal effectiveness (25%), and career guidance (23%), 20% were interested in courses to develop communication skills and courses to develop managerial skills.

The Concept of specialised psychological and pedagogical classes, primarily, is intended for organisations engaged in educational activities and teachers engaged in the process of organising the activities of psychological and pedagogical classes. The target group of the programme of psychological and pedagogical classes is students who have an interest in teaching activity, in studying in a specialised class of psychological and pedagogical orientation, as well as their parents (legal representatives).

There is currently a sufficient regulatory and legal framework in Russia for the establishment of specialised psychological and pedagogical classes. The main documents that can guide an educational organisation in this matter include the following:

- Federal Law of 29 December 2012 No. 273–FZ On Education in the Russian Federation (hereinafter referred to as Federal Law No. 273);
- Federal state educational standard of secondary general education, approved by order of the Ministry of Education and Science of Russia dated 17 May 2012 No. 413;
- Order of the Ministry of Education of the Russian Federation dated 18 July 2002 No. 2783 On approval of the Concept of specialised training at the senior level of general education;
- Approximate basic educational programme of secondary general education (approved by the decision of the Federal Educational and Methodological Association for General Education, protocol dated 28 June 2016 No. 2/16–z);
- Order of the Ministry of Education of Russia dated 20 May 2020 No. 254 On approval of the federal list of textbooks approved for use in the implementation of state-accredited educational programmes of primary general, basic general, secondary general education by organisations engaged in educational activities, etc.

Psychological and pedagogical prerequisites for the creation of specialised psychology and pedagogical classes are the variability of opportunities to meet the most diverse demands of stakeholders in the field of individualisation of education, the availability of a psychologically safe educational environment in which modern students study, as well as the breadth of tools that can be used to design professional samples of students.

Nowadays, the Russian education system has accumulated a lot of experience in the implementation of different models of profile education. The educational organisation can choose a traditional model (activity is organised through cooperation of all internal resources of the educational organisation) or network

forms of implementation of educational programmes (based on the following models – basic school; resource centre; cluster of educational organisations of the same or different types and kinds; cluster of educational organisations with organisations/institutions/enterprises of other spheres of activity; cluster of integration of general education organisations and organisations of additional educational programs).

Analysis of the conceptual framework for organising the activities of psychological and pedagogical classes indicates the following priorities:

- identification of gifted students and formation of their readiness for professional and personal identity;
- integration of pedagogically gifted students into the professional community at the stage of school education.

The organisation implementing pre-vocational teacher education programmes should develop and implement a system of identification and support of pedagogically gifted students, monitor the results of profile education and professional self-determination of students. The training organisation (or a network of organisations) creates conditions for the development of students' subjectivity through the personalisation of professional trials and the creation of individual training projects; develops and implements mechanisms for targeted training in pedagogical areas of training with the establishment of preferences for the most distinguished students and graduates of pedagogical classes.

The Concept also provides foreseeable outcomes for the students in the school system as follows:

- an understanding of one's identity;
- development of emotional intelligence;
- development of personal qualities and skills;
- development of social activity and social responsibility, increasing self-esteem;
- broadening the worldview of people and the professions.

Also the results of training in the psychological and pedagogical classes are the formation of a positive and meaningful image of the teaching profession, professional and personal self-determination; the development of psychological ideas about the educational process, and skills to use psychological knowledge in solving pedagogical problems, the development of skills of self-education and organisation of educational and training events, increasing motivation for educational activities.

The effects for the education system and society as a whole in the implementation of the concept are development of the system of identification and support of gifted children; increased coverage of children with additional education of social and humanitarian orientation; increased access of students to human resources and infrastructure of organisations of secondary professional and higher pedagogical education; creation of conditions for overcoming the

deficit of pedagogical personnel; increased prestige of the pedagogical profession; increased psychological and pedagogical culture of the population.

The Concept outlines the mechanisms for organising psychological and pedagogical classes as follows:

- mechanism of admission (selection) of students to specialised psychological and pedagogical classes;
- mechanisms for the development of network interaction between educational organisations;
- mechanisms for the development of social partnership;
- the mechanism for assessing the results of education in the conditions of functioning of psychology and pedagogical classes.

The Concept also discloses organisational conditions for the effectiveness of the psychological and pedagogical classes as follows:

- networking with educational and cultural, research organisations and business;
- involvement of the student in various types of pre-vocational teaching activities (organisational, research, project);
- creating opportunities for gaining experience in vocational training in modern types of educational practices – coaching, supervision, moderating, training and realisation of personal educational projects, practice of conducting educational school events and educational activities, etc.;
- holding profile educational shifts of psychological and pedagogical orientation;
- organisation of pedagogical and psychological contests, competitions and academic contests of pedagogical orientation;
- organisation of online events that form communities of students interested in teaching.

The specialised pre-vocational stage of pedagogical classes, which takes place in 10th–11th grades, is characterised by the development of students' identity, with the formation of requests for a professional plan. The Concept proposes that the profile direction should be realised both in class and in extracurricular activities. Curriculum, under the Concept, alongside profile subjects (Russian language, Literature, Foreign Language, Biology, History), it is recommended to include such specialised courses as History of Psychology and Pedagogics, Modern Educational Technologies for Students, Psychology of Education, Psychology of Communication, SMART–Education, Pedagogical Design, Psychology of Creativity, Pedagogical Design, Psychology of Digital Learning, Basics of Self-Discovery and Self-Development. The evaluation of students takes place in the form of the project (individual or collaborative).

It is essential to comply with the teaching mode when implementing pre-vocational teacher training at school. A 5-day school week is optimal, during which educational programmes of curriculum subjects and programmes of special courses are mastered. Practitioners emphasise Saturdays as Project Days, filled

with various types of project activities, workshops, and training for academic competitions, events and pre-vocational exams.

The procedural (technological) aspect of pre-vocational training under the Concept of pedagogical classes in the Russian Federation is represented by work-related technologies, which include problem-based learning, cases, workshops, games, social modelling, etc.; educational events, such as organisation of an event by secondary school students for elementary school students. Project and research activities in the field of pedagogy and psychology, as well as in the interdisciplinary sphere, communicative practices, such as discussion clubs, speech workshops, participation in webinars, etc.

Teaching in psychology and pedagogical classes should form special skills for students that involve the use of strategies and methods of effective communication; empathy and social observation; self-control, reflection; skills of support, persuasion, and influence; skills of self-presentation, and presentation of one's own product; skills of social design; skills of working in a group and with a group and others.

Students in pedagogical classes have an organic combination of theoretical and practical training. Theory should be mastered by students with regard to practice so that they can understand the essence of teaching methods or forms of work with children. As part of theoretical training, students are familiarised with the basics of pedagogy and psychology, with the main documents regulating psychological and pedagogical activities, with methods of teaching and education, including on digital platforms, with best practices in the field of pedagogy, psychology, medicine and information technology (VR content).

Practical training for students in psychology pedagogical classes includes the following:

- realisation of vocational practice (teaching younger children, development and implementation of mini-lessons, educational activities, etc.);
- conducting research, design and implementation of socially-oriented projects;
- development and implementation of individually-oriented educational programs, including development on the Internet and on digital platforms;
- creation of a data bank of educational resources (including digital resources);
- volunteering as a teacher's assistant and educator for younger students;
- participation in the creative activities of school self-governance;
- active involvement in the social life of the younger generation of the country associated with the subject and psychological and pedagogical fields;
- mastering the experience of interaction in the digital environment;
- reflection of the current educational process (conscious participation in mastering academic disciplines, aspiration to improve their own and their classmates' learning activities).

Use of the Information and Communication Technologies (ICT); blended learning format; application of special normative and legal support such as agreements, regulations (standard/example), templates of curricula and programs,

etc. is particularly relevant in the case of the network form of implementation of pedagogical classes.

The results of passing the programme of psychological and pedagogical classes are reflected in various forms of control, involving the development and implementation of projects, performance of tasks, self-checking/mutual checking of tasks, etc.; in various forms and content of final certification such as project defence, solving professional problems, portfolio, etc.; in participation in the academic competitions in pedagogy and psychology (all–Russian/university), which allow to get additional advantages when entering a pedagogical university and (or) programmes in pedagogy.

Models of Specialised Psycho-Pedagogical Classes: Russian Regions' Case Studies

Prior to considering the models of teacher (psychological and teaching) education school programmes in Russia, the statistical data of monitoring studies by regions of the Russian Federation shall be presented (see Table 3.1).

The analysis conducted by Chernyavskaia et al. on the representation of cases of pre-vocational teacher education in the Russian educational context shows that 'the predominant modes of its implementation are teacher (psychological and teaching) education school programmes' (Chernyavskaia et al., 2021, p. 5). They can be found in more than half of schools in the Russian Federation. Generally, pre-vocational teacher education is provided on the basis of a universal curriculum combined with the curriculum of specialised educational extracurricular

Table 3.1. The Case of Organisation of Pre-Vocational Teacher Education in Russian Regions (Chernyavskaia et al., 2021, p. 6).

Federal District	Educational Organisations Total	Educational Organisations With Teacher Education School Programmes
Central	6,326	57
Southern	6,547	273
Northwestern	3,959	6
Far Eastern	1,071	40
Siberian	9,521	79
Ural	1,775	5
Volga	10,142	91
North Caucasian	4,832	36
Crimea	564	4

activities, which ensures the mastering of both the basic and additional educational programme.

Pedagogical classes are mainly organised on the basis of 10th–11th grades of general education school, the total duration of education of which is 11 years. Each teacher education school programme is authentic, and developed in collaboration between the school and the university. The students of those programmes sometimes attend the university and are involved in a variety of education formats, such as training, educational workshops, seminars, open lectures, etc. Students may also present the results of their own activities, and give speeches at scientific conferences, highlighting the results of their own research.

Pre-vocational teacher education is particularly relevant when a teacher (psychological and teaching) education school programme or team within it is organised at schools that are part of the university structure. The Kazan Federal University, whose structure includes Kazan Lyceums for intelligently gifted children, as well as the University School in Yelabuga, is a prime case of this. The university is engaged in targeted work on vocational guidance of students of its own lyceums, alongside the organisation of pedagogical classes on the sites of secondary schools of the city.

Setting training for independent educational work, and formation of professional and educational identity as a priority task, the management of the Lobachevsky Lyceum of Kazan Federal University together with the faculty of the departments of the Institute of Psychology and Education of KFU initiated the project named Teacher Education School Programmes, which has been launched on 1 September 2020. The project involves students of 10th and 11th grades of the Lyceum, who have passed a preliminary interview and expressed their priorities for professional and educational development. Recruitment to the pedagogical group is carried out annually. The content of the training is filled with teaching methods of different subjects (mathematics, foreign language, etc.), different pedagogical situations are analysed, and the search for optimal ways to improve the effectiveness of the educational process. Also included in the course are trainings of oratory, leadership, pedagogical interaction, on the development of the creative potential of the individual. A special role in the course is played by practise in winter and summer camp, where students can practise their skills in social and educational activities, working with gifted junior students who come to the camp on vacation, preparing for various academic competitions and contests of subjects.

The next type is network pedagogical classes in Russia (Chernyavskaia et al., 2021). They are organised in 38% of schools providing pre-vocational teacher education. For this purpose, half of the named schools use an additional educational programme, and a third of schools combine it with the basic educational programme.

Network paradigm is a promising direction of cooperation in educational practice and is distinguished by the following characteristics – horizontal management, self-organising network, bottom-up management; absence of traditional notions of organisation, the priority of community, community as a potential, the force of the development of network subjects. The nodes of the network are not

programmes or educational institutions, but authentic models of education, author's schools, etc.; the basis of the network is the subjects' contribution to solving a certain social problem; openness of the system, rapid spread of innovations within the network; research, academic network helps to uncover patterns, design forms and mechanisms of mass school development (Cirul'nikov, 2018).

The network implies decentralisation in process management. In the space of the network, there is distributed responsibility for keeping the common sense of joint activity. Each of the subjects of the educational network masters a wider specialisation and develops the ability to solve so-called cross-border problems.

The nature of the network model of psychological and pedagogical classes contributes to the improvement of the mechanism of interaction between the subjects of the educational process. An advanced culture of intersubjective relations, dominating in the network, testifies to the ability of subjects to coordinate the goals and objectives of their professional activities with each other. The network model will not exist even for a day without this culture of respect and consideration of each other's interests and needs.

In the national educational context, the pedagogical preuniversity is presented. It is developed as a model of pre-vocational teacher education (on the basis of Derzhavin Tambov State University (Gushchina et al., 2019)). The activity of the pedagogical preuniversity provides for the organization of lecture courses, psychological and pedagogical training, master classes, and career guidance consultations. New formats of pedagogical career guidance work are also being tested – pedagogical paratroops and quests, pedagogical workshops, psychological and pedagogical vocational tests, and decades of pedagogical literacy. Training is organised using a distance (remote) learning format.

However, it is necessary to ensure that such a format of work makes the condition of practice-oriented learning necessary. To ensure this condition the system of mentoring is developed, and realised by students–future teachers, students are involved in the educational space of the higher pedagogical school. It is necessary for the realisation of career guidance activity. The school–university partnership is also developed, and the motivation of students to master the pedagogical profession is increased.

The third type of psychological and pedagogical classes functions as an open or online class. According to Chernyavskaia et al. (2021), 14% of schools in the Russian Federation have it. Such practices are most widespread in the Siberian (34%) and Volga (25%) federal districts. Analysing this type of psychological and pedagogical classes, G.N. Skudareva notes:

> This organizational format is the most applicable for schools that are spatially dispersed and require the involvement of external resources (personnel, scientific and methodological) support. Nevertheless, its distinctive features allow simultaneously involving an unlimited number of subjects of pre-vocational

> teacher education in shared pre-vocational specialised pedagogical activities. (Skudareva, 2023, p. 197)

An example of such a format with active use of digital resources and platforms is the network educational project named Open Teacher Education School Programmes (Tomsk, Tomsk region) (Bajborodova, Gruzdev, et al., 2021; Chernyavskaia et al., 2021). Students of specialised 10th–11th grades are involved therein. Moreover, students of the propaedeutic 8th–9th grades are involved in this project as part of extracurricular activities of schools and additional educational activities of supplementary education organisations. The total number of students involved amounts to 800.

Open pedagogical classes are practised under the patronage and with the academic and methodological support of Tomsk State Pedagogical University. Its role is defined by the organisational and methodological support through the establishment and use of an online platform. Professional, intellectual and creative contests for students are also included in the training. The key idea of the project is a purposeful transition from mass education to a continuous individual educational programme for students, focused on the formation of their socially responsible identity. It concludes with an assessment that includes three components – a motivational letter (essay), tests and a case study (work with a text on education). The essay is an instrument of creative self-reflection. It identifies the level of interest in the teaching profession, the development of pre-vocational teaching skills and the identification of promising opportunities for advanced students. The online teacher education school programme is also successfully working in Volgograd. The educational programme is developed and implemented by the Volgograd State Socio-Pedagogical University there. It is mastered by students of primary school, high school and college students.

Teacher (psychological and teaching) education school programmes of an integrated structure, based on a single school, is a format of pre-vocational teacher education. This type of class is quite rare. A school that plans to open a teacher education school programme can enrol 10th graders from other general education organisations who have expressed a desire to master the pre-vocational teacher education programme, in addition to their current ones.

The pre-vocational teacher education cluster acquires increasingly more distinct organisations. It includes

- teacher (psychological and teaching) education school programmes on the basis of secondary general education schools;
- institutions of further education focused on pre-vocational guidance for high school students,
- institutions of higher and secondary vocational education,
- facilities for conducting pre-vocational teaching practices by high school students (pre-school educational organisations, health camps, educational centres).

The pedagogical pre-vocational teacher education cluster is a striking example of the social partnership of the abovementioned entities. The pedagogical cluster of the Sverdlovsk Oblast has been running since 2016 and comprises schools, creative centres for children and teacher training vocational schools in Yekaterinburg and the Sverdlovsk Oblast, with the Ural State Pedagogical University as the academic supervisor (Medvedeva, 2020). The key entities of the abovementioned cluster are teacher (psychological and teaching) education school programs, which enrol students in 9th–11th grades. The primary goals of pre-vocational specialised teaching activity are determined by the set of pre-vocational-pedagogical, social and individual goals. These include Introduction to Professional Pedagogical Activity (122 hours); Leadership Strategies (52 hours); Intercultural Communication (70 hours).

The social goals are as follows: (1) development of socially significant qualifications; (2) consolidation of educationally gifted youth in the city and the region. The individual goals are as follows: (1) development of high moral, business and organisational qualities in students; (2) motivation to professional teaching activity (Leskonog & Shalamova, 2022). The efficiency of the project is confirmed by the increase in the number of pedagogical classes graduates–university applicants from 25% in 2019 to 55% in 2020. The importance and prospectivity of the Teacher Education School Programmes project in the Sverdlovsk Oblast as a component of the system of continuous teacher education is self-evident (Medvedeva, 2020).

The national perspective is characterised by the presence of an innovative format of the interregional experimental cluster of pre-vocational teacher education, which was launched in the Russian Federation in 2022 (Skudareva, 2023).

The entities involved are as follows:

- State Humanitarian Technological University of Orekhovo-Zuyevo, Moscow Region (the main university of the cluster) and schools of the Moscow region;
- Glazov State Pedagogical Institute named after V.G. Korolenko and schools of Udmurtia;
- Udmurt State University and Garmonia-School No. 97 in Izhevsk;
- Kabardino-Balkarian State University named after H.M. Berbekov and republican schools;
- Bashkir State Pedagogical University named after M. Akmulla and schools of Bashkortostan;
- Kazan (Volga Region) Federal University (Institute of Psychology and Education) and schools of the Republic of Tatarstan;
- Vyatka State University and schools of Kirov city.

The mission of the interregional cluster of pre-vocational education is the consolidation of scientific, educational methodological, personnel, regulatory, legal, material and technical resources for the formation of motivation of school graduates to master professional teacher education and the profession of teacher.

To achieve this mission, the strategic objectives of the interregional cluster are defined as follows:

- Development of the content of pre-vocational education for teachers and its approbation in teacher (psychological and teaching) education school programs;
- Scientific analysis and review of the content of educational and methodological guidance;
- Development of diagnostic tools to identify educational, psychological and social characteristics of high school students studying in pedagogical classes.
- Formulation of scientifically-based proposals for improving the educational and methodological support of the educational process in pedagogical classes;
- Development of the model of pre-vocational education in teacher education taking into account regional peculiarities;
- Organisation of the work of the interregional cluster of pre-vocational teacher education with the consolidation of representatives of the scientific community, organisers and performers in the regions.
- Development of the Concept of activity of pedagogical and pedagogical classes.
- Development of scientific and methodological recommendations for the support of the activities of pedagogical and psychological pedagogical classes.
- Training of management teams, teachers and supervisors of pedagogical classes (organisation of training in the system of professional development, creation of resource centres, internship sites).
- Formulation of forecast proposals for the functioning of the interregional cluster of pre-vocational education. (Skudareva, 2023)

Scientific supervision is provided by the Russian Academy of Education.

Additional education programmes of specialised psychological and pedagogical classes are implemented in more than half (52%) of educational organisations, both within one organisation (60%) and several (40%).

For instance, the model of additional general educational programmes of social and pedagogical specialisation has been tested in Yaroslavl as part of the main general education programme, integrating programmes of extracurricular activities, elective courses and project-based learning for high school students. All students master this polycomponent programme according to an individual curriculum. A significant addition to the above is the emphasis on determining the results of mastering this programme by high school students with the crediting of their educational results (Bajborodova & Belkina, 2021).

Other facilities (centres, courses, pedagogical schools) (31%) *of pre-vocational teacher education*, to a greater extent, are observed on the basis of pedagogical universities or pedagogical colleges.

The results of the analysis of forms of organisation of pedagogical (psychological and pedagogical) classes showed their diversity illustrated by quantitative

indicators (Organizaciya deyatel'nosti psihologo-pedagogicheskih klassov: ucheb. -metod. posobie, 2021).

Thus, pedagogical (psychological–pedagogical classes) are the main and most common form of organisation of pre-vocational teacher education in Russia. There is their species diversity traditional pedagogical (psychological and pedagogical) class, network pedagogical (psychological and pedagogical) class, open (online) pedagogical (psychological and pedagogical) class, pedagogical (psychological and pedagogical) class of integrated composition, pedagogical cluster, interregional cluster. Target orientations of pre-vocational pedagogical education are mainly aimed at correct professional orientation and formation of motivation of high school students to master the pedagogical profession. The most common is propaedeutic developmental specialised pedagogical classes, pre-vocational pedagogical practices and career guidance activities. Digital technologies are key in organising the activities of pedagogical classes. They ensure the innovativeness of the content of training and help to implement the principle of openness of its organisation. A necessary condition for the implementation of such programmes is the social partnership of its participants.

Considering a large number of models of psychological and pedagogical classes, the problem of integral, systematic organisation of pre-vocational education remains unsolved. Therefore, it is necessary to substantiate the choice of class formats, as well as the relevant content. It is necessary to provide regulatory support for the activities of psychological and pedagogical classes in the Russian Federation, methodological foundations and development of a range of tools for the selection of students oriented to the choice of profession of teacher. It is essential to diagnose the progression of students to the profession of teacher at the pre-vocational stage, the predicted educational achievements and results of students, and the use of appropriate educational technologies.

Conclusion

Pre-vocational teacher education in Russia is one of the most significant elements of continuous teacher education. It represents a considerable tool for vocational guidance of students, and their identity in activities. Teacher education helps to set value orientations to the profession of a teacher, contributes to the formation of a special worldview of high school students and accustoms them to communicating in the school, pre-vocational environment.

Pedagogical classes in modern Russia are considered to be a means of attracting more non-accidental students to teacher education institutions and universities, as a means of a conscious choice of studying in a teacher education institution.

The main goals of pre-vocational education are determined at the educational, quasi-professional activity stage in the teacher (psychological and teaching) education school programmes of a school by focusing on the acquisition of practical educational skills by students through reflection and the accumulation of initial experience. The conceptualisation of the activities of pedagogical classes within the framework of pre-vocational teacher education, reflected in the targeted policy of the government, educational authorities at different levels, and

regulatory and legal documentation, has allowed to accurately designate the content and procedural components of education, as well as the system of evaluation of the results of educational activities.

A variety of types of teacher (psychological and teaching) education school programmes distinguishes the Russian context, which is predetermined by the specifics of interaction between the participants of education, the capabilities of educational organisations, the involvement of school administration bodies in the process of social partnership, the regional and university demands, etc.

It is necessary to develop various forms of school–university cooperation and strengthen the institution of school–university partnership in Russia, thus providing new opportunities for pre-vocational teacher education in the country and contributing to the improvement of the system of teacher education at the national level.

References

Afanasyev, V. V., Ivanova, O. A., Rezakov, R. G., Afanasyev, I. V., & Kunitsyna, S. M. (2019). Organizational environment for the schoolchildrens' professional identities: Establishing, modelling, efficiency expectations and long-term development. *International Journal of Civil Engineering & Technology*, *10*(2), 1612–1637.

Bajborodova, L. V., Bataeva, M. D., Belkina, V. V., Belousova, N. S., Belyaeva, O. A., Bushkova, Y. A., Vinogradova, M. Y., Gruzdev, M. V., Erofeeva, Z. G., ZHuk, A. I., Ivanova, Y. A., Kazakova, O. P., Koval'chuk, T. A., Kuznecova, I. V., Kuz'mishina, T. L., Loginova, A. N., Luneva, E. S., Lyba, A. A., Minyurova, S. A., . . . YAkovleva, Y. V. (2021). *Doprofessional'naya pedagogicheskaya podgotovka shkol'nikov: Opyt i tradicii*. [Pre-vocational teacher education of students: Experiences and traditions]. RIO JaGPU.

Bajborodova, L. V., & Belkina, V. V. (2021a). *Koncepciya i modeli doprofessional'noj pedagogicheskoj podgotovki shkol'nikov* [*Concept and models of pre-vocational teacher training for students*]. RIO JaGPU.

Bajborodova, L. V., Gruzdev, M. V., Hodyrev, A. M., CHernyavskaya, A. P., Golovina, I. V., & Paputkova, G. A. (2021). Perspektivy doprofessional'noj pedagogicheskoj podgotovki shkol'nikov v sovremennyh usloviyah. [Prospects of pre-vocational teacher education of students under modern conditions]. *Nauchnyj rezul'tat. Pedagogika i psihologiya obrazovaniya*, *7*(3), 3–15.

Bajborodova, L. V., Serebrennikov, L., & Tamarskaya, N. (2021). Formy doprofessional'noj pedagogicheskoj podgotovki shkol'nikov [Forms of pre-vocational teacher education for students]. *Izvestiya Baltijskoj gosudarstvennoj akademii rybopromyslovogo flota: psihologo-pedagogicheskie nauki*, *58*(4), 23–28.

Basjuk, V. S., Kazakova, E. I., & Brel', E. J. (2023). *Osnovy pedagogiki i psihologii. 10–11 klassy* [*Pedagogy and psychology fundamentals. 10th–11th grades*]. Prosveshhenie.

Beauchamp, C. (2015). Reflection in teacher education: Issues emerging from a review of current literature. *Reflective Practice*, *16*(1), 123–141.

Belkina, V. V. (2019). Realizaciya individual'nyh obrazovatel'nyh proektov v processe doprofessional'noj pedagogicheskoj podgotovki starsheklassnikov [Realization of individual educational projects in the process of pre-vocational teacher education of high school students]. *Pedagogika i psihologiya sovremennogo obrazovaniya: teoriya i praktika*, *1*, 89–94.

Brouwer, N., Joling, E., & Kaper, W. (2022). Effect of a person-centred, tailor-made, teaching practice-oriented training programme on continuous professional development of STEM lecturers. *Teaching and Teacher Education*, *119*, 103848. https://doi.org/10.1016/j.tate.2022.103848

Chance, P., & Furlong, E. (2022). *Learning and behavior: Active learning edition* (pp. 464). Cengage Learning.

Chernyavskaia, A. P., Bajborodova, L. V., Golovina, I. V., Gruzdev, M. V., Paputkova, G. A., & Hodyrev, A. M. (2021). Doprofessional'naya pedagogicheskaya podgotovka shkol'nikov v sovremennyh usloviyah [Pre-vocational pedagogical training of schoolchildren in modern conditions]. *Izvestiya Volgogradskogo gosudarstvennogo pedagogicheskogo universiteta*, *6*(159), 4–10.

Cirul'nikov, A. M. (2018). Obrazovatel'naya set' kak sociokul'turnaya tekhnologiya [Educational network as a sociocultural technology]. *Pedagogika*, (11), 16–22.

Darling-Hammond, L. (1990). Teacher professionalism: Why and how. In *Schools as collaborative cultures: Creating the future now* (Vol. 3, pp. 25–50). Falmer Press.

Dilafruz, A. (2023). The practice-oriented approach to learning in Europe. *Conferencea*, 79–80.

Gafurov, I. R., Valeeva, R. A., Kalimullin, A. M., & Sahieva, R. G. (2018). Opyt aprobacii praktiko-orientirovannoj programmy magistratury po napravleniyu podgotovki «Obrazovanie i pedagogicheskie nauki» (Pedagog osnovnogo obshchego obrazovaniya) [Approbation of practice-oriented Master's degree program in Education and Pedagogical Sciences (Teacher of basic general education). *Psihologicheskaya nauka i obrazovanie*, *23*(1), 25–37.

Gumerova, M. M. (2001). *Stimulirovanie motivacii tvorcheskogo samorazvitiya uchashchihsya v usloviyah uchebno-tvorcheskoj deyatel'nosti* [*Stimulation of motivation of students' creative self-development in terms of educational and creative activity*]. Published Dissertation, Ilya Ulyanov State Pedagogical University. https://www.dissercat.com/content/stimulirovanie-motivatsii-tvorcheskogo-samorazvitiya-uchashchikhsya-v-usloviyakh-uchebno-tvo

Gushchina, T. I., Makarova, L. N., & Kurin, A. Y. U. (2019). Model' nepreryvnogo pedagogicheskogo obrazovaniya v regione: Opyt realizacii i perspektivy razvitiya [The model of continuous pedagogical education in the region: Experience of realization and prospects of development]. *Vestnik Tambovskogo universiteta. Seriya: Gumanitarnye nauki*, *24*(181), 7–16.

Körkkö, M., Kyrö-Ämmälä, O., & Turunen, T. (2016). Professional development through reflection in teacher education. *Teaching and Teacher Education*, *55*, 198–206. https://doi.org/10.1016/j.tate.2016.01.014

Leskonog, N. Yu., & Shalamova, L. F. (2022). Formirovanie professional'noj motivacii u uchashhihsja pedagogicheskih klassov kak osnova podgotovki pedagogicheskih kadrov v regionah Rossijskoj Federacii [Formation of professional motivation in students of pedagogical classes as a basis for teacher training in the regions of the Russian Federation]. *Pedagogika i psihologiya obrazovaniya*, (1), 86–102.

Luzhetskaya, E. T., & Paschenko, G. V. (2021). K voprosu formirovaniya gotovnosti k social'no-pedagogicheskoj deyatel'nosti u studentov kolledzha–budushchih vospitatelej [To the question of formation of preparedness to socio-pedagogical activity of college students – Future teachers]. *Pedagogika i psihologija sovremennogo detstva: vyzovy, riski, prognozy*, *24*, 443–448.

Macdonald, D. (1999). Teacher attrition: A review of literature. *Teaching and Teacher Education*, *15*(8), 835–848. https://doi.org/10.1016/S0742-051X(99)00031-1

Medvedeva, O. V. (2020). Pedagogicheskoe obrazovanie v shkole: gorodskoj setevoj proekt «pedagogicheskie klassy» [Pedagogical education at school: "pedagogical classes", urban network project]. *Strategicheskie orientiry sovremennogo obrazovaniya*, 108–110.

Monat, J. P., & Gannon, T. F. (2015). What is systems thinking? A review of selected literature plus recommendations. *American Journal of Systems Science*, *4*(1), 11–26. https://doi.org/10.5923/j.ajss.20150401.02

Nurjanah, I., & Ana, A. (2022). Work readiness of TVET graduates in the context of industry 4.0. In 4th International Conference on Innovation in Engineering and Vocational Education (ICIEVE 2021) (pp. 34–38). https://doi.org/10.2991/assehr.k.220305.008

Organizaciya deyatel'nosti psihologo-pedagogicheskih klassov: ucheb.-metod. posobie [Organization of the activity of psycho-pedagogical classes: Educational-methodical manual]. (2021). *Akademiya Minprosveshcheniya Rossii*, 392.

Skudareva, G. N. (2011). Formirovanie nravstvenno-cennostnyh orientacij u uchashchihsya pedagogicheskogo klassa na etape vybora professii uchitelya [Formation of moral-value orientations in students of pedagogical class at the stage of choosing a teaching profession]. *Duhovno-nravstvennoe vospitanie: teoretiko-metodologicheskie aspekty formirovaniya cennostnyh orientacij lichnosti*, 72–76.

Skudareva, G. N. (2023). *Sistema doprofessional'nogo pedagogicheskogo obrazovaniya v usloviyah social'nogo partnyorstva* [*System of pre-vocational teacher education in a social partnership environment*]. Unpublished doctoral dissertation, Kazan (Volga Region) Federal University. https://shelly.kpfu.ru/e-ksu/docs/DISSERTATION/F1802175920/Doktorskaya_dissertaciya_Skudareva_G.N.pdf

Tolkova, N. M., & Troshina, I. V. (2018). Tendenciya padeniya prestizha pedagogicheskoj professii sredi molodyozhi [Tendency of declining prestige of teaching profession among young people]. *Dostizheniya vuzovskoj nauki*, 132–134.

Wang, M., Callaghan, V., Bernhardt, J., White, K., & Peña-Ríos, A. (2018). Augmented reality in education and training: Pedagogical approaches and illustrative case studies. *Journal of Ambient Intelligence and Humanized Computing*, *9*, 1391–1402.

Wolf, A. (2011). *Review of vocational education*. DfE. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/180504/DFE-00031-2011.pdf

Yakimov, O. G. (2020). Pedagogicheskie klassy kak sociokul'turnyj i social'no-ekonomicheskij fenomen v istoricheskom aspekte [Pedagogical classes as a socio-cultural and socio-economic phenomenon in historical aspect]. *Vestnik Chuvashskogo gosudarstvennogo pedagogicheskogo universiteta im. IYA YAkovleva*, *2*(107), 235–240.

Yusop, S. R. M., Rasul, M. S., Mohamad Yasin, R., Hashim, H. U., & Jalaludin, N. A. (2022). An assessment approaches and learning outcomes in technical and vocational education: A systematic review using PRISMA. *Sustainability*, *14*(9), 5225.

Zhurat, Y., Yanovskyi, A., Ianovska, L., Tsymbal, M., Kozyr, M., & Kokorina, L. (2022). The problem of subject and subjectivity in psychological and pedagogical sciences in the context of training future teachers. *Revista Romaneasca Pentru Educatie Multidimensionala*, *14*(Suppl. 1), 349–369. https://doi.org/10.18662/rrem/14.1Sup1/555

Chapter 4

Secondary Professional Teacher Education in Russia

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Abstract

Secondary professional teacher education (onwards – SPTE) in Russia has gone through many stages, from ups to downs. There have been periods when SPTE was in low demand and associated with poor student success. However, SPTE has been able to meet the socio-economic challenges of the time, take its place in the hierarchy of Russian education and become a competitive and effective system of practice-oriented teacher training.

The chapter is devoted to the subject description of the dynamic process of formation and development of modern SPTE as an educational system. The authors analyse scientific and pedagogical publications and methodological works of Russian scientists and summarise the results on the basis of their analysis. The proposed chapter 'Secondary Professional Pedagogical Education in Russia' will consider the development of the modern system of secondary professional teacher education in Russia. Particular emphasis is placed on the continuity of the theory and practice of teacher training, the peculiarities of a person-centred educational environment and the strong continuity of secondary professional and higher teacher education.

Keywords: Pedagogical education; Russian secondary professional teacher education (SPTE); SPTE core; educational programme; SPTE content; modernisation of education; continuity

Introduction

Secondary professional teacher education is an integral part of the Russian education system, largely determining the quality and prospects of teacher training. The system of secondary professional teacher education traditionally

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trains specialists in pre-school education (pre-school educators), primary school education (primary school teachers), supplementary education (teachers of supplementary education in the field of choreography, creativity, music, art, etc.), special pre-school education (educators of children with developmental disabilities), remedial pedagogy (teachers of remedial and compensatory primary classes) and vocational training (technologists, technicians, designers, etc.).

The demand for secondary professional pedagogical education today is associated with a high public expectation of the quality of practical training, the productivity of professional activity and the personality of a teacher who is able, in addition to solving their professional tasks, to promote the development and embodiment of human potential, to protect students from incompetent influence on them by society.

Restructuring processes associated with the formation of the Russian Federation actualised the issues of standardisation of the education system. In 1997, the Russian Ministry of Education published a decision to introduce state educational standards for vocational education and training, which began to establish key requirements for the content and level of training of graduates in a particular speciality. The standards of secondary vocational education were created in response to the needs of the labour market in the context of ongoing transformations in the country and have been updated since 2002 on the basis of changes related to the classification of specialties. Standardisation of the system of secondary vocational teacher education quite clearly reflects the system of transformations, reflecting changes in the conditions for the implementation of educational programmes in accordance with the changing requirements of society to the graduating teaching staff.

In 2012, the updated law 'On Education in the Russian Federation' came into force. On the basis of this law, a new generation standard came into force in 2014, defining the competency-based approach and the level of autonomy of educational institutions, concerning the volume of compulsory and variable parts, as well as the minimum content and volume of teacher training modules (Federal state educational standards for secondary vocational education, 2014).

The evolution of normative documents reflects system-forming changes in the methodology of professional education, associated with the transition from the model of 'lifelong learning' to the model of 'education through life', from understanding the value and sufficiency of knowledge to recognising it as a practical toolkit for personal development and solving problems of professional growth (Blinov et al., 2014).

Modernisation of the Russian qualifications system offers complementary opportunities to improve the quality of teacher education that meets the clear requirements of educational organisations. The main key functions of secondary professional teacher education are to meet the needs of personal development, to deepen and expand education, to create conditions for intellectual development, cultural and professional satisfaction of the learner's personality. The result of secondary professional teacher education is not only the qualification level of the future teacher but also a deep level of social maturity, culture and motivation for further professional education.

This chapter consists of three sections. The first section 'General characteristics of the current system of secondary vocational teacher education in Russia' gives a general characteristic of the modern system of secondary professional teacher education in Russia and describes modern challenges to it and ways of their solution. The second section 'The content of modern secondary professional teacher education' shows the peculiarities of the content of secondary professional teacher education and the structure of its educational programmes. The third section 'The system of secondary professional teacher education and its modernisation in the context of transformation of the Russian society' reflects the continuity of teacher education in the theory and practice of teacher training and the practice of transformations and reforms of the system of secondary professional teacher education.

General Characteristics of the Current System of Secondary Vocational Teacher Education in Russia

The SPTE system today implements socially oriented programmes that provide individual educational trajectories and reflect the qualification requirements of specific employers, including the education of children with disabilities. This, first of all, determines the uniqueness of the current system of secondary vocational teacher education.

The educational environment of the system of secondary vocational teacher education allows to provide high-quality training of future specialists. SPTE organisations provide an opportunity for graduates of general education schools to receive professional education, who, upon graduation from college, return to the teaching profession in a new capacity. In order to meet the needs for teaching staff, educational organisations of secondary professional teacher education build cooperation with higher education institutions, general education organisations and supplementary education organisations.

In accordance with the Order of the Ministry of Education of the Russian Federation No. 336 of 17 May 2022 'On Approval of the List of Professions and Specialties of Secondary Vocational Education', the List of Specialties of Secondary Vocational Education was approved including in the field of Education and Pedagogical Sciences (see Table 4.1).

SPTE in Russia has always been regarded as a system of training mainly specialists in general (preschool and primary) education (pedagogical education in the narrow sense). At the present stage, such types of SPTE as engineering and pedagogical education (IT-teacher, teacher-designer), professional and pedagogical education (music teacher, physical education teacher, teacher-instructor of children's and youth tourism) are also gaining recognition.

The development of the system of secondary professional teacher education in Russian regions is implemented in different institutional forms. Expanding the range of educational programmes, teacher training colleges have been reorganised into professional-pedagogical, multi-disciplinary multifunctional centres. Some teacher training colleges became structural subdivisions by joining universities.

Table 4.1. Qualification List of Specialties of Secondary Professional Pedagogical Education (SPPE) in Russia.

Names of Enlarged Groups of Professions	**Specialist Qualification**
Pre-school education	Educator of preschool children Educator of preschool children in a multilingual educational environment
Teaching in primary grades	Elementary school teacher Elementary school teacher with the right to teach in a native language from among the languages of the peoples of the Russian Federation
Pedagogy of additional education	Teacher of additional education (with indication of the field of activity): Teacher of choreography Teacher of fine arts Teacher of labour education (technology teacher)
Special preschool education	Educator of children with developmental disabilities Teacher of children with developmental disabilities Educator of preschool children with developmental disabilities and with preserved development and additional training (with indication of additional training programme)
Correctional pedagogy in primary education	Corrective elementary school teacher Teacher of compensatory primary classes Teacher of primary grades and primary grades of compensatory and correctional-developmental education with additional training (specifying the programme of additional training)
Vocational training (by branches)	Master of industrial training (technician, technologist, designer, fashion designer, designer, etc.)

Source: Ministry of Education of the Russian Federation (2022a).

However, being an integral part of regional education systems, professional educational organisations implementing pedagogical specialties are oriented, first of all, to the need for training of personnel in the region (see Fig. 4.1).

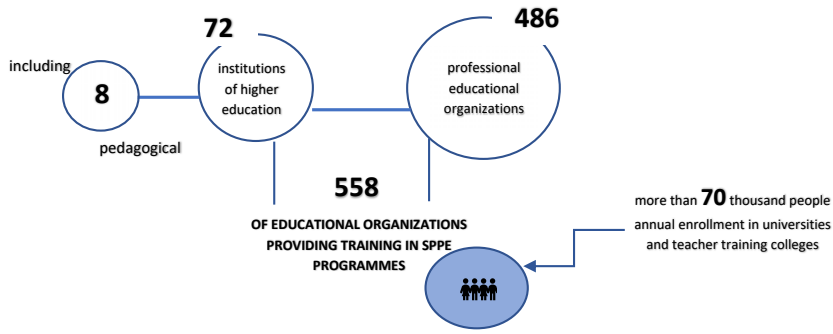

Fig. 4.1. General Information About the System of Secondary Professional Teacher Education. *Source:* Kalinin (2022).

In the Russian system of teacher training with secondary professional education, there are models of development of secondary professional teacher education:

- model of integration with educational organisations of higher education – the college as a structural subdivision of a higher education institution, or within a faculty/institute of a higher education institution;
- model of network interaction of the teacher training college with educational organisations (social partners) – with general education organisations, universities, organisations of additional education;
- model of a multidisciplinary educational centre – the college implements specialties of different enlarged groups, including 'Education and pedagogical sciences', professional training programmes, has a regional resource centre for pedagogical specialties.

The analysis of the state of the system of secondary professional teacher education has determined the quantitative and qualitative composition of professional educational organisations implementing educational programmes in the 'Education and Pedagogical Sciences' group of specialities. Teacher training with secondary professional education is carried out in 558 educational organisations, including branches of higher education organisations. This includes 312 multidisciplinary colleges, 154 teacher training colleges, 20 colleges of culture and sport and 72 higher education institutions located in 84 constituent entities of the Russian Federation in all federal districts (see Fig. 4.2).

Educational organisations enrol students in SPTE programmes on the basis of complete secondary (11 school grades) and basic general (9 school grades) education. The period of training depends on the basis of which education a student

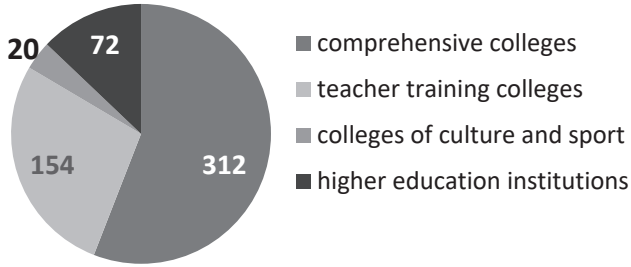

Fig. 4.2. Composition of Educational Institutions Implementing Educational Programmes of Secondary Teacher Education in the Enlarged Group of Specialties 'Education and Pedagogical Sciences'. *Source:* Kalinin (2022).

has entered and which form of education (full-time or part-time) he/she has chosen.

Professional educational organisations conduct educational activities in the specialties: 'Pre-school education', 'Teaching in primary grades', 'Pedagogy of additional education', 'Special pre-school education', 'Correctional pedagogy in primary education', 'Vocational training (by branches)', 'Physical education', 'Adaptive physical education', 'Music education', 'Fine arts and drawing'.

Traditionally, the most demanded specialities are Preschool Education and Teaching in Primary Grades (see Fig. 4.3, Table 4.2).

At present, there is a question of development of the system of secondary professional teacher education in the third decade of the XXI century.

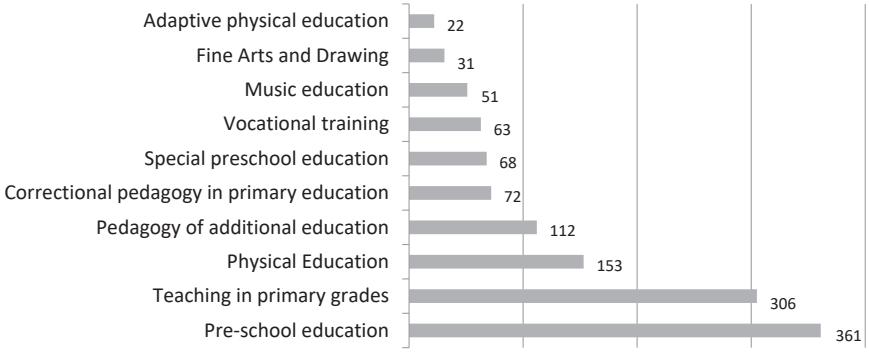

Fig. 4.3. Distribution of Secondary Teacher Education Programmes by the Enlarged Group of Specialties 'Education and Pedagogical Sciences'. *Source:* Komarnitskaya (2020).

Table 4.2. Indicative Number of Students in Pedagogical Specialities of Secondary Vocational Education in Educational Organisations in Russia.

Name of specialty	**Number of students, thousand people**
Pre-school education	78302
Teaching in primary grades	70600
Pedagogy of additional education	10475
Special preschool education	8777
Correctional pedagogy in primary education	9532
Vocational training (by branches)	5330
Physical Education	47665
Music education	4551
Adaptive physical education	4123
Fine Arts and Drawing	4557

about 50,000 students annually
Number of graduates in pedagogical specialties of secondary vocational education

The share of employment of young specialists is, on average,
75%

Source: Kalinin (2020).

The variability of this system depends on the prospects of economic development of society and, accordingly, the need for the necessary personnel. These include IT-technologies, robotics, additive technologies and many other things that will make it possible to train middle-level teaching staff for educational organisations, as the need for the teaching staff of 'tomorrow' is today as high as ever (Blinov & Kurteeva, 2020).

The peculiarities of the system of Russian secondary professional pedagogical education are as follows: early professional orientation of graduates, the opportunity to continue their studies in higher education and to obtain higher education on an accelerated programme, focus on the student's obtaining a profession in demand within the optimal time frame, high degree of practical orientation, the possibility of organising dual education in the system of vocational education and training, accessibility of education for different population categories, the possibility for a student to obtain several specialties in the future (see Fig. 4.4).

The system of teacher training in secondary vocational education in Russia is characterised by its variability, individuality and high level of orientation towards practical skills and knowledge. The implementation of SPTE educational programmes ensures the transfer of knowledge and experience to the future teacher, providing assistance and support in professional activities, formation and development of students' professional skills. Monitoring of the quality of education in this case makes it possible to ensure equal quality of training of such pedagogical staff.

The modern system of secondary professional pedagogical education provides the process of training highly qualified teachers of a new generation, capable of continuous self-development and rapid transformation in changing conditions, allows to ensure their targeted employment and competitiveness, as well as to

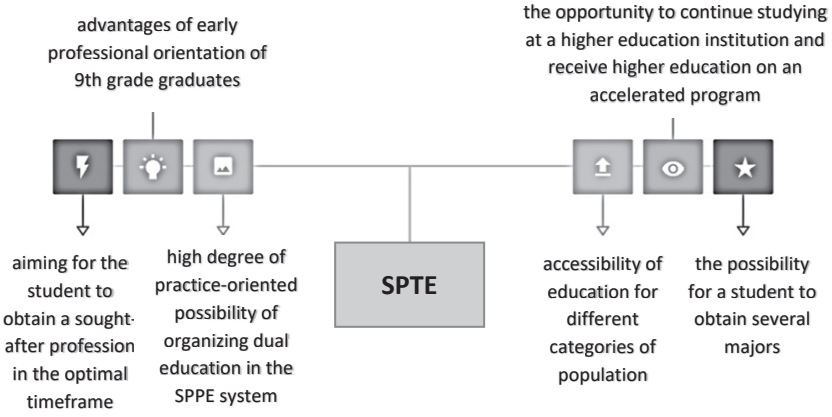

Fig. 4.4. Features of the System of Secondary Professional Teacher Education in Russia. *Source:* Kalinin (2020).

meet the employer's demand for teaching staff aimed at building a successful career as a teacher.

At the same time, the content and educational technologies, infrastructure and related management technologies of teacher education require constant change in response to the changes taking place in the system of general education, the purpose of which is, first of all, to provide educational organisations with teaching staff in advance. There are, of course, also problems hindering the achievement of the necessary quality of teacher training: this is the difference in approaches to the mechanisms for assessing the quality of education and training tools; this is the mismatch between the pace of updating the content, technologies and infrastructure of teacher training and the rapid development of the content and technologies of general education. In addition, until recently there was a deficit of scientific developments in the field of education for the advanced formation of the content of teacher training adequate to modern realities, which entails incomplete compliance of the results of professional training of young teachers with the real requirements adequate to the demands of the sphere of education. The lack of measures on early comprehensive career guidance of schoolchildren to pedagogical professions, insufficient involvement of practicing teachers in the process of training of pedagogical staff determined the key imbalance of the necessary quality and existing conditions of teacher training in the system of secondary vocational education, as well as contributed to the deficit of pedagogical staff in organisations of general secondary education.

In addition, it is important to take into account the social functions of secondary professional teacher education. It is no secret that vocational education has always been the so-called window of opportunity for young people who

consciously link their further and gradual development with the profession of teacher. In addition, many teacher training colleges (colleges) are indispensable infrastructural components of remote (rural) districts and territories.

The forecast of development until 2030 in the Russian Federation, among other things, defines the vector directions of transformation of the system of secondary professional teacher education (SPTE) as a priority driver of social development. Teacher training at the level of secondary professional teacher education today, firstly, is aimed at preparing a future teacher for employment in a particular organisation, and secondly, it is focused on new educational technologies that allow for the implementation of enhanced training of teachers of different profiles. Variative forms and methods of training, assessment of its effectiveness, updated requirements for a modern teacher, as well as conditions for the organisation of the educational process are determined in line with today's attitudes and trends. That is why the obvious scenario for updating the system of secondary professional teacher education at the present stage of society evolution is the development of new formats of individualisation and differentiation of professional training (Sazonov, 2020). And the key (target) task becomes the provision of future teachers with professional competences that allow him to change in a timely manner adequately to changes in the sphere of educational technologies, as well as external forced conditions and requirements of society (Blinov & Sergeyev, 2020).

The implementation of forced requirements is also complicated by some barriers related to the socio-age characteristics of students in SPTE institutions and the deficit of qualifications required to implement educational programmes in the modern information environment, which makes adjustments to the learning process and determines the requirements for its transformation to prepare future teachers with modern competencies (Bakanova & Kapustina, 2022).

The analysis of scientific, pedagogical, socio-economic and methodological literature allows us to state that in order to improve the quality of the educational process, it is necessary to qualify SPTE teaching staff according to modern requirements. Practice-oriented training becomes a priority and allows introducing theoretical knowledge and practical skills into the educational process.

Leading political figures pay much attention to the well-being of Russian citizens, which is achieved by investing in human capital, and the sphere of education, where this capital is formed, is considered especially carefully. Therefore, the problems of education are a serious intellectual challenge not only as social obligations to people but also as drivers of socio-economic growth of the country. This problem is especially relevant for the system of secondary professional teacher education, since quality teacher education has always been and is the key to the development of society. Today in Russia there are about 900 thousand students studying in more than 500 structural units of secondary vocational teacher education and more than 30,000 educators working in them. These rather impressive indicators allow us to say that there is a high interest of students in the sphere of secondary vocational teacher education. Every year we can see positive dynamics in the number of applicants to these educational organisations. In the coming years, a trend towards quantitative levelling of

secondary vocational education and higher education systems is expected in the future (Dudyrev et al., 2017; Glushko et al., 2020).

Over the past few years, budgetary admission to professional educational organisations for training under secondary vocational education teacher training programmes has been increasing: in 2016 – 48.4 thousand people; in 2020 – 56.1 thousand people (Government of the Russian Federation, 2022).

According to survey conducted by SuperJob, a job search and employee recruitment service showed a lower number of university entrants (43%) in 2021–2022 compared to last year (48%) and the year before (47%), respectively. Although in 2010 the majority of school leavers (80%) planned to study at universities (Research Centre of the portal Superjob.ru, 2021) (see Fig. 4.5).

At the same time, it should also be noted that students studying in teacher training colleges differ from students of teacher training colleges. This difference is primarily due to lower academic performance. The PISA International Programme for the Assessment of Educational Achievement of Students shows lower scores for students of teacher training colleges, for example, in mathematical literacy (478 points) compared to high school students (526 points), which corresponds to a calculated gap of almost 2 years of study.

However, the key motivations on which SPTE applicants are based today are not so much the insufficient level of school education and the need for additional rehearsal classes and high pass marks in higher education, but rather the opportunity to receive quality practice-oriented education, high professional status dispositions of a teacher today and the provision of varied educational trajectories for learning a profession.

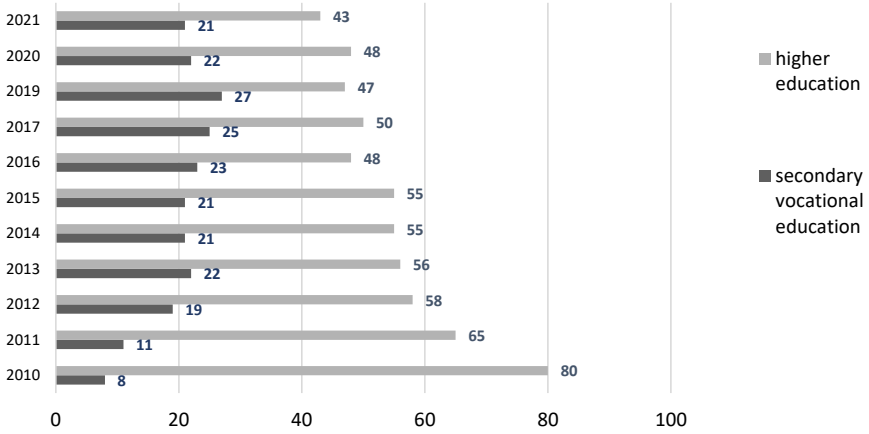

Fig. 4.5. Dynamics of Choice of Education Level by Russian School Leavers. *Source:* Research Centre of the Portal Superjob.ru (2021).

The Content of Modern Secondary Professional Teacher Education

Features of the content of secondary professional teacher education. Integration and interaction of theory and practice in the system of secondary professional teacher education on the basis of the competence approach increases the effectiveness of mastering the theoretical foundations of the specifics of the teaching profession and favours the acquisition of modern competences, which contributes to a more effective educational process. The synergetic effect of interaction between theory and practice is the strongest side of secondary professional teacher education. Educational institutions (various educational organisations) are directly involved in the process of implementing educational programmes, as they are a stakeholder both in the results of training and in the content and organisation of training. Upon graduation from college, graduate teachers can be immediately employed in schools and other organisations, reducing the teacher's adaptation time to the conditions of pedagogical activity (Bicheva et al., 2019).

When designing educational programmes of secondary professional pedagogical education and planning educational outcomes of future teachers, the requirements of the federal state educational standards (further FSES) SPTE to general and professional competencies and the requirements of the professional standard 'Teacher' (educator, teacher) to labour actions, knowledge and skills (pedagogical activity in the field of preschool, primary general, basic general, secondary general education) are taken into account. The analysis of educational results in terms of mastering competences shows the comparability of professional skills and competences formed at the level of secondary vocational and higher education in a future teacher.

The very idea of integration of secondary professional and higher pedagogical education emerged quite a long time ago and is implemented at the organisational and content levels (Repina, 2020). The main approaches to the development of educational programmes are based on the continuity of education levels and the theory of competencies in the training of secondary specialists. The theoretical foundations of the key essential characteristics of secondary professional teacher education, the so-called core, as a structural element of secondary professional education (SPE) development in relation to the vertical and horizontal integration of SPE and higher teacher education are laid in the works of Russian researchers Blinov, Satdykov, Sergeev and Rodichev (Blinov et al., 2021).

For the design of conjugate curricula at the stage of secondary vocational education and, further, higher education, the continuity of educational programmes for training future teachers in the aspect of general (by SPTE) and universal (by HE) competences is of particular importance. At the same time, emphasis is placed on their holistic and strong correlation in the conditions of modern society, when, in addition to professional competences, flexible skills (soft skills) and skills of work with information and communication technologies become essential.

The practice-oriented nature of secondary professional teacher education programmes determines their specificity. Sufficient volume and variety of

pedagogical practices, as well as theoretical training based on real applied tasks allow to realise effective learning activities of students to master the required competences and experience of practical work in the profession. Practical training implies the use of technologies that form key competences of professional pedagogical activity, including case technology; critical thinking development technologies; technologies of level differentiation; technologies of distance, active, inverted, modular, problem-based learning; information, game, project technologies; educational startups; discussions, etc. (Kazakova, 2022).

A future teacher studying at a teacher training college (SPTE educational organisation) learns telecommunication technologies, how to create teacher websites and how to make presentations using various techniques (infographics, mind maps, motion graphics, duotone, etc.). It gets a wide practice of application and orientation in the modern digital environment, which offers variable training and development programmes, various services and platforms for school education. The system of secondary professional pedagogical education uses quite actively immersive technologies related to the pedagogical guidance of students' activities in an artificially created educational environment. Today they are associated not only with the use of virtual reality (VR) and augmented reality (AR) but also with the immersion of students in real or conditional action, including the creation of the 'presence effect' due to the complex of sensations in the artificially created environment.

In addition, the characteristics of preparation of a future teacher to work in the profession also include variable aspects of educational activity. The main objectives of education in teacher training college determine the professionally oriented vector of the education process, which establishes a persistent interest and sustainable motivation for the teaching profession. Future teachers are trained to organise effective educational work with their students, based on regional, national and universal values and semantic attributes (descriptors) while mastering the required general and professional competencies, reflecting the key requirements to the qualities of the personality of a future teacher.

In 2022, the training of future teachers is based on the document 'SPTE Core' (Ministry of Education of the Russian Federation, 2022c). The core of the SPTE is a document that reveals the approaches and describes the main mechanisms for implementing the competency-based model of specialist training in secondary professional teacher education programmes, explains the specifics of practical training and the features of educational work with children. The implementation of the SPTE Core allows synchronising the educational programmes of secondary professional and higher teacher education, defining joint requirements for teacher training on the basis of common agreed approaches. The key idea of the document implementation is the synchronisation of educational programmes of secondary professional and higher pedagogical education, consolidated requirements for the training of teaching staff in secondary professional and higher pedagogical education programmes on the basis of unified coordinated attitudes and approaches, taking into account the peculiarities of the formation, development and improvement of the championship movement 'Young Professionals' (Kazakova et al., 2022).

Educational standards of secondary professional pedagogical education determine the mandatory requirements for the implementation of educational programmes of training of specialists of secondary level in the specialties 'Pre-school education', 'Teaching in primary classes', 'Pedagogy of additional education', 'Special pre-school education', 'Correctional pedagogy in primary education' and 'Vocational training (by branches)'. Education can be carried out by full-time, part-time (evening) and correspondence forms of education with the use of e-learning and distance learning technologies, as well as through a network form of education. The period of study under the SPTE educational programme depends on the form of education and the base of education: on the basis of secondary general education (11 grades of secondary general education school) the period of study is 2 years 11 months, on the basis of basic general education (9 grades of secondary general education school) the period of study is 3 years 10 months. On part-time and correspondence forms of education the term of study shall be increased by no more than 1 year regardless of the applied educational technologies.

The structure of the educational programme of secondary professional teacher education. The volume of a teacher education programme is determined by the system of credit units, where 1 credit unit corresponds to 36 academic hours. The structure of the SPTE education programme includes several blocks: a block of disciplines (or modules) of at least 2052 hours, a block of practices of at least 900 hours and a block of State Final Attestation of at least 216 hours. The total volume of the educational programme of teacher training on the basis of secondary general education is 4,464 hours. On the basis of basic general education, the educational programme of teacher training includes secondary general education and totals 5,940 hours.

The block of disciplines (modules) of the educational programme of teacher training necessarily includes social and humanitarian, general professional and professional cycles of disciplines. Within the framework of the teacher training programme in the system of secondary professional pedagogical education, there is a compulsory part and a variable part formed by participants of educational relations.

The compulsory part, the volume of which, excluding the time for the state final certification, is no more than 70% of the total amount of teacher training time and is aimed at the formation of general and professional competences.

A graduate of SPTE programmes should possess general competences, among which are:

- choosing ways of solving professional tasks in different contexts;
- using modern means and technologies of information processing;
- planning their professional and personal development, including in business and financial spheres;
- effective co-operation in a team and in a collective;
- oral and written communication taking into account social and cultural context;

- displaying a civic and patriotic position on the basis of traditional universal values, interethnic and interreligious values, and standards of anti-corruption behaviour;
- preserving the environment on the basis of knowledge of climate change and careful production;
- effective actions in emergency situations;
- preservation and promotion of health in professional activities;
- use of professional documentation in state and foreign languages.

When developing the educational programme of SPTE teacher training, the main emphasis is placed on mastering the key activities, such as pedagogical activities in designing, implementing and analysing the process of education and extracurricular activities of students, educational activities, including classroom management. In SPTE training, much attention is also paid to the teaching of disciplines of art and aesthetic cycle and specifics of teaching foreign languages and informatics.

Professional competences of an SPTE teacher are formed in accordance with the types of activities and include:

- designing and organising the learning process and extracurricular activities in accordance with the requirements of state educational standards and taking into account sanitary norms;
- control, correction and analysis of the learning process and extracurricular activities, analytical evaluation of its results;
- development and selection of necessary teaching and methodological materials taking into account the efficiency and specificity of the educational process;
- systematisation and evaluation of existing pedagogical experience and technologies of teaching and extracurricular activities;
- design, implementation and analysis of educational programmes based on the value-based content of education and its results,
- evaluation of pedagogical experience and technologies in terms of their effectiveness in the education of students;
- building trajectories of professional growth on the basis of self-analysis of their professional activities, extracurricular activities of students and educational activities;
- using a variety of approaches to teaching, including for the effective inclusion in the educational process of students with special educational needs (talented students and students with disabilities);
- pedagogical education and support of parents of students and interaction with them;
- design, organisation and control of the process of learning of disciplines of art and aesthetic cycle, foreign language and informatics by students.

The variable part with the volume of not less than 30% of the total volume of the educational programme develops general and professional competences

necessary to meet the needs of the regional labour market, taking into account the requirements of the digital economy, by introducing additional activities. These activities are carried out outside educational programmes and standards using innovative personality-oriented methods and trainings, teleconferences and online seminars on the basis of network information learning technologies. The training is primarily aimed at the development of the most motivated and talented students, in-depth training of disciplines, planning and preparation of professional development activities.

The content of the social and humanitarian cycle of the compulsory part of the SPTE teacher training curriculum includes such disciplines as 'History of Russia', 'Foreign Language in Professional Activity', 'Life Safety', 'Physical Education', 'Basics of Financial Literacy'.

The mastering of disciplines of the general professional cycle provides the study of such subjects as 'Basics of pedagogy', 'Basics of psychology', 'Basics of teaching persons with special educational needs', 'Russian language and culture of professional communication of a teacher', 'Age anatomy, physiology and hygiene', 'Project and research activity in the professional sphere', 'Informatics and information and communication technologies in professional activity', 'Mathematics in the professional activity of a teacher', 'Age psychology', 'Pedagogical psychology', 'Psychology of communication', 'Legal support of professional activity', 'Fundamentals of pedagogical skills', 'Fundamentals of special pedagogy and psychology'.

The professional cycle of the compulsory part of the curriculum, the volume of which cannot be less than five credits, is formed in accordance with the main and additional activities of an SPTE teacher and includes interdisciplinary courses and various practices. When mastering professional disciplines and modules, students are aimed at developing cognitive projects within the framework of the disciplines studied, the content of which they later use in the course (or qualification) work and pedagogical practice. As an example, let us outline some topics of such projects: 'We are all different', 'Magic water', 'Journey to the world of numbers', 'Pets and me', 'On the pages of the Red Book', 'Excursion to the world of plants', 'My favourite pets' and others.

Discussion and debate technologies are effective in training SPTE specialists, allowing them to discuss professional problems, voice their professional position, exchange opinions and analyse them in classes (both theoretical and practical). At the same time, logical and critical thinking skills, skills of organising one's thoughts and rhetoric skills are formed. By mastering the technology of debate, the future specialist can build relationships with his/her students, their parents and colleagues.

Practical training of SPTE teachers is realised in academic and industrial practice, for which specific periods and terms are defined. Practical training can be dispersed, alternating with classes throughout the entire period of study. In the process of practical activities, students gain initial and dynamic experience of interaction with children and their parents. General and professional competences in the practical training of future SPTE teachers are effectively developed using the technology of educational web-quest. It organises independent activity of

students to master programme or additional educational material with the use of problem tasks with elements of role-playing game. In this case, the development of such competences as the use of information technologies to solve professional problems, organisation of interaction in teamwork, mastering the skill of public speaking, identification of rational options for solving pedagogical situations takes place.

Educational work occupies a significant segment in the process of training a specialist of secondary professional pedagogical education. The specificity of the educational process in the SPTE system is reflected in the pronounced professional orientation of the process of education of future teachers. In the process of educational work, a stable interest in the pedagogical profession is formed, preparation for effective organisation of educational work with children on the basis of an inclusive understanding of national and universal values is carried out, a positive attitude to professional self-determination, personal self-development of the student and his/her motives for professional activity are manifested.

The training is completed by the state final certification, which is held in the form of a demonstration exam and defence of the final qualification work (Ministry of Education of the Russian Federation, 2022b).

Topics of graduate qualification works reflect the formation of the necessary competencies, the specifics of the profile of training of a specialist of secondary level and include research in the spheres of pedagogy, psychology, methods of teaching disciplines, for example, in the subject area of Primary education, 'Research activity of junior schoolchildren as a means of formation of cognitive universal learning actions', 'Formation of modelling action in junior schoolchildren when teaching problem solving', 'Development of spatial thinking of junior schoolchildren in the process of studying geometric concepts and representations', 'Development of emotional responsiveness of junior schoolchildren through music perception', 'Formation of ecological culture of junior schoolchildren in project activities', 'Use of online games in Russian language lessons in the formation of spelling skills of primary school students' and others.

Assessment of students' achievements of personal results occurs during the control (evaluation) procedures planned in the educational programme. Criteria that allow for this assessment include: the dynamics of the organisation of learning activities and responsibility for its results (theoretical training), manifestation of professional work activity (practical training), participation in research and project work (professional skills competitions, competitions in the profession, quizzes, subject weeks). In addition, readiness for professional activity upon completion of training in the SPTE system reflects: demonstration of interest in the future profession, adequate assessment of one's own progress, observance of ethical norms of communication, constructive interaction in the team and absence of social conflicts, business communication skills and social image, formed civic position, participation in the volunteer movement, legal activity, manifestation of environmental, economic and financial culture.

Modernisation of Secondary Professional Teacher Education in the Context of Transformation of Russian Society

Continuity of pedagogical education in the theory and practice of teacher training. In the last decade in Russia, various measures have been initiated to adequately transform pedagogical education, the necessity of which is caused by new tasks of interaction with the educational sphere workers related to the training of pedagogical personnel. One of the significant principles on which the system of interaction with future teachers is based is the principle of continuity at different stages of their professional development and education. In addition, researchers of the problems of professional training of teachers define the system of continuous pedagogical education as an important and necessary condition for ensuring the high quality of trained teaching staff.

Continuity in pedagogical science is a pedagogical phenomenon that conveys and reflects the sequence and connection between different stages of education, development and upbringing of personality with the preservation of various components of the educational process and consolidation of its foundations in the transition from one stage of education to another. Continuity in education provides a systematic interaction of the main target objectives, relevant content and appropriate methods of teaching and learning to create a unified and holistic, 'through' educational process at related stages of formation and development of the learner. The main pedagogical condition for the formation and formation of the cognitive sphere of the learner's personality is, first of all, the continuity of knowledge and competences. This condition in teacher education is provided by an ecological educational environment that meets the principles of person-centred education, including the integrity and expediency of the educational process, as well as adaptability to the interests and capabilities of each student. From the point of view of a person-centred educational environment, the process of professional development of a teacher, being unified for all, should be, at the same time, variable, i.e. adapted to the individuality of each student – future teacher in the whole vertical of his/her professional development.

The change in professional requirements for pedagogical activity is significantly influenced by the active updating of the federal normative and legal framework that regulates educational policy in the Russian Federation. The order for the training of teaching staff at various levels is reflected in public reports, decrees and legislative acts, resolutions and ordinances, in the development of federal educational and professional standards for teachers, as well as in the formation of general principles of state personnel policy. Russia has a fairly extensive experience of teacher training in the systems of secondary vocational education and higher education. In the system of secondary vocational education, there is a network of teacher training colleges and technical schools, which produce teaching staff for the field of education in accordance with the federal state educational standards (FSES) of secondary vocational education. Higher education institutions of the Russian Federation also have quite a large and rich experience of training teaching staff in accordance with the FSES of higher education (further HE).

Attention is drawn to the actual process of building models of continuity of educational programmes of teacher education at the level of secondary professional and higher education, taking into account the tasks of updating the content and technologies of education, the requirements of federal state educational standards and professional standards.

Teachers of educational organisations are motivated today to open new modern profiles and education of pedagogical professions of the future. It is also possible to note the existing variant models of ensuring at the present stage the necessary and sufficient quality of professional training for the education system. The continuity of teacher training is associated with the development of 'through' curricula in accordance with the order of the labour market of the regions for actual directions and profiles of teacher training. The existing traditional models of teacher education are actively beginning to be oriented towards on the existing deficits of teachers' competences in the implementation of the state educational policy, to create and update existing mechanisms to ensure the continuity of teachers' competences development in the system of secondary professional and higher teacher education, on the implementation of the formulated requirements of professional standards of a teacher, ensuring mobility, personalisation and continuity of training for future new pedagogical professions and qualifications, for example, tutor, mediator, etc.

To date, the system of secondary vocational teacher education has developed and tested modular programmes for the formation of professional competencies corresponding to new work functions and new tasks of teachers, which allow graduates of teacher training colleges and technical schools to study on shortened programmes in higher education, and professional communities have been created that carry out their activities aimed at solving professional pedagogical problems.

The comparative analysis of the standards of secondary professional and higher education, professional standards and priorities of modern education development allowed to substantiate the necessity of ensuring the continuity of teacher training.

The separation of so-called academic and applied educational outcomes is widely represented in European science and practice (Smirnov, 2013). The expediency of such an approach in the continuity of SPTE and HE systems is obvious. At the SPTE level, a part of professional competences is formed, which provides the necessary qualification and education of a teacher for employment and further activity in the profession. This may limit a teacher's opportunities in the set of functions to be realised in his/her activity and in the definition of his/her job responsibilities, which, as a consequence, will not be able to ensure the necessary and sufficient quality of education for his/her students. There are also limitations in methodological activity or methodological function of a teacher in terms of reflecting the essence of various types of practices in the work of a teacher and pedagogical activity in general, which are defined by professional standards (teacher, educator, teacher of additional education, teacher-psychologist, etc.) (Zolotareva, 2020).

The continuity of teacher education ensures professional development of a teacher throughout his/her professional activity in accordance with new tasks and

changes in the education system. In order to ensure continuity in the training and professional development of pedagogical staff, we have developed a competence model of a teacher, identified the necessary groups of competences (universal, general professional, professional, special), implemented a set of assessment procedures aimed at identifying professional deficits of teachers using a system of test tasks for the possession of these competences (Anisimova & Zolotareva, 2016).

The sets of modular programmes by profiles of education staff training were developed, the possibility of implementation of which allowed flexible integration into the content of education according to 'through' curricula aimed at the formation of the whole set of competencies embedded in the competence model of a graduate.

Graduates of teacher training colleges study at HEIs under special programmes, which may be associated with the creation of special organisational structures. In particular, it is a question of the functioning of educational and pedagogical complexes, which include specialised colleges and universities. Such complexes make it possible to systematically implement the tasks of continuous teacher education, emphasising not only the specificity of levels but also the continuity of stages.

In the process of implementing the continuity of training and professional development programmes, educational organisations of secondary vocational education (further SVE) and HE enter into a variety of relationships with each other. These are involvement of qualified specialists of the university in the implementation of pedagogical programmes SVE, and the use of the university's material base for conducting classes with students of secondary vocational education, and the organisation of joint laboratories (resource centres) to conduct research on educational development issues, and the creation of professional associations, when pedagogical structures of secondary vocational education become branches of pedagogical universities, and the opening of internship sites for the professional development of teaching staff. In this case, the coordination and continuity of educational programmes for teacher training are transparently ensured, and opportunities arise for targeted admission of graduates of teacher training colleges to higher education institutions in the agreed areas and programmes of teacher training.

Thus, continuity in the training and professional development of teaching staff is an important condition for ensuring the quality of professional teacher education. Different options of interaction between SVE and higher education institutions in order to ensure the continuity of professional activities of future teachers allow to increase the capacity of educational organisations and improve the efficiency of the staff potential of the education system.

Practice of transformations and reforms of the system of secondary professional teacher education. The main ideas of transformation of the system of secondary professional teacher education are shown in scientific, methodological and scientific works of Russian scientists who analyse the current state of the environment in which the formation of a teacher's personality takes place (Repina, 2020; Vorobyeva, 2022). In their studies, they draw attention to the need to involve

students in the learning process, including complex relationships and interactions of the learning environment and learning activities, which allows forming flexible thinking and the ability to learn and further work in co-operation in future teachers.

Transformations and reforms in the aspect of modernisation of secondary professional teacher education were determined by the development of a new technological mode associated with the development of digitalisation processes; the increasing complexity of the context of professional pedagogical activity; updating the requirements for a teacher, reflected in the Federal State Educational Standards and the professional standard 'Teacher'; diversity and multiculturalism of educational environments; the need for scientifically grounded methods of digital didactics and the demand of modern students for the renewal of pedagogical design.

The content of studies by Russian authors allows us to speak about the growing interest of the state and society in the system of secondary professional teacher education. The ongoing changes determine the requests for new competencies of future teachers and formulate new challenges to the education system, focusing on digitalisation of education, practice-oriented learning, development of competitive personal and professional competencies (Travkin & Rudakov, 2017). For example, educational organisations (schools, kindergartens, institutions of additional education) pay attention to 'soft skills', among which stand out 'key competences', '21st century skills', including self-organisation and communication skills, skills of mastery of modern educational technologies and tools, digital skills. Especially valuable in a future teacher are the skills of project activity and the ability of teamwork. It can be noted that the requirements to the skills of teachers of secondary vocational education and higher education are not very different from each other. Therefore, rapid changes in teaching technologies make new compulsory demands on the practice-orientation in the system of secondary professional teacher education, which, first of all, forms students' ability to learn ('teach to learn'), teaches students to act 'ahead of the curve', inculcates the necessary general and professional competences, it allows students to adapt to modern conditions of professional activity in the most easy and mobile way.

The beginning of the 21st century is characterised as a time of strategic transformations and reforms in teacher education. The development and modernisation of SPTE determines the further development of future teachers' independence and required professional competencies, the increase of their active participation in the transformation and efficiency of the regional labour market, as well as the growth of the prestige of the teaching profession. The second decade of the XXI century was the beginning of the period of global digitalisation of the education sphere. Teachers' colleges as full participants actively joined the process of development (design) of digital educational resources and preparation of future teachers for professional activity in a modern school, realising modern digital competences by expanding digital content in teaching.

Reform and modernisation of teacher education actively unfolded against the background of depoliticisation and regionalisation of education management, which ceased to have a politicised aspect and became regulated by legislation. The strategic

objectives of the reform of teacher education substantially reflected the achievements of modern pedagogical science, the views of the teaching community, social and digital transformations in the country (Egorshin, 2000). The development of updated approaches to teacher education was carried out within the framework of general transformations in secondary vocational and higher education in Russia, primarily in the content aspects of philosophical, methodological and theoretical teacher training, fundamentalisation and practice-orientation of its content, integrity and logic of educational programmes, orientation to universal human values, as well as personal and professional development of future teachers.

The basis for reforms of secondary professional teacher education in the aspect of rethinking the subject training of students was chosen as a personality-oriented concept. The main difference from the previous paradigm of teacher education was the concept of orientation to the personal needs of the learner in the priority direction of his/her development. The key direction of reforming teacher education was the development of the foundations and formation of the teacher's model based on his/her personal, cognitive and activity characteristics as a specialist for a developing school.

The main directions of modernisation of secondary vocational teacher education are related to the diversification of SPTE programmes allowing variability, flexibility, adaptability of educational programmes and prompt adjustment to the needs of employers. This updates SPTE standards in the direction of variable opportunities to choose practice-oriented professional modules, to ensure the personalisation of education and the implementation of individual educational routes in the combination of training and professional activities.

Strengthening the practical orientation of learning at the SPTE stage helps students to use modern pedagogical and digital technologies to actualise concepts related to their practical training, immerse themselves in the environment of their future professional activity, get acquainted with best practices, teaching and learning technologies (learning dialogue, critical thinking, problem-based learning, blended learning, online learning, 'flipped classroom', gamification, project technology, case technology, game technology), as well as artificial intelligence, online visualisation tools, various services and tools for testing and assessment.

Improving the content and methods of teacher training in the SPTE system is carried out through the adjustment of the content of educational programmes, taking into account the updating of general education standards, the development of material and technical base and the emergence of new technical capabilities and learning tools. Digitalisation of education and explication of digital competences of a teacher is based on the development of digital infrastructure, development and implementation of digital content and digital management of the educational process.

Reforming and modernising the system of secondary vocational teacher education and improving the quality of teacher training is facilitated by the integration of SPTE into the digital educational space under the priority project 'Modern Digital Educational Environment in the Russian Federation', which focuses future teachers on the use and implementation of interactive teaching

methods in the development of the necessary cognitive and non-cognitive competencies.

The development of digital educational environment of SPTE organisations is aimed at expanding the boundaries of education (quantitative, temporal, spatial), personalisation of educational trajectories, use of technological and technical innovations, formation, updating and expansion of digital competences of participants of educational relations. The processes of digitalisation that are launched in the educational organisations of secondary vocational education are developing simultaneously in several directions:

- formation of a set of digital educational environments (e.g. Edu-quantum – for future school teachers, Game-quantum for – future pre-school teachers, Art-quantum – for music and fine arts teachers, Sport-quantum – for teachers of physical education, sports and teachers-instructors of children's and youth tourism);
- modernisation of the educational process towards the development of distance forms of learning, interactive pedagogical interaction, project and team forms of educational work, including the use of telecommunications and information technologies;
- improving the educational environment, taking into account the characteristics of the student of the digital society, which poses a challenge to the teaching staff of colleges to quickly adapt the content, forms and technologies of education.

Monitoring shows that the majority of students, having various access to the Internet and information resources (60%), do not use this opportunity sufficiently to improve their professional knowledge. Only a small part of SPTE students (8%) use the Internet for educational purposes. Another problem is related to receiving feedback from learners through created online courses, which requires them to invest some time and intellectual resources (Konovalov & Chebykina, 2021).

The formation of a unified educational space of the SPTE system in the framework of network interaction is achieved by ensuring systemic qualitative changes in the training of pedagogical staff related to ensuring continuity and accessibility of quality education, designing the professional perspective of students on the basis of their early profiling, and developing the professional skills of future teachers, creation of a unified digital platform of electronic educational resources with the possibility of using modern equipment in the educational process.

Secondary professional pedagogical education today gives the future specialist an opportunity to work in a specific teaching profession of his/her choice (*traditional trajectory*), to continue studying at a higher education institution on a special shortened programme within the framework of so-called conjugate curricula (*multi-stage trajectory*) and, finally, change the profile of training in accordance with the state educational standards defining the requirements for the training of a pedagogical specialist (*multilevel trajectory*).

Young teachers are being retained in the workplace through the creation of scientific and methodological support for specialists, related to the diagnosis of professional deficits in education, a programme of methodological support and mentoring of young teachers, operational consulting and stimulation of their pedagogical activity (grants, benefits).

The course for the implementation of positive reforms, fixed in the state and regional strategies of education modernisation, improvement of infrastructure and creation of necessary conditions adequate to the present day for the implementation of SPTE educational programmes, allows to outline the emerging trends in the field of secondary professional teacher education, reflected in the formation of an effective system of training of qualified teaching staff.

Conclusion

The system of secondary professional pedagogical education in Russia is aimed at preparing students for professional activity with a key emphasis on practice-oriented knowledge and skills, on their mastery of modern pedagogical technologies and skills that allow to design a personalised educational route of the student, to present the presentation of educational products and ideas of students, to provide them with access to the bank of educational digital resources.

The diversity of models developed and implemented by secondary vocational education institutions as part of teacher training programmes is based on the following network interaction with higher professional education organisations, academic mobility of students, the introduction of academic advisors–tutors who help students to build individual educational programmes in the process of mastering the teaching profession, the possibility for third- and fourth-year students studying in non-pedagogical areas of training to 'enter' pedagogical bachelor's programmes, on the variability of Master's programmes, which implies its diverse orientation in the spheres of training of managerial personnel in education and research activities in education.

The 'Core' of secondary professional teacher education reveals the approaches and describes the main mechanisms of implementation of the competence-based model of specialist training, explains the specifics of practical training and the features of educational work with children. The implementation of the 'SPTE Core' synchronises the educational programmes of secondary professional and higher teacher education, defines joint requirements for teacher training on the basis of common agreed approaches. Synchronisation, which is the key idea of the document's implementation, consolidated requirements for the training of pedagogical staff in secondary professional and higher teacher education programmes.

The processes of modernisation of teacher education require the future teacher to be ready to master the federal state educational standards and master the professional competences laid down in the professional standard. The system of teacher training is subject to the requirements of compliance with the tasks defined by federal programme and regulatory documents. The main directions of strategic development of secondary professional teacher education are as follows:

- Creation of a mechanism for adjusting the list of professions and specialities of secondary vocational education included in the group of specialities 'Education and Pedagogical Sciences' based on the potential of the level of teacher education and the needs of educational organisations for specialists with appropriate qualifications.
- Development and implementation of models of continuous teacher education that provide for variability of educational routes and 'entry' into the teaching profession, including secondary professional and additional professional teacher education.
- Development of the next generation standards for SVE and HE that clearly reflect the principles of continuity and level, variability, unity of approaches to the results of training and education of the future teacher.
- Development and testing of effective models of identification, selection and support of pedagogically gifted students, including opportunities for networking and distance forms of work with children and youth.
- Creation of a unified all-Russian digital educational space of teacher education.
- Strengthening of the material and technical base of pedagogical professional educational organisations, introduction of infrastructural solutions that correspond to the digital stage of society development and allow training of pedagogical staff at the level of world standards.

The strategic objectives of the system of secondary vocational teacher education development are solved in the conditions of state support for the development of infrastructure of SPTE educational organisations, introduction of project management methods and training of project teams of heads of secondary vocational teacher education organisations on their development and the use of advanced pedagogical experience of Russian colleges and universities.

References

Anisimova, N. P., & Zolotareva, A. V. (2016). Podkhody i printsipy formirovaniya kompetentsiy pedagoga, neobkhodimykh dlya raboty s talantlivymi det'mi i molodezh'yu [Approaches and principles of formation of teacher competencies necessary for working with talented children and youth]. *Sibirskiy pedagogicheskiy zhurnal*, *6*, 41–46. https://cyberleninka.ru/article/n/podhody-i-printsipy-formirovaniya-kompetentsiy-pedagoga-neobhodimyh-dlya-raboty-s-talantlivymi-detmi-i-molodezhyu/viewer. Accessed on November 16, 2023.

Bakanova, I. G., & Kapustina, L. V. (2022). Vyzovy sovremennoy sisteme srednego professional'nogo obrazovaniya i puti ikh resheniya [Challenges of the modern system of secondary vocational education and ways of their solution]. *Nauchno-metodicheskiy elektronnyy zhurnal «Kontsept»*, *4*, 50–64. https://doi.org/10.24412/2304-120X-2022-11023

Bicheva, I. B., Khizhnaya, A. V., Emelina, A. V., & Chelnokov, A. S. (2019). Organizatsiya metodicheskoy deyatel'nosti s pedagogami kolledzha: tendentsii i perspektivy razvitiya [Organisation of methodical activity with college teachers: Trends and prospects of development]. *Mir nauki. Pedagogika i psikhologiya*, *6*(7). https://mir-nauki.com/PDF/07PDMN619.pdf. Accessed on November 16, 2023.

Blinov, V. I., Batrova, O. F., Yesenina, E. Y., & Faktorovich, A. A. (2014). Kontseptsiya federal'nykh gosudarstvennykh obrazovatel'nykh standartov srednego professional'nogo obrazovaniya chetvertogo pokoleniya [Concept of federal state educational standards of secondary vocational education of the fourth generation]. *Sovremennyye problemy nauki i obrazovaniya*, *5*. https://science-education.ru/ru/article/view?id=15137. Accessed on September 15, 2023.

Blinov, V. I., & Kurteeva, L. N. (2020). Razvitiye srednego professional'nogo obrazovaniya v sovremennoy Rossii [Development of secondary vocational education in modern Russia]. *Tekhnik transporta: obrazovaniye i praktika*, *1*(4), 269–277. https://doi.org/10.46684/2687-1033.2020.4.269-277

Blinov, V. I., Satdykov, A. I., Sergeev, I. S., & Rodichev, N. F. (2021). Metody razrabotki stsenariyev razvitiya srednego professional'nogo obrazovaniya v sub"yektakh Rossiyskoy Federatsii [Methods of developing scenarios for the development of secondary vocational education in the subjects of the Russian Federation]. *Obrazovaniye i nauka*, *23*(2), 11–38. https://doi.org/10.17853/1994-5639-2021-2-11-38

Blinov, V. I., & Sergeyev, I. S. (2020). Veyer vozmozhnostey: professional'noye obrazovaniye 2020–2035 [Fan of possibilities: Professional education 2020–2035]. *Obrazovatel'naya politika*, *1*(81), 76–86. https://doi.org/10.22394/2078-838X-2020-1-76-86. https://cyberleninka.ru/article/n/veer-vozmozhnostey-professionalnoe-obrazovanie-2020-2035/viewer. Accessed on November 16, 2023.

Dudyrev, F. F., Kozlov, V. A., Kuzevanova, Y. V., & Shabalin, A. I. (2017). Sistema srednego professional'nogo obrazovaniya Rossiyskoy Federatsii v 2005–2030 gg.: vliyaniye demograficheskikh faktorov [The system of secondary vocational education of the Russian Federation in 2005–2030: The influence of demographic factors]. *Fakty obrazovaniya*, *4*(13), 28. https://publications.hse.ru/pubs/share/direct/207811427.pdf. Accessed on November 16, 2023.

Egorshin, A. P. (2000). Perspektivy razvitiya obrazovaniya Rossii v XXI v. [Prospects for the development of education in Russia in the 21st century]. *Universitetskoye upravleniye: praktika i analiz*, (4), 50–64.

Federal state educational standards for secondary vocational education. (2014). https://fgos.ru/fgos/fgos-44-02-02-prepodavanie-v-nachalnyh-klassah-1353. Accessed on December 16, 2023.

Glushko, D. E., Demin, V. M., & Urazov, R. N. (2020). Iz 2020 v 2030: novaya strategiya razvitiya SPO [From 2020 to 2030: A new strategy of SPE development]. *Akkreditatsiya v obrazovanii*, *122*. https://akvobr.ru/new/publications/158. Accessed on November 16, 2023.

Government of the Russian Federation. (2022). *Order No. 1688-r "On the concept of training of pedagogical staff for the education system for the period up to 2030"*. https://www.garant.ru/products/ipo/prime/doc/404830447/. Accessed on November 16, 2023.

Kalinin, A. S. (2020). *Razvitiye srednego pedagogicheskogo obrazovaniya v usloviyakh sistemnykh izmeneniy nepreryvnoy podgotovki pedagogicheskikh kadrov* [*Development of secondary teacher education in the conditions of systemic changes of continuous training of pedagogical staff*]. https://rstatic.oshkole.ru/editor_files/199805/Development%20of%20secondary%20teacher%20education%20in%20the%20conditions%20of%20systemic%20changes%20of%20continuous%20training%20of%20pedagogical%20staff.pdf. Accessed on November 19, 2023.

Kalinin, A. S. (2022). *Podgotovka pedagogov doshkol'nogo i nachal'nogo obrazovaniya v sisteme SPO: unikal'nyye dostizheniya i neizbezhnyye trudnosti* [*Preparation of teachers of preschool and primary education in the system of SPE: Unique achievements and inevitable difficulties*]. https://kalininas.ru/files/?page=1. Accessed on November 24, 2023.

Kazakova, I. S. (Ed.). (2022). *Metodicheskiye rekomendatsii o realizatsii « Yadro srednego professional'nogo pedagogicheskogo obrazovaniya» v obrazovatel'nykh organizatsiyakh, vedushchikh podgotovku pedagogicheskikh kadrov* [*Methodical recommendations on the implementation of the "Core of secondary professional teacher education" in educational organisations that train teaching staff*]. Izdatel'stvo Instituta razvitiya professional'nogo obrazovaniya. https://firpo.ru/netcat_files/25/58/h_7ed049c37a205a71d49f6a4c8700514f. Accessed on November 16, 2023.

Kazakova, I. S., Minyar-Beloruchеva, E. Y., Emelianenko, M. S., Kalinin, A. S., Gerasimenko, S. V., Vorobyeva, N. A., & Nikitina, E. K. (2022). Yadro srednego professional'nogo pedagogicheskogo obrazovaniya v strukture podgotovki pedagogicheskikh kadrov [The core of secondary professional pedagogical education in the structure of teacher training]. *Vestnik Moskovskogo gosudarstvennogo pedagogicheskogo universiteta. Seriya «Sovremennyy kolledzh»*, *2*(2), 6–17. https://doi.org/10.25688/2782-6597.2022.2.2.1

Komarnitskaya, E. A. (2020). *Analiz sushchestvuyushchego sostoyaniya podgotovki pedagogicheskikh kadrov po obrazovatel'nym programmam srednego professional'nogo obrazovaniya po ukrupnennoy gruppe 44.00.00 Obrazovaniye i pedagogicheskiye nauki* [*Analysis of the existing state of training of pedagogical staff on educational programmes of secondary vocational education in the educational group 44.00.00 Education and pedagogical sciences*]. https://spo.vercont.ru/storage/Prezentatsyia_Doklada_Komarnytskaia_E.A.pptx. Accessed on November 19, 2023.

Konovalov, A. A., & Chebykina, I. V. (2021). Professional'no-pedagogicheskiye defitsity pedagogov sistemy SPO: rezul'taty issledovaniya [Professional-pedagogical deficits of teachers of the SPE system: Results of the study]. *Innovatsionnaya nauchnaya sovremennaya akademicheskaya issledovatel'skaya trayektoriya (INSAYT)*, *2*(5), 7–18. https://doi.org/10.17853/2686-8970-2021-2-7-18

Ministry of Education of the Russian Federation. (2022a). *Order No. 336 "On approval of the lists of professions and specialities of secondary vocational education"*. https://www.garant.ru/products/ipo/prime/doc/404748057/. Accessed on November 16, 2023.

Ministry of Education of the Russian Federation. (2022b). *Order No. 742 "On approval of the federal state educational standard of secondary vocational education in the speciality 44.02.02 teaching in primary classes"*. https://obrnadzor.gov.ru/wp-content/uploads/2022/09/44.02.02-prepodavanie-v-nachalnyh-klassah.pdf. Accessed on November 16, 2023.

Ministry of Education of the Russian Federation. (2022c). *Letter dated 28 April 2022 N AB-1197/05 "On sending the documents "Core of secondary professional teacher education""*. https://rulaws.ru/acts/Pismo-Minprosvescheniya-Rossii-ot-28.04.2022-N-AB-1197_05/

Repina, A. V. (2020). Podkhody k obespecheniyu integratsii srednego professional'nogo i vysshego pedagogicheskogo obrazovaniya [Approaches to

ensuring the integration of secondary professional and higher pedagogical education]. *Yaroslavskiy pedagogicheskiy vestnik*, *1*(112), 31–36. https://doi.org/10.20323/1813-145X-2020-1-112-31-36

Research center of the portal Superjob.ru. (2021, March 19). *16% roditeley vypusknikov zayavili, chto COVID-19 izmenil plany na budushcheye ikh detey* [*16% of parents of graduates said that COVID-19 changed the plans for the future of their children*]. https://www.superjob.ru/research/articles/112739/16/. Accessed on November 16, 2023.

Sazonov, B. A. (2020). Organizatsiya obrazovatel'nogo protsessa: vozmozhnosti individualizatsii obucheniya [Organisation of the educational process: Opportunities for individualisation of training]. *Vyssheye obrazovaniye v Rossii*, *29*(6), 35–50. https://doi.org/10.31992/0869-3617-2019-29-6-35-50

Smirnov, V. I. (2013). Zarozhdeniye i razvitiye sistemy pedagogicheskogo obrazovaniya v Rossii (konets XVIII – nachalo XX vv.) [The origin and development of the system of pedagogical education in Russia (late XVIII – early XX centuries)]. *Istoriko-pedagogicheskiy zhurnal*, (1), 59–74.

Travkin, P. V., & Rudakov, V. N. (2017). Prepodavateli i studenty professional'nykh obrazovatel'nykh organizatsiy: trudovyye i obrazovatel'nyye strategii [Teachers and students of professional educational organizations: Labour and educational strategies]. *Informatsionnyy byulleten' «Monitoring ekonomiki obrazovaniya»*, *15*(114), 52. https://memo.hse.ru/data/2017/08/24/1174039027/%D0%98%D0%91_%D0%9C%D0%AD%D0%9E_114_(15_2017).pdf. Accessed on November 16, 2023.

Vorobyeva, N. A. (2022). Transformatsiya podkhodov k podgotovke pedagogov na urovne srednego professional'nogo obrazovaniya [Transformation of approaches to teacher training at the level of secondary vocational education]. *Vestnik Moskovskogo gosudarstvennogo pedagogicheskogo universiteta. Seriya «Sovremennyy kolledzh»*, *1*(1), 9–19. https://ofmoderncollege.mgpu.ru/2022/04/13/transformacziya-podhodov-k-podgotovke-pedagogov-na-urovne-srednego-professionalnogo-obrazovaniya/. Accessed on November 16, 2023.

Zolotareva, A. V. (2020). Obespecheniye nepreryvnosti i preyemstvennosti v podgotovke i professional'nom razvitii pedagogicheskikh kadrov [Ensuring continuity and continuity in the training and professional development of teaching staff]. *Nepreryvnoye obrazovaniye*, *1*(31), 44–49. https://elibrary.ru/item.asp?id=43771424. Accessed on November 16, 2023.

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Chapter 5

Higher Professional Teacher Education

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Abstract

The current structure and content of higher pedagogical education in Russia is a unique interweaving of the traditions of the historical past with post-Soviet and modern reforms of the last 30 years. They reflect the complex process of development of the national teacher training system, each stage of which not only built on the previous one, but also brought something new and more perfect, without denying the previous experience. The current situation in teacher education in Russia is quite diverse and original. Teachers have the opportunity to study in specialised secondary, higher and professionally oriented postgraduate education programmes.

This chapter presents modern higher pedagogical education in Russia as a rather complex and multilevel system. This required a rather in-depth coverage of state policy, structure and content of Federal State Educational Standards. On this basis, the authors planned to achieve a full understanding of the phenomenon of the combination of centralisation and decentralisation of the teacher training process in Russia, where the existing legal and content frameworks nevertheless leave ample opportunities for variability and autonomy in the formation of educational programmes at universities and institutes.

Keywords: Teacher education; federal state educational standards; competency-based model of teacher training; curriculum modules; practices of future teachers

Introduction

The modern world is extremely diverse in its various manifestations – politics, economics, culture and other spheres. Teacher education, which determines the development and progress of any country in the world, is no exception. It is no coincidence that many politicians and scientists, recognising the existence of

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serious problems in this sphere, are now making significant efforts to overcome them. As a result, over the past two or three decades, countries around the world have accumulated unique experience in reforming teacher education and have developed distinctive models of teacher training.

There are examples where quite a serious departure from the past has been demonstrated, where previous models have been preserved, and in some cases, there is an organic combination of traditions and modern trends. The reasons for such transformations lie not only in the changed needs of society and the economy, digitalisation, rapid changes in scientific knowledge and people's behavioural attitudes, but also often in the political sphere in the context of an inevitably changing world order and international orientation. Despite differences in ideological regimes, what is common is the realisation of the extraordinary importance of teacher education for the future of each country, thus stimulating new rounds of reform (Rizvi & Lingard, 2010; Tatto & Menter, 2019; Teacher Education Group, 2016).

In these conditions, the importance of both comparative studies in the field of teacher education and independent works devoted to national systems is being reconsidered. They give an opportunity to see the specifics of each country and its place in the global experience of development of this sphere of professional activity for all mankind. Russia, the successor of the Union of Soviet Socialist Republics, presents quite interesting material for this purpose. This country once not only occupied one-sixth of the land of our planet but also to a greater or lesser extent spread its influence on many countries of the world, located on different continents. This included exporting the Soviet model of teacher education, which was partially or fully implemented in some countries of Eastern Europe, Latin America, Asia and Africa (Menter et al., 2023; Minakov, 2019). Many of them have changed significantly in recent decades, although some have retained the main features of the past system. In this regard, it is important to understand the real situation in the Russian Federation itself, as history is inherently repetitive, especially understanding today the prospect of developing relations within the framework of such interstate associations as BRICS, SCO and others.

Presidential Decree N 343 of 12 May 2023 'On Some Issues of Improving the Higher Education System' marked the beginning of new reforms that are likely to expand over the coming years (President of the Russian Federation, 2023). A pilot project in the 2023–2024 academic year was launched in six higher education institutions, including the leading specialised pedagogical university, Moscow Pedagogical State University. That is why now, in the scientific and pedagogical community of the country the development of new Federal State Educational Standards is unfolding, accompanied by the inevitable discussion – what we can keep in the existing system and what needs to be changed. There is no doubt that this will strengthen the research activity of Russian and foreign scientists, some of whom are still influenced by clichés and erroneous judgements about the Russian educational system. The first of them follow the stereotypes about the excessive ideologisation of Russian education, preserved from the Soviet era. The second exaggerate the importance of historical experience for the current stage, although it is undoubtedly the foundation for the current transformations. Others

overestimate the role of international influence, in particular the Bologna Agreements, and the activities of various non-governmental organisations, thus attempting to undermine the originality of the teacher training system in Russia. The origins of such judgements lie in the political turbulence of the Mikhail Gorbachev and Boris Yeltsin governments, when the country did experience serious external pressure (Bezborodov et al., 2010; Dabrowski, 2016).

The current decade, which has become a period of relative political and economic stability within the country, despite various external international events and processes, has become a time of strengthening of the state policy in education, which has been fully manifested in the pedagogical sphere. Firstly, strict adherence to uniform state standards for all levels of teacher training has been maintained, which is a positive development for the Russian system of higher teacher education, which includes more than 300 public and private universities and institutes across the vast territory of the country. Secondly, the state is increasing financial support for higher education institutions, which has resulted in increased opportunities for free tuition, construction of dormitories, gyms, cultural centres and upgrading of teaching equipment. Thirdly, the role of the educational component in the education of students is increasing. However, this is by no means an example of their administrative involvement in youth political organisations as it was in Soviet times. It is about the revival of spiritual and moral values, citizenship, patriotism, national identity and others. Love for the Motherland, respect for the culture and past of all the numerous peoples of Russia, and support for state policy are once again becoming the key principles of teacher training in the country. This is where the originality of the national system of teacher education lies, as it combines centralisation and different approaches, historical and cultural heritage and global ideas. There are no signs of economic, social and ethnic discrimination in teacher training, and there is still a focus on multilingual training in regions with a multi-ethnic population.

This chapter is devoted to the modern system of higher pedagogical education in the Russian Federation. It begins with the disclosure of legal foundations and principles of higher teacher education in Russia. The chapter focuses on the content of federal state educational standards of higher pedagogical education, the competency-based model of teacher education programmes, the characteristics of higher education competency groups, the modular principle of teacher education curricula design and the structural and content of Bachelor's degree programme modules. It reveals the peculiarities of the organisation of future teachers' practice. The content of this chapter reveals the problems and prospects of development of higher pedagogical education in Russia. The conclusion emphasises that the year 2023 has become the reporting point of a new stage of reforms in the system of higher education in the Russian Federation, associated with the actualisation of higher education levels in the country, the development of a new federal state educational standard for teacher training and other measures aimed at improving the quality of education.

Legal Foundations and Principles of Higher Teacher Education

Higher teacher education in the Russian Federation is a multi-level system. It is regulated by various legal and regulatory documents, the key of which is the Federal Law of the Russian Federation of 29 December 2012 N 273-FL 'On Education in the Russian Federation' (in the current version). The law is a general document for the entire educational system of the country. It defines the mechanisms and principles for citizens to receive accessible, free and quality education; levels of education; rights, duties and social security measures for teachers, students and their parents; the legal status of all educational organisations and individual entrepreneurs carrying out educational activities and a number of other important issues regulating educational activities in the Russian Federation. The legislative act establishes three levels of higher education:

(1) Bachelor's degree;
(2) specialisation and master's degree;
(3) training of personnel of higher qualification (postgraduate studies).

(State Duma of the Russian Federation, 2012)

The Federal Law 'On Education in the Russian Federation' stresses that Federal State Educational Standards, on the basis of which teacher training curricula are developed in higher education institutions, ensure the continuity of basic educational programmes, the variability of their content and the unity of the educational space of the Russian Federation. Given the vastness of the country's territory, natural-climatic, economic, social, cultural and ethnic diversity of the population living in 89 regions of Russia, the maximum possible centralisation and unification of the educational process is a guarantee of uniform quality, equal opportunities and accessibility of higher pedagogical education. The historically developed principle of a unified educational system allows today to maintain the status of recognition of a diploma of education in the entire territory of this largest country in the world, regardless of the part of the country where the educational institution is located. This right is guaranteed by the Federal Law 'On Education in the Russian Federation' and is directly implemented in the Federal State Educational Standards of Higher Education, in by-laws and regulations, professional standards and government programmes for the development of this sphere. Among a large number of such documents, it is worth highlighting professional standards corresponding to the professional activities of graduates ('Pedagogue (pedagogical activity in the field of preschool, primary general, basic general, secondary general education) (educator, teacher)', 2013; 'Pedagogue of additional education of children and adults', 2021; 'Specialist in the field of education', 2023; 'Specialist involved in the organisation of children's collective activities (counsellor)', 2018, 'Pedagogue-psychologist (psychologist in the field of education)', 2015, 'Pedagogue-Defectologist', 2023, etc.). They are approved by Orders of the Ministry of Labour and Social Protection of the Russian Federation and are documents that disclose, from the perspective of employers' associations (and/or the teaching community), the content of relevant professional teaching

activities, as well as requirements for the qualifications of teaching staff. Professional standards are supplemented by various orders and regulatory and methodological documents of the Ministry of Education and Science of the Russian Federation (since 2018, it has been divided into the Ministry of Education of the Russian Federation and the Ministry of Science and Higher Education of the Russian Federation).

The basic principles of higher pedagogical education in the Russian Federation are:

- humanistic nature of education, priority of human life and health, rights and freedoms of the individual, free development of the individual, education of mutual respect, hard work, citizenship, patriotism, responsibility, legal culture;
- freedom of choice to receive education according to a person's aptitudes and needs, the creation of conditions for the self-realisation of each person and the free development of his or her abilities, including the granting of the right to choose the forms of education, the forms of training, the organisation carrying out educational activities, the orientation of education within the limits provided by the education system, as well as the granting of freedom to teaching staff in the choice of forms of training, methods of training and education;
- democratic nature of education management, ensuring the rights of teaching staff, students, parents to participate in the management of educational organisations (State Duma of the Russian Federation, 2012); publicity and transparency in management decision-making, creation of a system of effective control, etc.;
- inadmissibility of restriction or elimination of competition in education; the principle aimed ultimately at improving the quality of education, since the development of a competitive environment in education creates a favourable investment climate in education, as well as promotes the renewal and modernisation of the education system, since competition in education generates innovations;
- understanding of the role of the teacher, pedagogue as a key figure for ensuring the quality of general education and for the future development of the country, implementation of a value-sense approach to the training of teachers of future generations of the Russian Federation;
- priority of equal accessibility of quality education in pedagogical training areas and specialities in all subjects of the Russian Federation, in all educational organisations regardless of departmental subordination;
- unity of the educational space in the territory of the Russian Federation through the unity of requirements and guarantees in the implementation by educational organisations of education under teacher training programmes while respecting the autonomy of educational organisations;
- continuity and continuity of professional development of teaching staff;
- openness and independence in assessing the quality of teacher training;
- development of the system of teacher training taking into account the current research agenda in the field of education;

- ensuring joint activities of educational organisations implementing teacher training programmes and social partners – representatives of public-business associations, employers, taking into account socio-economic and scientific and technological development priorities of constituent entities of the Russian Federation and municipalities;
- interaction between state authorities, local authorities, educational organisations, public associations and other legal entities on the issues of improving the system of teacher training in the Russian Federation.

(Government of the Russian Federation, 2022)

The Russian Federation guarantees free higher education on a competitive basis if a citizen receives education at this level for the first time (State Duma of the Russian Federation, 2012).

System of Higher Teacher Education

Currently, more than 300 higher education institutions of various levels (universities, academies, institutes), types (classical, specialised, sectoral) and forms of ownership (state and private), including their branches, provide teacher training in Russia. Their number varies slightly annually due to the closure or opening of new higher education institutions or, as a rule, is related to the opening of educational programmes in private and non-state higher education institutions responding to the shortage of teachers of any profile in a particular region.

It should be reminded that until the beginning of the 21st century, the bulk of Russian teachers were trained in specialised pedagogical institutes and universities. This was a continuation of Soviet traditions, however, due to Russia's participation in international integration processes, there was a steady universalisation of this sphere. Every year, on the one hand, the number of specialised higher education institutions decreased for various reasons, and on the other hand, educational institutions of various types became more actively involved in the process of teacher training. While at the end of the second decade of the 21st century, non-pedagogical universities trained as many future teachers as pedagogical universities, today the ratio is already 60 to 40% (Main data-computing center [MDCC], 2022).

Structural changes determined further diversification of the system of higher pedagogical education in Russia. The term 'specialised pedagogical universities' was replaced by the notion of 'higher education institutions implementing teacher training programmes'. As a consequence, the modern organisational structure of teacher education is unusually diverse. But most likely, this phenomenon should not be considered as a disadvantage, but on the contrary the possibility of participation in the process of teacher training of various participants, each of which plays its own role and closes a certain professional niche. There are five groups of higher education institutions implementing teacher training programmes in Russia:

(1) specialised pedagogical universities and institutes;
(2) traditional non-pedagogical universities implementing teacher training programmes;
(3) specialised universities (technical, economic, linguistic) implementing teacher training programmes;
(4) federal, regional and other universities formed as a result of the merger of several universities, including pedagogical universities;
(5) private universities that provide teacher education under specific teacher training programmes.

Higher education institutions implementing teacher training programmes are rather unevenly distributed across the territories of the eight federal districts into which the modern Russian Federation is divided. This is due to the history of the emergence of educational institutions in the pre-revolutionary and Soviet periods, and mainly due to the population density in these territories. The number of their population is significantly differentiated and it is much smaller in the east of the country. Therefore, the largest number of higher education institutions implementing teacher training programmes are located in the Central and Volga districts and the smallest in the Far Eastern Federal District.

According to the official statistics of 2022, more than 250 thousand students-future teachers were studying in higher education institutions of the country according to the calculations on the given contingent, including: in specialized pedagogical higher education institutions – 111,350, in classical and other higher education institutions – 135,047, in private and non-state – 4,046 (Main data-computing center [MDCC], 2022). However, it is necessary to explain the specifics of the existing calculations, which involve counting students in a certain proportion. In Russian educational statistics, it is called 'reduced contingent of students' and is related to the distribution of state funding for student education and reimbursement of costs to educational institutions. It is related to the allocation by the state of a certain amount of money for the education of one full-time student. Thus, part-time students are counted with a ratio of 10 to 1 full-time student, respectively, evening students 5 to 1 full-time student. Therefore, the actual number of students-future teachers studying in various forms of education exceeds 400 thousand people in the country. And in general, future teachers make up 9.26% of the total number of students in Russia.

The data on monitoring the activity of higher education institutions for 2022 (based on the data for 2021) show that future teachers study in 306 higher education institutions, of which: specialised pedagogical (with branches) – 44, classical and other (with branches) – 220, private and non-state (with branches) 42 (Main data-computing center [MDCC], 2022). Their distribution by districts is presented in Table 5.1.

The overwhelming majority of higher education institutions implementing teacher training programmes are state-owned. The largest of them are the Moscow Pedagogical State University, Russian State Pedagogical University in the

Table 5.1. Distribution of the Reduced Contingent of Students for 2022 (Based on Data for 2021).

Name of the District	Pedagogical Universities of the Ministry of Education of the Russian Federation and Their Branches		Classical, Other Universities, Institutes and Their Branches		Non-state and Private Higher Education Institutions and Their Branches	
	Number of Higher Education Institutions	Number of Students	Number of Higher Education Institutions	Number of Students	Number of Higher Education Institutions	Number of Students
Central Federal District	7	25,139.2	53	39,525.2	24	2,526
North-Western Federal District	3	8,903.3	25	13,073.3	2	93.8
Volga Federal District	11	27,922.2	41	24,095.3	7	837.5
Southern Federal District	3	6,510.2	29	18,224.5	3	148.8
North Caucasus Federal District	5	7,655.7	18	9,130.8	3	122.7
Urals Federal District	5	12,949.5	16	8,981.4	–	–
Siberian Federal District	8	19,485	22	11,635.2	2	317.4
Far Eastern Federal District	2	2,785.6	16	10,381.7	1	0.6
ИтоГо	44	111,350.7	220	135,047.4	42	4,046.8

Source: Main data-computing centre (MDCC) (2022).

name of A. I. Herzen, Moscow City Pedagogical University, Kazan Federal University, Novosibirsk State Pedagogical University and others (see Table 5.2).

Table 5.2. The Largest Universities Implementing Teacher Training Programmes.

№	Higher Education Institution	Student Contingent
1.	Moscow Pedagogical State University	11,569
2.	Russian State Pedagogical University in the name of A. I. Herzen	8,932
3.	Moscow City Pedagogical University	6,938
4.	Kazan Federal University	6,927
5.	Novosibirsk State Pedagogical University	5,043
6.	Moscow State Regional University	4,920
7.	Nizhny Novgorod State Pedagogical University	4,442
8.	Dagestan State Pedagogical University	4,064
9.	Volgograd State Social and Pedagogical University	3,963
10.	Ural State Pedagogical University	3,930

Source: Main data-computing centre (MDCC) (2022).

Approximately 60% of students – future teachers – study at universities with more than 1 thousand students. The conditions and services of a sufficiently large university make it possible to improve the quality of the educational process. On the contrary, there are some private and non-state educational institutions that implement only one educational programme of teacher training, as a rule, on a part-time basis with the total number of students from 10 people. Undoubtedly, the presence of small universities with low educational potential reduces the overall level of teacher training. However, given the shortage of teachers, this phenomenon should be assessed as forced and natural.

Forms of Education

There are several forms of education in Russian universities: full-time (day), part-time and evening. Recently, there has also been a distant form of education, which is, in fact, a part-time form of education with the use of distance learning technologies.

In full-time study, classes take place at the university in the morning or afternoon. The learning process involves regular attendance at the university, regular work in lectures, practical classes and seminars, and therefore live interaction with lecturers and other students. Systematic control, being in an educational environment motivates students and affects the quality of their education.

There is only one disadvantage of full-time study: it is difficult to combine study with work or other activities.

It is necessary to explain the concepts and content of two more forms of education – part-time and evening. Historically, they emerged in the first decades of Soviet power and were a forced measure in the context of a shortage of teaching staff, when millions of citizens of the USSR sat behind desks as part of a large-scale campaign to eliminate illiteracy. This required hundreds of thousands of new teachers, who simply did not have time to be trained by higher and secondary specialised educational institutions. Therefore, a rather effective system of education was created, called 'part-time' or in-service schooling. The essence of this system was that teachers working in schools were simultaneously enrolled in higher or specialised secondary education. In the conditions of that time, these were people who had only secondary education or those who had completed their education at a teacher training college (college) and upgraded their education at an institute. The latter gave the graduate the opportunity to work in secondary or senior secondary schools and to qualify for higher salaries or administrative positions.

According to the curriculum, part-time students were obliged to study 40–50 days a year directly at the educational institution, and the rest of the time they were organised to study disciplines independently on the basis of special assignments. As a rule, the contact work was 30% of the contact work at full-time departments, but the study period was extended by 0.5–1 year, depending on the profile of the programme. During the period when part-time students travelled to higher education institutions for two compulsory sessions and final state examinations, the state guaranteed the preservation of their salaries at their main place of work, and in some cases paid their travel and accommodation expenses.

This rather peculiar system of teacher training has proved to be highly effective, meeting up to 40% of the country's need for teachers at various historical stages. Moreover, the percentage of their retention for school work was disproportionately higher, as these programmes trained people who had already chosen school as their main occupation for life. The principles of part-time learning in teacher training have survived to the present day, in particular, the retention of the full content of the curricula while reducing the volume of classroom work to 30–40% through the organisation of independent work. Modern technologies of digitalisation in education, remote (distance) learning have presented new opportunities for improving this form of education. Given the fairly good spread of the Internet in different regions of Russia, the possibility of access to digital libraries and online lectures for part-time students have become more accessible. Many regional universities attract leading scientists from metropolitan universities to conduct online classes.

Evening form of education was also born in the country in the 1930s during the period of rapid cultural and educational growth of the country. It provides for simultaneous study and work at school, but it is slightly different from the part-time form, which is convenient primarily for students living in a significant geographical distance from the place of study. Evening study is aimed at students who live within relative transport accessibility of the higher education institution,

allowing them to attend classes on a regular basis. It assumes attendance of students to classes, as a rule, in the evening from two to four times a week and systematic classroom training (lectures, practical classes, etc.) throughout the academic year. The volume of classroom (contact) work is 60% of full-time study. In the modern system of teacher education, evening education is less developed than part-time education and is mainly spread in large cities with well-developed transport infrastructure.

The Content of the Federal State Educational Standards of Higher Pedagogical Education

Federal State Educational Standards are a set of mandatory requirements for education of a certain level and (or) for a profession, speciality and direction of training, approved by the federal executive body responsible for developing state policy and normative-legal regulation in the field of education (State Duma of the Russian Federation, 2012).

Due to the fact that there is a huge number of higher education institutions implementing teacher training programmes, Federal State Educational Standards of higher education allow to observe uniform requirements for teacher training in the country. On the basis of the Federal State Educational Standards the basic professional educational programmes of higher education – bachelor's, specialist and master's degrees – are developed.

The enlarged group of specialities and training areas 'Education and Pedagogical Sciences' is subdivided into several training areas:

- pedagogical education (training of teachers for pre-school and supplementary education, primary school teachers, teachers in all subject areas of general education, etc.);
- psycho-pedagogical education (training of educational psychologists);
- special (defectological) education (training of speech therapists, typhlopedagogues, sign language therapists, teachers-defectologists, etc., specialists to work with children with health limitations);
- vocational training by sector (training of vocational training teachers for various sectors of the economy, apprentices for various professions, etc.);
- teacher education with two training profiles (similar to the first direction, but teachers are trained in two subject areas of the modern school (e.g. Mathematics and Informatics, Biology and Chemistry, two foreign languages, etc.)).

Within each of the directions, Bachelor's and Master's degree programmes are implemented, the title and content of which is determined directly by higher education institutions. An exception among all this diversity is the only specialty level programme 'Pedagogy and Psychology of Deviant Behaviour', aimed at training specialists carrying out: psychological, pedagogical and legal support for the work of law enforcement agencies with minors prone to deviant behaviour; specialists carrying out psychological and pedagogical correction and

rehabilitation of persons with deviant behaviour; specialists carrying out prevention of deviant behaviour of minors.

It should be emphasised that the training directions 'Pedagogical Education (Bachelor's degree)', 'Pedagogical Education (with two profiles) (Bachelor's degree)' and the training direction 'Pedagogical Education (Master's degree)' are considered as a system of training mainly teachers of pre-school, primary, basic and secondary general education. The directions of training psycho-pedagogical education, special defectology education, professional education (by branches) of bachelor's and master's degrees, as well as the speciality 'Pedagogy and Psychology of Deviant Behaviour' are relatively independent types of pedagogical education.

According to a study conducted in 2022 by the Centre for the Development of Teacher Education of the Russian Academy of Education, 92% of future teachers are enrolled in bachelor's degree programmes, 8% in pedagogical master's programmes and 0.22% in specialist programmes (Basiuk et al., 2022).

Obtaining education under Bachelor's degree programmes is allowed only in educational organisations of higher education. Receiving education under Master's programmes – in educational organisations of higher education and scientific organisations. Postgraduate education – in educational organisations of higher education, organisations of additional professional education and scientific organisations.

Each higher education institution develops educational programmes in accordance with the Federal State Educational Standard. Accordingly, educational institutions are fully responsible for the approved programmes and, as a rule, control over this is exercised by Departments of Education, quality control services, etc. Periodic examination on the basis of a special schedule or unscheduled inspections is carried out by federal structures, in particular by the Federal Service for Supervision in the Sphere of Education and Science, established in accordance with Presidential Decree No. 314 of 9 March 2004 'On the System and Structure of Federal Executive Bodies'. The Federal Service for Supervision in the Sphere of Education and Science is a federal executive body exercising control and supervision functions in the sphere of education and science at all levels, from kindergartens to universities, including in the field of teacher training.

To fully understand the specifics of the implementation of Bachelor's, Master's and Specialist programmes, it is necessary to highlight their general characteristics, laid down in the Federal State Educational Standards. In the educational programmes of Bachelor's, Master's and Specialist degree programmes, there is a compulsory part and a part formed by the participants of educational relations. The compulsory part of the educational programme is aimed at forming the fundamentals of the pedagogical profession. The part of the educational programme formed by the participants of educational relations reflects the peculiarities of the training profile.

The curricula of Bachelor's, Master's and Specialist programmes, according to the Federal State Educational Standards, consist of three blocks: block 1 'Disciplines (modules)', block 2 'Practice', block 3 'State Final Certification'. The

standard defines the volume of the programme of each level of education and its blocks in credit units.

A credit unit in educational programmes in the Russian Federation is defined as a unified unit of measurement of the workload of a student, which includes all types of learning activities envisaged by the curriculum (including classroom and independent work) and practice (State Duma of the Russian Federation, 2012). 1 credit unit, as a rule, is 36 academic hours with the duration of an academic hour of 45 minutes.

Curricula of Bachelor's, Specialist's and Master's programmes shall include elective disciplines (modules) and optional disciplines (modules). Optional disciplines (modules) are not included in the volume of the educational programme.

When developing Bachelor's and Master's degree programmes, the educational organisation establishes the profile of the programme, which specifies its content within the framework of the pedagogical area of training. When developing curricula for a specific profile, the educational organisation is oriented to the tasks and features of future professional activity.

The total volume of the Bachelor's programme with one profile (e.g. Biology or Mathematics) is 240 credits. Of these: for block 1 'Disciplines (modules)' at least 120 credit units are allocated, for block 2 'Practice' – at least 60 credit units, for block 3 'State Final Certification' – at least 9 credit units (Ministry of Education and Science of the Russian Federation, 2018a).

The total volume of a Bachelor's programme with two profiles (e.g. Biology and Chemistry or Mathematics and Computer Science) is 300 credits. Of these: Block 1 'Disciplines (modules)' is allocated at least 180 credits, Block 2 'Practice' – at least 60 credits, Block 3 'State Final Certification' – at least 9 credits (Ministry of Education and Science of the Russian Federation, 2018b).

The period of education on the single-profile Bachelor's degree programme on full-time study is 4 years. The term of education at the Bachelor's programme with two profiles is increased by 1 year on full-time study and is 5 years.

In part-time or evening forms, the duration of education shall be increased by not less than 6 months and not more than 1 year compared to the duration of education in full-time education.

Block 1 'Disciplines (modules)' of Bachelor's degree curricula mandatorily, according to the Federal State Educational Standard, includes the following disciplines: philosophy, history (history of Russia, general history), foreign language, life safety, physical education and sport (Ministry of Education and Science of the Russian Federation, 2018a, 2018b).

The volume of the compulsory part of the Bachelor's programme, excluding the volume of the state final attestation, according to the Federal State Educational Standard, should be at least 70% of the total volume of the Bachelor's programme. The volume of a Bachelor's programme implemented in one academic year cannot exceed 70 credits, regardless of the form of study. This allows to protect students from overload.

The total volume of the only specialist programme to date 'Pedagogy and Psychology of Deviant Behaviour' is 300 credits. Of these: for block 1 'Disciplines (modules)' is allocated at least 210 credit units, for block 2 'Practice' – at least 40

credit units, for block 3 'State Final Certification' – 6–9 credit units (Ministry of Education and Science of the Russian Federation, 2021).

The term of education under the specialisation programme in full-time form of study is 5 years. In part-time or evening forms, the duration of study is increased, as at Bachelor's degree, by no less than 6 months and no more than 1 year compared to the duration of education in full-time study. In contrast to Bachelor's and Master's programmes, where an educational institution has the right to independently determine the profile and the title of the programme, in the specialisation the choice of specialisation from the proposed list is assumed: 'Psychological-pedagogical and legal support of the work of law enforcement agencies with minors prone to deviant behaviour', 'Psychological-pedagogical correction and rehabilitation of persons with deviant behaviour', 'Psychological-pedagogical prevention of deviant behaviour of minors'.

In the block 1 'Disciplines (modules)' of the curricula of the specialty in the mandatory order, according to the Federal State Educational Standard, the following disciplines are included: philosophy, foreign language, history (history of Russia, general history), general basics of pedagogy, theory and methods of education, correctional pedagogy, social pedagogy, general psychology, psychology of deviant behaviour, developmental and age psychology, family psychology, psychology of conflict, life safety, physical education and sport. When implementing the specialisation 'Psychological, pedagogical and legal support for the work of law enforcement agencies with minors prone to deviant behaviour', the curriculum shall also include disciplines on criminal law, criminal procedure, criminology and special professional or military vocational training.

The volume of the compulsory part of the specialist curriculum, excluding the volume of the state final attestation, should be, according to the Federal State Educational Standard, not less than 40% of the total volume of the specialist programme. The volume of a specialist programme implemented in one academic year is not more than 70 credit units (Ministry of Education and Science of the Russian Federation, 2021).

The total volume of the Master's programme is 120 credit units. Of these: for block 1 'Disciplines (modules)' at least 50 credit units are allocated, for block 2 'Practice' – at least 40 credit units, for block 3 'State Final Certification' – at least 9 credit units (Ministry of Education and Science of the Russian Federation, 2018c).

The volume of the compulsory part of the Master's degree curriculum, excluding the volume of the state final attestation, according to the Federal State Educational Standard, should be not less than 40% of the total volume of the Master's degree programme. The volume of the Master's programme, implemented in one academic year, is not more than 70 credit units.

The period of education under Master's degree programmes in full-time education is 2 years. In part-time or evening forms of education, it is increased by not less than 3 months and not more than half a year in comparison with the period of education in full-time education (Ministry of Education and Science of the Russian Federation, 2018c).

Master's programmes provide in-depth professional training of an innovative nature, preparing students to perform not only pedagogical but also research, project and management activities. The Master's programmes prepare students to solve non-standard problems with the help of innovative and, if necessary, self-developed programmes and methods.

Competency-Based Model of Educational Programmes for Teacher Training

Federal State Educational Standards and, accordingly, curricula in Russia are built on the basis of the competence approach, the essence and content characteristics of which are disclosed in the works of both foreign (Burns & Klingstedt, 1973; Cheetham & Chivers, 1998; Hoffmann, 1999; Houston, 1974; Le Deist & Winterton, 2005; Raven, 1984; White, 1959, etc.) and domestic (Baidenko, 2005; Khutorskoy, 2013; Tatur, 2004; Verbitsky & Larionova, 2009; Zeer, 2005; Zimnyaya, 2004, etc.) researchers.

The competence approach is an approach emphasising the results of education expressed in the format of competences. It implies practice-oriented nature of students' training, strengthening the role of their independent work on solving problems and situations imitating socio-professional problems. The main components of the competence approach are three main components: first – knowledge, second – methodology of application of this knowledge, mastery of this methodology; third – practical skills. The competence-based approach is associated with the transition to the system of key competences in the design of educational content and quality control systems. The concept of 'competence-based approach' came to the sphere of Russian education in the 1990s in the course of Russia's entry into the European Higher Education Area.

In higher education as a whole, the competence-based approach determines the orientation of education towards the development of personal and professional qualities of a graduate, with the help of which he/she can realise himself/herself in the continuously developing reality. The new paradigm of education brings to the forefront not the assessment of learnt knowledge and skills, but the degree of competences formation, realising it through the solution of situational learning tasks. In higher pedagogical education, the competence approach is considered in the context of development of value, motivational structures of personality, its interests, attitudes, positions, personal meanings in mastering knowledge, skills and methods of pedagogical activity.

The competency-based model of teacher education programs includes blocks of universal and general professional competencies established by the federal state educational standard of higher education, as well as professional competencies established by educational organisations. The name of competence groups, their peculiarities, general characteristics, representation in the educational standard are reflected in Table 5.3.

When considering the competencies that a graduate should demonstrate during final certification, it is necessary to note the unique combination of centralisation

Table 5.3. *Groups* of Competences of Higher Teacher Education and Their Characteristics.

Name of Competence Groups	Features	General Characterisation	Representation in the Educational Standard
Universal competences	Formulated according to the level of higher education (Bachelor's degree, speciality, Master's degree). Invariant for all areas of training within one level of higher education	Reflect the expectations of modern society in terms of the social and personal position of a graduate of a higher education programme at the appropriate level and the expectations of the individual in terms of potential readiness for self-organisation, self-development and self-realisation	Presented in the Federal State Educational Standard
General professional competences	Focused on the enlarged group of specialities and areas of training, in particular on teacher education. Formulated for the direction of training as a whole regardless of possible profiles of educational programmes and tasks of professional activity of graduates. Form the foundation ('core') of training, which is the basis for all possible types and tasks of a graduate's professional activity	Reflect the demands of the labour market in terms of the graduate's mastery of the basics of professional activity, taking into account its dynamic development, as well as the individual's expectations of potential opportunities for professional growth	Presented in the Federal State Educational Standard

Professional competences	Formulated for a specific educational programme	Reflect the demands of the labour market in terms of the potential readiness of the graduate of the educational programme to perform specific professional tasks, specific job functions presented in the professional standard	Not presented in the Federal State Educational Standard. Defined by the higher education institution independently on the basis of professional standards corresponding to the professional activity of graduates (if any). In the absence of professional standards corresponding to the professional activities of graduates, they are determined on the basis of the analysis of requirements to professional competencies for graduates in the labour market, generalisation of domestic and foreign experience, consultations with leading employers, associations of employers of the industry in which graduates are in demand, and other sources

Source: Ministry of Education and Science of the Russian Federation (2018a, 2018b, 2018c).

and decentralisation in this area. For example, the formulations of universal competences are defined by the Federal State Educational Standards, indicators of their achievement are recommended in the document 'The Core of Higher Teacher Education', details of which will be written below. Let us consider universal competences and indicators of their achievement in the example of Bachelor's degree (see Table 5.4).

The formulations of general professional competences are also defined by the Federal State Educational Standards, indicators of their achievement are

Table 5.4. Universal Competences and Indicators of Their Achievement (Bachelor's Degree).

Code and Name of Universal Competence	**Code and Name of Indicator Achievement of Universal Competence**
UC-1. Capable of search, critical analysis and synthesis of information, apply a systematic system approach to solve tasks at hand	UC-1.1. Demonstrates knowledge of the features of systematic and critical thinking, reasonably forms his/her own judgement and evaluation of information, makes an informed decision
	UC-1.2. Applies logical forms and procedures, is capable of reflection on his/her own and others' thinking
	UC-1.3. Analyses sources of information in order to identify their contradictions and find reliable judgements
UC-2. Able to identify the range of tasks within the set goal and choose the best ways to solve them, based on the existing legal norms, available resources and limitations	UC-2.1. Defines a set of interrelated tasks and resource support, conditions for achieving the set goal, based on the current legal norms
	UC-2.2. Assesses likely risks and constraints, determines the expected results of solving the set tasks
	UC-2.3. Uses digital modelling tools and techniques to implement educational processes
UC-3. Able to carry out social interaction and realise his/her role in a team	UC-3.1. Demonstrates the ability to work in a team and displays leadership skills and abilities

Table 5.4. *(Continued)*

Code and Name of Universal Competence	**Code and Name of Indicator Achievement of Universal Competence**
	UC-3.2. Demonstrates the ability to interact effectively verbally and socially, including with a variety of organisations
UC-4. Able to carry out business communication orally and in writing in the state language of the Russian Federation and foreign language(s)	UC-4.1. Possesses the system of norms of the Russian literary language when it is used as the state language of the Russian Federation and the norms of foreign language(s), uses various forms and types of oral and written communication
	UC-4.2. Uses language means to achieve professional goals in Russian and foreign language(s) within the framework of interpersonal and intercultural communication
	UC-4.3. Communicates in a digital environment to achieve professional goals and collaborate effectively
UC-5. Able to perceive the intercultural the intercultural diversity of society in socio-historical, ethical and philosophical contexts	UC-5.1. Analyses the socio-cultural differences of social groups based on knowledge of the stages of Russia's historical development in the context of world history, socio-cultural traditions of the world, basic philosophical, religious and ethical teachings
	UC-5.2. Demonstrates a respectful attitude towards the historical heritage and socio-cultural traditions of the Fatherland
	UC-5.3. Interacts constructively with people, taking into account their socio-cultural characteristics in order to successfully fulfil professional tasks and social integration

(Continued)

Table 5.4. *(Continued)*

Code and Name of Universal Competence	Code and Name of Indicator Achievement of Universal Competence
UC-6. Able to manage his/her time, build and implement a trajectory of self-development based on the principles of lifelong learning	UC-6.1. Evaluates personal resources to achieve self-development and time management goals based on the principles of lifelong learning
	UC-6.1 Critically assesses the effectiveness of time and other resources in realising a self-development trajectory
UC-7. Able to maintain an adequate level of physical fitness to ensure full social and professional activity	UC-7.1. Determines the personal level of physical development and physical fitness indicators
	UC-7.2. Owns technologies of healthy lifestyle and health saving, selects a set of physical exercises taking into account their impact on functional and motor capabilities, adaptation resources of the organism and health promotion
UC-8. Able to create and maintain in everyday life and in professional activities safe conditions to preserve the natural environment, ensure sustainable development of society, including in case of threat and emergencies	UC-8.1. Assesses risk factors, knows how to ensure personal safety and the safety of others in everyday life and in professional activities
	UC-8.2. Knows and can apply methods of protection in emergency situations, develops a culture of safe and responsible behaviour
UC-9. Able to make informed economic decisions in various areas of life livelihood	UC-9.1. Understands the basic principles of economic development and functioning of the economy, goals and forms of state participation in the economy
	UC-9.2. Applies methods of personal economic and financial planning to achieve current and long-term financial goals, uses financial tools to manage personal finances, controls own economic and financial risks

Table 5.4. *(Continued)*

Code and Name of Universal Competence	**Code and Name of Indicator Achievement of Universal Competence**
UC-10. Capable of forming intolerant attitude towards corrupt behaviour	UC-10.1. Understands the social and economic causes of corruption, principles, goals and forms of combating corrupt behaviour UC-10.2. Identifies and assesses corruption risks and demonstrates the ability to counteract corrupt behaviour

Source: Ministry of Education and Science of the Russian Federation (2018a, 2018b) and Ministry of Education of Russia (2021).

recommended in the document 'The Core of Higher Teacher Education'. Let us consider general professional competences and indicators of their achievement in the example of Bachelor's degree (see Table 5.5).

A manifestation of decentralisation and freedom of choice is the development of professional competences directly by a higher education institution to meet the

Table 5.5. General Professional Competences and Indicators of Their Achievement (Bachelor's Degree).

Code and Name of General Professional Competence	**Code and Name of Indicator Achievement of General Professional Competence**
GPC-1. Able to carry out professional activities in accordance with normative legal acts in the field of education and norms of professional ethics	GPC-1.1. Understands and explains the essence of the priority areas of development of the educational system of the Russian Federation, laws and other normative legal acts regulating educational activities in the Russian Federation, regulatory documents on education and upbringing of children and youth, federal state educational standards, legislation on the rights of the child, labour legislation

(Continued)

Table 5.5. *(Continued)*

Code and Name of General Professional Competence	Code and Name of Indicator Achievement of General Professional Competence
	GPC-1.2. Applies in his/her activity the basic normative-legal acts in the sphere of education and norms of professional ethics, ensures confidentiality of information about subjects of educational relations, received in the process of professional activity
GPC-2. Able to participate in the development of basic and additional educational programmes, develop their individual components (including with the use of information and communication technologies)	GPC-2.1. Develops programmes of study subjects, courses, disciplines (modules), programmes of additional education in accordance with normative and legal acts in the field of education
	GPC-2.2. Designs individual educational routes of mastering programmes of subjects, courses, disciplines (modules), programmes of additional education in accordance with the educational needs of students
	GPC-2.3. Selects pedagogical and other technologies, including information and communication technologies, used in the development of basic and additional educational programmes and their elements
GPC-3. Able to organise joint and individual educational and upbringing activities of students, including those with special educational needs, in accordance with the requirements of Federal State Educational Standards	GPC-3.1. Designs diagnosable goals (requirements for results) of joint and individual educational and upbringing activities of students, including those with special educational needs, in accordance with the requirements of federal state educational standards
	GPC-3.2. Uses pedagogically sound content, forms, methods and

Table 5.5. *(Continued)*

Code and Name of General Professional Competence	Code and Name of Indicator Achievement of General Professional Competence
	techniques of organising joint and individual learning and educational activities of students
	GPC-3.3. Manages study groups in order to involve students in the process of education and upbringing, provides assistance and support in organising the activities of student self-governing bodies
GPC-4. Able to carry out spiritual and moral education of students on the basis of basic national values	GPC-4.1. Demonstrates knowledge of spiritual and moral values of the individual, basic national values, model of moral behaviour in professional activities
	GPC-4.2. Demonstrates the ability to form in students a civic position, tolerance and skills of behaviour in a multicultural environment, the ability to work and live in the modern world, general culture based on basic national values
GPC-5. Able to monitor and evaluate the formation of educational outcomes of students, identify and correct difficulties in learning	GPC-5.1. Selects the content, methods, techniques of organisation of control and evaluation in accordance with the established requirements to the educational results of students
	GPC-5.2. Control and evaluation of educational results based on the principles of objectivity and reliability
	GPC-5.3. Identifies and corrects learning difficulties, develops proposals to improve the educational process
GPC-6. Able to use psychological and pedagogical technologies in	GPC-6.1. Selects psychological and pedagogical technologies (including

(Continued)

Table 5.5. *(Continued)*

Code and Name of General Professional Competence	Code and Name of Indicator Achievement of General Professional Competence
professional activity, necessary for individualisation of education, development, upbringing, including students with special educational needs	inclusive technologies) and applies them in professional activity taking into account different contingent of students
	GPC-6.2. Applies special technologies and methods that allow individualisation of training, development, education, formation of a system of regulation of behaviour and activity of students
GPC-7. Able to interact with participants of educational relations within the framework of implementation of educational programmes	GPC-7.1. Interacts with parents (legal representatives) of students taking into account the requirements of normative-legal acts in the field of education and individual situation of education, upbringing, development of a student
	GPC-7.2. Interacts with specialists within the framework of the psycho-medical-pedagogical counselling centre
	GPC-7.3. Interacts with representatives of educational, social and spiritual organisations, media, business communities, etc.
GPC-8. Able to carry out pedagogical activity on the basis of special scientific knowledge	GPC-8.1. Applies methods of analysis of pedagogical situation, professional reflection on the basis of special scientific knowledge, including in the subject area
	GPC-8.2. Designs and implements the educational process based on the knowledge of the subject area, psychological and pedagogical knowledge and scientifically based regularities of the organisation of the educational process

Table 5.5. *(Continued)*

Code and Name of General Professional Competence	**Code and Name of Indicator Achievement of General Professional Competence**
GPC-9. Able to understand the principles of modern information technologies and use them to solve professional tasks activity	GPC-9.1. Selects modern information technologies and software tools, including those of domestic production, to solve the problems of professional activity GPC-9.2. Demonstrates the ability to use digital resources to solve professional problems

Source: Ministry of Education and Science of the Russian Federation (2018a, 2018b) and Ministry of Education of Russia (2021).

objectives of a particular educational programme. First of all, the differences in the formulation of professional competences formulated by each higher education institution are related to the training profile of a particular programme. At the same time, the experience of recent years has shown that higher education institutions at the Bachelor's degree level have shown an intention to coordinate their activities in this direction.

The great variety of teacher training models and programmes in the Russian Federation, the need to improve the quality of teacher education have determined the need to put into practice the idea of forming a unified standard of teacher training. This led to the development in 2021 by several pedagogical universities under the auspices of the Moscow State Pedagogical University of the recommendation document 'The Core of Higher Pedagogical Education'. The document has been approved by the Collegium of the Ministry of Education of the Russian Federation, but is not mandatory. Nevertheless, due to its relevance and importance, the 'Core of Higher Pedagogical Education' has been introduced into the educational process of teacher training at the undergraduate level of most leading universities and institutes. The purpose of this document is to provide unified approaches to the content of practical, methodological and subject-specific teacher training and the conditions for its implementation in any higher education institution of the Russian Federation.

The goal defined the objectives:

- to strengthen the unified educational space of teacher training in the country;
- to ensure orientation to the actual needs of the development of modern general education;
- to strengthen the practice-oriented nature of the teacher training process;

- to orient the training towards different types of professional activities of a modern teacher, including educational activities.

(Ministry of Education of Russia, 2021)

Many administrators and practitioners in higher education institutions delivering teacher education programmes agree that the role of the 'Core of Higher Teacher Education' is also important in the context of defining professional competencies at the bachelor's level.

Table 5.6 presents the professional competences of the pedagogical bachelor degree, which are cross-cutting (regardless of the profile of the educational programme), and indicators of their achievement. Professional competencies are formulated on the basis of the professional standard 'Teacher (pedagogical activity in the field of preschool, primary general, basic general, secondary general education) (educator, teacher)' (hereinafter - PS 01.001), developed by the Moscow City Psychological and Pedagogical University and the state budgetary educational institution of Moscow 'Education Centre No. 109' (Ministry of Labour and Social Protection of the Russian Federation, 2013).

Table 5.7 presents the recommended professional competences of a pedagogical bachelor's degree for different types of professional activity tasks (cultural and educational, support, methodical, organisational and managerial) and indicators of their achievement (Ministry of Education of Russia, 2021).

Modules of the Teacher Education Curriculum (Bachelor's Degree)

Curricula for teacher training are developed on the basis of the modular principle.A module in pedagogical education is understood as a sequence of educational activities (disciplines, practices), united in thematic integral sections and blocks, which have logical completeness in relation to the established goals and outcomes of learning and education, i.e. are responsible for the development of a particular competence or group of competences (Ministry of Education of Russia, 2021).

Currently, most of higher educational institutions follow the structural and content filling of the pedagogical bachelor's degree modules offered in the 'Core of Higher Pedagogical Education':

- Social and Humanitarian Module. It includes the following disciplines: History (History of Russia, General History), Philosophy, Financial and Economic Practice, Regulatory and Legal Basis of Professional Activity and Anti-Corruption Behaviour.

The module provides acquaintance of students with specifics, basic concepts, problems and concepts of philosophy and history, is aimed at formation of students' competences in the field of social and humanitarian knowledge and financial literacy, readiness to carry out professional activities in accordance with normative and legal acts in the field of education, ability to make reasonable

Table 5.6. Cross-Cutting Professional Competences of the Pedagogical Bachelor Degree and Indicators of Their Achievement.

Generalised Labour Function	Labour Function	Code and Name Professional Competence	Code and Name of the Indicator of Professional Competence Achievement
Type of Professional Activity Tasks: Pedagogical			
Generalised labour function A Pedagogical activity on design and implementation of the educational process in educational organisations preschool, primary general, basic general, secondary general education organisations	Labour function A/ 01.6 General pedagogical function. Teaching	PC-1. Able to master and utilise theoretical knowledge and practical skills and abilities in the subject matter in solving professional tasks	PC-1.1. Knowledge of the structure, composition and didactic units of the subject area of the taught subject. PC-1.2. Is able to select educational content for its implementation in various forms of training in accordance with the requirements of the Federal State Educational Standard. PC-1.3. Demonstrates the ability to develop various forms of training sessions, apply methods, techniques and technologies of teaching, including informational

(Continued)

Table 5.6. *(Continued)*

Generalised Labour Function	Labour Function	Code and Name Professional Competence	Code and Name of the Indicator of Professional Competence Achievement
Generalised labour function A Pedagogical activity on design and implementation of the educational process in educational organisations preschool, primary general, basic general, secondary general education organisations	Labour function A/ 02.6 Educational activities	PC-2. Able to carry out purposeful educational activities	PC-2.1. Demonstrates the ability to set educational the ability to set educational goals, design educational activities and methods of their implementation in accordance with the requirements of the Federal State Educational Standard and the specifics of the subject. PC-2.2. Demonstrates methods of organisation and evaluation of various types of extracurricular activities of the student (educational, game, labour, sports, artistic, etc.), methods and forms of organisation of collective creative affairs, excursions, hikes, expeditions and other activities (by choice).

			PC-2.3. Selects and demonstrates ways of providing counselling to parents (legal representatives) of students on educational issues, including parents of children with special educational needs
Generalised labour function A Pedagogical activity of designing and realisation of educational process in educational organisations preschool, primary general, basic general, secondary general education organisations	Labour function A/ 03.6 Developmental activities	PC-3. Able to form a developing educational environment to achieve personal, subject and meta-subject learning outcomes by means of the subjects taught	PC-3.1. Possesses ways of integrating academic subjects to organise developmental learning activities (research, project, group, etc.). PC-3.2. Uses the educational potential of the region's socio-cultural environment in curricular and extracurricular activities

Source: Ministry of Education of Russia (2021).

Table 5.7. Recommended Professional Competences of the Pedagogical Bachelor's Degree and Indicators of Their Achievement.

Generalised Labour Function	Labour Function	Code and Name Professional Competence	Code and Name of the Indicator of Professional Competence Achievement
Type of Professional Activity Tasks: Cultural and Educational			
PS 01.001 Generalised labour function A Pedagogical activity on design and realisation educational process in educational organisations preschool, primary general, basic general, secondary general education organisations	Labour function A/03.6 Developmental activities	PC-4. Able to develop and implement cultural and educational programmes in accordance with the needs of different groups of people in accordance with the needs of different social groups	PC-4.1. Organises cultural and educational space using the content of academic subjects (according to the profile) and applies various technologies and methods of cultural and educational activities. PC-4.2. Uses methods of organising cultural and educational activities taking into account the needs of different age, gender, socio-cultural, ethnic groups, relying on the content resources of subject areas (according to the profile). PC-4.3. Participates in the popularisation of knowledge (in the subject area of the profile) among the subjects of the educational process

Type of Professional Activity Tasks: Project			
PS 01.001 Pedagogical activity on designing and implementing basic general education programmes	PS 01.001 Pedagogical activity on implementation of basic and secondary general education programmes	PC-5. Able to organise individual and joint educational and project activities of students in relevant subject area	PC-5.1. Demonstrates knowledge of design principles, mastery of design techniques. PC-5.2. Develops and implements individual and joint educational and project activities of students in the relevant subject area. PC-5.3. Uses advanced pedagogical technologies in the process of implementation of educational and project activities of students in the relevant subject area
Type of Professional Activity Tasks: Support			
Generalised labour function A Pedagogical activity on design and implementation of the educational process in educational organisations preschool, primary general,	Labour function A/01.6 General pedagogical function. Teaching	PC-6. Able to use modern methods and technologies of teaching persons with disabilities	PC-6.1. Knowledge of special methods and modern technologies of psychological and pedagogical support of students with disabilities. PC-6.2. Selects ways of providing consultative assistance to parents (legal

(Continued)

Table 5.7. *(Continued)*

Generalised Labour Function	Labour Function	Code and Name Professional Competence	Code and Name of the Indicator of Professional Competence Achievement
basic general, secondary general education			representatives) of students with special educational needs on issues of upbringing and education of children
Generalised labour function A Pedagogical activity on design and implementation of the educational process in educational organisations preschool, primary general, basic general, secondary general education	Labour function A/01.6 General pedagogical function. Teaching	PC-7. Able to ensure the protection of life and health students in the educational process and extracurricular activities	PC-7.1 Apply child injury prevention measures and use health-promoting technologies in the classroom. PC-7.2 Provides first aid to students
Type of Professional Tasks: Methodical			
Generalised labour function A Pedagogical activity on design and realisation educational process in educational organisations preschool, primary general,	Labour function 01.6 General teaching function. Teaching	PC-8. Able to organise the educational process with the use of modern educational technologies, including distance learning	PC-8.1. Develops educational programmes at various levels in accordance with modern methods and technologies. PC-8.2. Forms means of controlling the quality of the educational process.

basic general, secondary general education organisations			PC-8.3. Develops a plan of correction of the educational process in accordance with the results of diagnostic and monitoring activities
Type of Professional Activity Tasks: Organisational and Managerial			
Generalised labour function A Pedagogical activity on design and realisation educational process in educational organisations preschool, primary general, basic general, secondary general education organisations	Labour function A/01.6 General pedagogical function. Teaching	PC-9. Able to plan, organise, control and coordinate the educational process	PC-9.1 Analyses the educational environment, determines the purpose of the activities of the subjects of the educational process and the ways to achieve it. PC-9.2. Plans the activities of the subjects of the educational process on the basis of regulatory and legal documents. PC-9.3 Manage a team of students, form students' learning and cognitive motivation for the subject in class and extracurricular activities, and use ways of organising joint activities

economic decisions in various spheres of life, intolerant attitude to corrupt behaviour.

- Communicative and digital module. It includes the following disciplines and practices: Foreign Language, Speech Practices/Russian Language and Culture of Speech, Technologies of Digital Education, Practice aimed at the formation of information and communication competences, digital literacy of the professional sphere of a teacher.

The module is aimed at the formation of students' communicative competences, readiness to carry out social interaction and business communication in Russian and foreign language(s), including the use of information and communication technologies, professional competences in the field of media and information literacy, readiness for professional activity in digital space, including the use of artificial intelligence technologies.

- The module is health-promoting. It includes disciplines: Age Anatomy, Physiology and Health Culture, Basics of Medical Knowledge, Life Safety, Physical Education and Sport, Elective Courses in Physical Education and Sport.

The relevance of the module is related to the growing new threats (Covid-19), emergencies in schools. The module is aimed at the formation of competences in the field of health and safety of life (ability to create and maintain in everyday life and in professional activities safe living conditions for the preservation of the natural environment, sustainable development, including the threat and occurrence of emergencies), as well as the formation of physical culture of the individual (skills and abilities of the directed use of a variety of means of health and safety, physical education, sports and tourism for the preservation and promotion of health, psychophysical training and self-preparation for future life and professional activity).

- Psychological and pedagogical module. It includes the following disciplines: Psychology, Pedagogy, Education of Persons with Disabilities and Special Educational Needs, as well as pedagogical practice, including classroom management.

The module is aimed at the formation of students' readiness to carry out professional activity on the basis of knowledge of regularities of personal development, modern theories of teaching and education, the system of scientific ideas about inclusive education of persons with disabilities and special educational needs, possession of skills to implement an inclusive model of education, perception of intercultural diversity of society; organisation and interpretation of psychological and pedagogical research.

- The module of educational activities. It includes the following disciplines: Fundamentals of State Policy in the sphere of interethnic and interfaith relations, Psychology of Educational Practices, Technology and Organisation of Educational Practices (classroom management), Fundamentals of Counselling, as well as pedagogical practice, including classroom management and counselling practice.

The relevance of the module is conditioned by the state tasks in the field of education of the younger generation. The module is aimed at developing students' readiness to carry out purposeful educational activities, to use methods and forms of organising collective creative activities, excursions, hikes, expeditions and other events, to provide consultative assistance to parents (legal representatives) of students on educational issues, including parents of children with special educational needs.

- Module of educational-research and project activity. It includes the following disciplines: Methods of research/project activity, Methods of mathematical data processing, as well as academic and industrial practice – research work (project work).

The module is aimed at developing research skills for analytical and applied work, including coursework, project work, final qualifications and others, as well as the implementation and organisation of project-research activities at school.

- Subject-methodic module. The module is aimed at the formation of professional competences and readiness to carry out professional activities in the field of teaching a particular subject. The content of the module is formed in accordance with the training profile (Ministry of Education of Russia, 2021).

Organisation of Practice of Future Teachers

Practice traditionally occupies an important place in teacher training. It acts as a link between theoretical training and future pedagogical activity and allows testing the acquired knowledge in specific practical situations. According to the Federal State Educational Standards in the 'Practice' block of educational programmes for teacher training there are educational and industrial internship. The types of educational internship include: familiarisation practice, technological (design and technological) internship and research work (obtaining primary skills of research work). The types of industrial internship include: pedagogical internship, technological (design and technological) internship and research work.

Higher education institution may choose one or more types of educational and one or more types of industrial internships from the list specified in the educational standard, as well as has the right to establish an additional type (types) of educational and (or) industrial internships. The university has the right to independently establish the scope of each type of internship. Aims, objectives, content,

forms of reporting are determined by the higher education institution for each type and type of practice.

For practice, according to the Federal State Educational Standards, in pedagogical bachelor's degree – not less than 60 credit units out of 240 at one-profile bachelor's degree and not less than 60 credit units out of 300 at two-profile bachelor's degree; in pedagogical master's degree – not less than 40 credit units out of 120; in specialist's degree – not less than 40 credit units out of 300.

Professional standard is a link in the design and implementation of practical training at bachelor, master and specialist levels, based on the mastering of labour functions and actions with the allocation of its final result for each level of higher education (Lyubchenko et al., 2015).

For full-time students, the internship is distributed, i.e. it takes place in parallel with theoretical training. For part-time students the practice is concentrated – it takes place mainly after theoretical training. The structure of practice is a system of interrelated elements: purpose, content, technologies used, reflection, conditioned by the specificity of the level of higher education, the specificity of a particular stage of professional training and the specificity of formed competences.

In the content of practice of Bachelors of Pedagogical Education the subject-methodical component dominates, and of Master's students – the research component. The internship of Bachelors and Masters students takes place in stages and has an increasingly complex character. In the process of practice bachelors first get acquainted with the educational organisation and its infrastructure, the specifics of the organisation of the educational process in it, study normative-legal and educational-methodical documentation, study the peculiarities of the class collective and its activities, get acquainted with the main forms of work and with the reporting documentation of the class teacher, observe the educational process, attend lessons and extracurricular activities of school teachers. Then they gradually move to active activity: they make a psychological and pedagogical characteristic of the class collective, develop technological maps of lessons and outlines of extracurricular activities, independently conduct lessons and extracurricular activities, gain experience of creative activity, learn to carry out reflection of the conducted lessons, develop control and measurement materials for monitoring the level of formation of educational results in the subject, interns in summer health camps, collect experimental materials as part of the preparation of term papers and final qualification works. In the process of practical training Master's students are oriented to scientific research and project activity. Master's students' practice includes all components of research activity, which are learnt throughout the whole period of study in pedagogical Master's programme (scientific idea, scientific problem, hypothesis formulation, use of a set of scientific methods, including methods of mathematical statistics, design, reflection of the obtained results). Each internship begins with an introductory conference on internship, during which students get acquainted with the goals, objectives, content, specifics of a particular type and type of internship, are instructed before going to the educational organisation. Each internship period

ends with a reporting conference on practice, where its results are summarised and analysed.

Successful solution of the set tasks of internship is achieved through the formation and development of internal motivation to pedagogical activity, clear definition of goals, content, technologies used and results at each stage of internship, rational organisation of school–university partnership, organisation of reflexive activity at the end of internship.

The organisation of students' practice, starting from the first year, allows to make the educational process continuous, progressive, systematic, which leads to the improvement of the effectiveness of teacher training in general. The systemic nature of practical training is achieved through its integration with the theory of the disciplines/modules studied and correlation with the goals, objectives, ways of acquiring professional experience by students, testing the readiness of the future teacher to independent pedagogical activity through the solution of specific professional tasks.

Practical training is mainly carried out on the basis of educational organisations with which the university has contractual relations. The internship base is determined based on the training programme and specifics of a particular educational programme. Some educational institutions even have their own schools, which are used not only to organise practical training but also as platforms for research and approbation of their results. For example, the case of Kazan Federal University, which has developed a university model of teacher training that is new to Russia over the past decade, is illustrative. One of its components is three own schools of different types and a kindergarten for children with autism spectrum disorders. The inclusion of educational organisations into the university's structure makes it possible to strengthen the practical orientation of professional training.

Current Problems and Prospects of Higher Teacher Education

Reforming teacher education is an important priority for many countries today (Cochran-Smith, 2021; Darling-Hammond, 2020; Douglas-Gardner & Callender, 2022; Zeichner, 2021). Russia is no exception, where numerous reforms have been implemented in this area over the past two decades. However, it is impossible to speak about their completion, because educational practice initiates the emergence of new problems in this area, which are layered on the solved problems of the previous stage.

The document 'The Concept of Teacher Training for the Education System until 2030' reveals the following main problems hindering the quality of teacher training:

- imbalance in the quality and conditions of teacher training in different educational organisations and lack of unified approaches to quality assessment mechanisms and tools;

- the gap between the rate of renewal of the content and infrastructure of teacher training and the rate of renewal of general education;
- lack of advanced scientific research in the field of education;
- insufficient compliance of the results of graduate training with the actual demands of the education sector, society and the state;
- weak involvement of employers in the process of teacher training;
- shortage of teaching staff;
- lack of comprehensive measures for early career guidance of schoolchildren to pedagogical professions.

(Government of the Russian Federation, 2022)

At present, Russia is actively discussing the problems of restructuring the national system of higher pedagogical education, including its organisational structure. There is an active process of elaboration of a modern strategy for the development of teacher education, which would meet the actual and prospective needs of modern educational practice.

The main promising directions for the development of higher pedagogical education in the Russian Federation are:

- ensuring unified approaches to the implementation of subject, methodical and psychological-pedagogical training of future teachers;
- ensuring unified approaches to the process of education and the results of formation of social responsibility of the individual, humanitarian, spiritual, moral and civic-patriotic values of pedagogical education, as well as to the process of training a teacher to carry out educational activities;
- improvement of the system for assessing the quality of teacher training;
- attracting students and specialists from different fields to pedagogical training, expanding training in additional pedagogical qualifications, taking into account the demands of the dynamically changing system of general and additional education of children;
- increased involvement of employers in the teacher training system;
- further digital transformation of teacher education;
- increasing the status of Russian language and literature in teacher training programmes (Government of the Russian Federation, 2022);
- creation network infrastructure of interaction between the main actors teacher training (federal and regional platforms) and the development and implementation of specialised technologies in teacher education (big data, 'immersive' technologies including virtual and augmented reality, etc.);
- development of interregional and international cooperation in the field of teacher education, multifaceted support (financial, expert and information) of cooperation with foreign universities and international organisations;
- development and implementation of complex programmes in the field of research and innovation in the field of teacher education;
- formation and development of scientific and educational clusters uniting leading universities, institutions of secondary and additional professional education, as well as regional and municipal educational authorities and

employers to develop and implement comprehensive programmes and projects for the development of human resources and human potential of the region (Borisenkov et al., 2020);

- introduction of a system of measures to identify, select and support pedagogically gifted young people, including the implementation of additional pre-professional development programmes and professional orientation programmes for school-children focused on teaching professions (Government of the Russian Federation, 2022);
- development of a network of psycho-pedagogical profile classes, in which conditions are created for pupils to discover their abilities, to familiarise them with the peculiarities of the teaching profession and to study the basics of psychology and pedagogy (in the constituent entities of the Russian Federation there are currently about 1,300 psycho-pedagogical classes for 17,500 pupils; it is expected that 5,000 psycho-pedagogical classes will be opened in Russia by 2024);
- creation of internship sites for students on the basis of the best schools for practical training and testing of new teaching methods and technologies;
- further development of technoparks and 'quantoriums', where students will be able to practice solving applied school problems in various situational models of the teaching profession, gaining experience in implementing interdisciplinary and meta-disciplinary projects;
- ensuring continuity in the training of future teachers at different levels of education.

Conclusion

The education system in any country in the world is subject to state regulation because it provides an opportunity to influence the attitudes and beliefs of future generations and also because it makes a vital contribution to the political, economic and social prosperity of the country. The Russian Federation, which is at another turning point in its history, is no exception. It is indicative that one of the tools to preserve its political, economic and cultural independence is the sphere of education, which is confirmed by the historical examples of Peter the Great's reforms in the first quarter of the 18th century, the Soviet cultural revolution of the 1920s–1930s and the grandiose scientific leap after the Second World War. They were based primarily on educational reforms aimed at transforming school and higher education. Their success, above all, depended on the professionalism of the teacher, and therefore the state has always prioritised teacher education.

The year 2023 became the reporting point of a new stage of reforms related to the actualisation of education levels in the country. On 12 May 2023, President of the Russian Federation Vladimir Putin signed the Decree 'On Some Issues of Improving the System of Higher Education'. The document envisages the unification of Bachelor's and Specialist degrees into one level of higher education – basic, and Master's degree will become part of higher specialised education (President of the Russian Federation, 2023). The pilot project, which runs for the

academic years 2023–2024 and 2025–2026, has already started in six higher education institutions in the Russian Federation. Among them are the leading specialised educational institution, Moscow Pedagogical State University and Baltic Federal University, which implements teacher training programmes. The Russian scientific and pedagogical community is developing a new Federal State Educational Standard, which will specify the characteristics of different areas of training, supplement the requirements for the results of mastering and conditions of implementation of the educational programme at the level of basic higher education and specialised higher education (Master's degree), and other adjustments have been made in the context of ongoing changes in Russian higher education. The main principles of modern pedagogical education remain humanistic character, critical thinking, creativity, communicativeness, cooperation and digitalisation. To them it is necessary to add the values traditional for Russian education: subject fundamentality, systemic, practice-oriented, strengthening of cultural and axiological components of education, education of national traits and human qualities, that is, achieving the synthesis of national and cultural traditions of Russian education with the innovative vector of the country's development (Lubkov, 2019).

References

Baidenko, V. I. (2005). *Kompetentnostnyi podkhod k proektirovaniyu gosudarstvennykh obrazovatel'nykh standartov vysshego professional'nogo obrazovaniya (metodologicheskie i metodicheskie voprosy): metodicheskoe posobie* [*Competency-based approach to the design of state educational standards of higher professional education (methodological and methodical issues): Methodical manual*]. Issledovatel'skij centr problem kachestva podgotovki specialistov.

Basiuk, V. S., Kazakova, E. I., & Vrublevskaya, E. G. (2022). Rezul'taty monitoringa pedagogicheskogo obrazovaniya: tsennostno-smyslovaya interpretatsiya [Results of teacher education monitoring: A value-sense interpretation]. *Vestnik Moskovskogo universiteta, Pedagogicheskoe obrazovanie*, *20*(4), 152–167. https://cyberleninka.ru/article/n/rezultaty-monitoringa-pedagogicheskogo-obrazovaniya-tsennostno-smyslovaya-interpretatsiya/viewer

Bezborodov, A. B., Eliseeva, N. V., & Shestakov, V. A. (2010). *Perestroika i krakh SSSR. 1985–1993* [*Perestroika and the Collapse of the USSR. 1985–1993*]. Norma.

Borisenkov, V. P., Bermus, A. G., Gukalenko, O. V., & Kirik, V. A. (2020). Strategiya razvitiya pedagogicheskogo obrazovaniya v sovremennoi Rossii [Strategy of pedagogical education development in modern Russia]. *Pedagogika*, *12*, 87–98. https://istina.fnkcrr.ru/publications/article/370045866/

Burns, R. W., & Klingstedt, J. L. (1973). *Competency-based education: An introduction*. Educational Technology Publications.

Cheetham, G., & Chivers, G. (1998). The reflective (and competent) practitioner: A model of professional competence which seeks to harmonise the reflective practitioner and competence based approaches. *Journal of European Industrial Training*, *22*(7), 267–276. https://doi.org/10.1108/03090599810230678

Cochran-Smith, M. (2021). Exploring teacher quality: International perspectives. *European Journal of Teacher Education*, *44*(3), 415–428. https://doi.org/10.1080/02619768.2021.1915276

Dabrowski, M. (2016). Currency crises in post-Soviet economies-a never ending story? *Russian Journal of Economics*, *2*(3), 302–326. https://doi.org/10.1016/j.ruje.2016.08.002

Darling-Hammond, L. (2020). Accountability in teacher education. *Action in Teacher Education*, *42*(1), 60–71. https://www.researchgate.net/publication/338427675

Douglas-Gardner, J., & Callender, C. (2022). Changing teacher educational contexts: Global discourses in teacher education and its effect on teacher education in national contexts. *Power and Education*, *15*(1), 66–84. https://doi.org/10.1177/175774382211247

Government of the Russian Federation. (2022). *Order "On approval of the concept of training pedagogical staff for the education system for the period up to 2030"*. N 1688-r, June 24. https://legalacts.ru/doc/rasporjazhenie-pravitelstva-rf-ot-24062022-n-1688-r-ob-utverzhdenii/?ysclid=lnxp9ge3o9758981918

Hoffmann, T. (1999). The meanings of competency. *Journal of European Industrial Training*, *23*(6), 275–286. https://doi.org/10.1108/03090599910284650

Houston, W. R. (1974). *Competency-based teacher education: Progress, problems, and prospects*. McCutchan Pub Corp.

Khutorskoy, A. V. (2013). *Kompetentnostnyi podkhod v obuchenii: nauchno-metodicheskoe posobie* [*Competence-based approach in teaching: Scientific and methodical manual*]. Ejdos.

Le Deist, F. D., & Winterton, J. (2005). What is competence? *Human Resource Development International*, *8*(1), 27–46. https://doi.org/10.1080/1367886042000338227

Lubkov, A. V. (2019). Pedagogicheskoe obrazovanie Rossii: sovremennoe sostoyanie, opyt, problemy i perspektivy [Pedagogical education of Russia: Current state, experience, problems and prospects]. *Nauka i shkola*, *5*, 41–49. https://cyberleninka.ru/article/n/pedagogicheskoe-obrazovanie-rossii-sovremennoe-sostoyanie-opyt-problemy-i-perspektivy?ysclid=lo1b6l3ioe175111627

Lyubchenko, O. A., Lvova, A. S., & Popov, Y. A. (2015). Teoreticheskie modeli sochetaniya razlichnykh form organizatsii pedagogicheskoi praktiki studentov bakalavriata i magistratury (napravleniya podgotovki: «Pedagogicheskoe obrazovanie», «Psikhologo-pedagogicheskoe obrazovanie») [Theoretical models of combination of different forms of organization of pedagogical practice of Bachelor's and Master's degree students (training directions: "Pedagogical Education", "Psychological and Pedagogical Education")]. *Sovremennye problemy nauki i obrazovaniya*, *4*. https://science-education.ru/ru/article/view?id=20870

Main data-computing center (MDCC). (2022). *Information and analytical materials on the results of monitoring the effectiveness of the activities of universities. Monitoring of the activity of educational organizations of higher education in 2022*. https://monitoring.miccedu.ru/?m=vpo

Menter, I., Kowalczuk-Walędziak, M., Valeeva, R., & Sablić, M. (2023). Teacher education in Central and Eastern Europe: Emerging themes and potential future trajectories. In M. Kowalczuk-Walędziak, R. Valeeva, M. Sablić, & I. Menter (Eds.), *Teacher education in Central and Eastern Europe* (pp. 555–569). Palgrave Macmillan.

Minakov, M. (2019). Post-soviet Eastern Europe. Achievements in post-soviet development in six Eastern European nations. *Ideology and Politics Journal*, *3*(14), 171–193. https://www.ideopol.org/wp-content/uploads/2020/03/ENG.-2019-3.-10.-Minakov-fin-.pdf

Ministry of Education and Science of the Russian Federation. (2018a). *Order "On approval of the federal state educational standard of higher education – Bachelor's degree in the direction of training 44.03.01 Pedagogical education" (as amended and supplemented)*. № 121, 22 February. https://base.garant.ru/71897858/53f89421bbdaf741eb2d1ecc4ddb4c33/?ysclid=lnxqpj7mnj799712313

Ministry of Education and Science of the Russian Federation. (2018b). *Order "On approval of the federal state educational standard of higher education – Bachelor's degree in the direction of training 44.03.01 Pedagogical education (with two profiles)" (with amendments and additions)*. № 125, 22 февраля. https://www.ulspu.ru/upload/img/medialibrary/715/-125-ot-22.02.2018.pdf?ysclid=lnxr4dnu14664344529

Ministry of Education and Science of the Russian Federation. (2018c). *Order "On approval of the federal state educational standard of higher education – Master's degree in the direction of training 44.04.01 Pedagogical education" (as amended and supplemented)*. № 126, 22 February. https://legalacts.ru/doc/prikaz-minobrnauki-rossii-ot-22022018-n-126-ob-utverzhdenii/?ysclid=lnxsgu9of9893394638

Ministry of Education and Science of the Russian Federation. (2021). *Order "On approval of the federal state educational standard of higher education – specialty 44.05.01 Pedagogy and psychology of deviant behavior"*. № 297, 15 April. https://base.garant.ru/400799271/53f89421bbdaf741eb2d1ecc4ddb4c33/?ysclid=lnxrxsysfh618845244

Ministry of Education of Russia. (2021). *Letter "On sending information (together with "Methodological Recommendations for training personnel in pedagogical bachelor's degree programs on the basis of unified approaches to their structure and content ("The core of higher pedagogical education")")"*. № АЗ-1100/08, 14 December. https://legalacts.ru/doc/pismo-minprosveshchenija-rossii-ot-14122021-n-az-110008-o-napravlenii/?ysclid=lp8tnc9lu910904612

Ministry of Labor and Social Protection of the Russian Federation. (2013). *Order "On Approval of the professional standard "Pedagogue (pedagogical activity in the sphere of preschool, primary general, basic general, secondary general education) (tutor, teacher)"" (as amended and supplemented)*. № 544н, 18 October. https://www.garant.ru/products/ipo/prime/doc/70435556/?ysclid=lnyzoz0bap983867670

President of the Russian Federation. (2023). *Decree "On some issues of improving the system of higher education"*. № 343,12 May. http://www.kremlin.ru/acts/bank/49210

Raven, J. (1984). *Competence in modern society: Its identification. Development and release*. H.K. Lewis.

Rizvi, F., & Lingard, B. (2010). *Globalizing education policy*. Routledge.

State Duma of the Russian Federation. (2012). *Federal Law «On Education in the Russian Federation (in the current edition)»*. № 273-ФЗ, 29 December. https://www.consultant.ru/document/cons_doc_LAW_140174/?ysclid=lnxovk2ywn78722722

Tatto, M. T., & Menter, I. (Eds.). (2019). *Knowledge, policy and practice in teacher education – A cross-national study*. Bloomsbury.

Tatur, Y. G. (2004). *Kompetentnostnyi podkhod v opisanii rezul'tatov i proektirovanii standartov vysshego professional'nogo obrazovaniya: materialy ko vtoromu zasedaniyu metodologicheskogo seminara* [*Competency approach in describing outcomes*

and designing standards for higher professional education: Materials for the second session of the methodological seminar]. Issledovatel'skij centr problem kachestva podgotovki specialistov.

Teacher Education Group. (2016). *Teacher education in times of change*. Policy Press.

Verbitsky, A. A., & Larionova, O. G. (2009). *Lichnostnyi i kompetentnostnyi podkhody v obrazovanii: problemy integratsii* [*Personal and competence approaches in education: Problems of integration*]. Logos.

White, R. W. (1959). Motivation reconsidered: The concept of competence. *Psychological Review*, *66*, 297–333. https://doi.org/10.1037/h0040934

Zeer, E. F. (2005). *Modernizatsiya professional'nogo obrazovaniya: kompetentnostnyi podkhod* [*Modernization of professional education: Competence-based approach*]. Moskovskij psihologo-social'nyj institut.

Zeichner, K. (2021). Critical unresolved and understudied issues in clinical teacher education. *Peabody Journal of Education*, *96*(1), 1–7. https://doi.org/10.1080/0161956X.2020.1864241

Zimnyaya, I. A. (2004). *Klyuchevye kompetentnosti kak rezul'tativno-tselevaya osnova kompetentnostnogo podkhoda v obrazovanii. Avtorskaya versiya* [*Key competencies as a result-target basis of competency-based approach in education. Author's version*]. Issledovatel'skij centr problem kachestva podgotovki specialistov.

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Chapter 6

Novice Teacher's Induction in Russia

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Abstract

The problem of introducing novice teachers into the profession and professional development of future teachers is urgent due to the social significance of the professionalism factor in Russian continuous teacher education. Special attention on the part of the country's government, as well as local authorities, is paid to projects related to the effective adjustment of novice teachers in the professional pedagogical environment. This process implies joint work of school, university, ministry and department leaders and staff.

The leading mechanisms for the professional development of novice teachers are modernisation of initial teacher education and reflexive management technologies in schools. The creation of qualitatively new content and conditions of scientific and methodological support for novice teachers requires the development of network and productive innovations in the education system. It also implies the development of organisational models for the professional development of novice teachers, implemented at different levels.

Keywords: Young teacher; adjustment; professionalism; programme; Russian models

Introduction

Induction to the teaching profession, adaptation to it, is not only a matter of education but also of other sciences – organisational management, psychology, sociology – that can provide school leaders with quality implementation of strategies to support novice teachers. At the same time, most nations place special hopes on pedagogical science and practice with regard to the adjustment of novice teachers, putting into this concept two main components: social and professional. This is evidenced by the considerable amount of research that supports the

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prioritisation of socio-professional support for young teachers on the agendas of most developed countries in the world (Carr et al., 2017; Dammerer et al., 2019; Fantilli & McDougall, 2009; Flores, 2004; Hebert & Worthy, 2001; Hsu et al., 2015; Struyven & Vanthournout, 2014). This issue is also relevant for the Russian system of teacher education (Chernikova, 2014; Chernyavskaya, 2018; Kharavinina, 2011; Nazarova, 2003).

The analysis of scientific literature on the issue of novice teachers' induction into the profession, modern pedagogical practice of their adaptation in the professional community of schools testifies in favour of the complex nature and variability of these programmes (Pinskaya et al., 2016). In many countries, the induction stage is a kind of 'superstructure' of initial teacher education and exists as an additional stage after the training of a specialist teacher. The content of induction and adaptation programmes for novice teachers is selected in order to provide comprehensive support and development of a novice teacher.

A young teacher's willingness to stay in the profession or change it depends largely on how successful his/her adjustment was at the beginning of the career. According to the available statistics, from 10% to 50% of teachers leave the profession in the first 5 years of work in different countries (European Union, 2013; Ingersoll et al., 2018; Perryman & Calvert, 2019).

Age distribution of teachers in Russia also presents a challenging issue (see Table 6.1).

According to the official statistics (Ministry of Education of the Russian Federation, 2021a), the number of teachers of pre-retirement and retirement age (>60 years) in 2021 amounted to almost 150 thousand people, including almost 60 thousand people over 65 years. Thus, 21% of teachers are over 55 years, and the proportion of early-career teachers has not increased in recent years. The problem is particularly acute in rural schools and outlying regions.

As Valeeva et al. put it:

> For all the differences in educational systems, the main reasons for dismissal among novice teachers in all countries center around the following: lack of professional experience; loads of work; lack of respect from society; continuous changes; student behaviour; external supervision of the educational process; low salaries; cultural and professional isolation; lack of career opportunities.
>
> (Valeeva et al., 2021, p. 2)

Table 6.1. Age Distribution of Russian Teachers (%).

Age									
Younger than 25	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65 and older
6.11	7.78	9.79	10.07	11.82	14.86	12.16	10.03	6.7	4.27

Source: Ministry of Education of the Russian Federation (2021a).

Given the critical importance of the first year of work in the profession, the need to keep a young teacher in the profession, as well as pursuing the task of attestation, certification of young teachers, which is a mandatory procedure for the beginning of the main professional activity, organisers, mentors of induction programmes fill the content of training with various formats of work with young people. These programmes often pursue the goal of full acquaintance of the new teacher with the features of the educational organisation, its internal corporate culture, as well as the content and technologies of implementation of professional and pedagogical activities (Valeeva et al., 2018). It is also important to ensure the psychological adaptation of the newcomer, his/her socialisation in a new professional team, distinguished by its traditions, set of relations, norms of communication, etc. (Chernikova, 2014). Successful introduction to the teaching profession and adaptation in it predetermine in many respects the formation of teacher professionalism (Aschepkov, 1998). The Russian context of continuous teacher education includes the stage of induction into the profession of a teacher, his/her adjustment for the purpose of further professional development (Chernyavskaya, 2018).

This chapter presents the Russian experience of novice teachers' adaptation. The chapter begins with the analysis of the main concepts' essence from Russian research perspective. Next, we present the regulatory and legal documentation governing the process of entering the teaching profession in the Russian Federation. The next section describes Russian practice of solving the problems of young teachers' entry into the profession.

Induction and Adaptation of Novice Teachers: The Essence of the Main Concepts From Russian Research Perspective

It is advisable to analyse the introduction to the teaching profession, as well as adaptation to it, starting from the essence of key concepts that are directly related to this problem, which is characterised by specifics in the Russian context. In our opinion, it is necessary to distinguish two concepts: induction to the teaching profession and adjustment to the teaching profession.

The first concept, induction to the profession, is a complex, variable system of inter-subject relations, unfolding in time along different trajectories, contributing to the professional development of a teacher. Here we observe the predominant influence on the process of educational organisers – the management staff of educational organisations, teachers of universities, secondary vocational schools, school teachers, representatives of educational authorities, the head of professional development programs, etc. (Chernikova, 2014).

There is no separately allocated, enshrined in the law induction period of novice teachers in Russia. At the same time, induction into the teaching profession is considered as: (1) theoretical and practical discipline in the curricula of pre-professional teacher training, professional orientation, initial teacher education (including at the master's level); (2) programmes of pedagogical practice, implemented in the conditions of school–university partnership in the training of

bachelors, masters, postgraduates; (3) projects at the federal and regional levels, contributing to the provision of comprehensive support to young teachers, promoting their development in the profession and (4) advanced training, retraining courses. The latter are a prerequisite for the certification of pedagogical staff in the country.

The second concept, the adaptation of a new teacher to the profession, is in close conjunction with the concept of introduction to the teaching profession. Professional adaptation of a teacher is the process of active interaction between the novice teacher and the pedagogical environment, aimed at maintaining their dynamic balance ensuring the effectiveness of pedagogical activity, the development of the school team and the teacher's personality, and his/her professional self-realisation (Andrushchenko et al., 2017; Chernikova, 2014; Chernyavskaya, 2018; Kharavinina, 2011; Nazarova, 2003). Slastenin et al. consider professional adaptation as a process of 'independent entry of a person into the profession and harmonisation of his/her interactions with the professional environment' (Slastenin et al., 2002, p. 389).

These approaches emphasise the predominant influence of the novice teacher himself/herself on his/her adaptation. Emphasis is placed on the young teacher's active position in relation to his/her development as a professional, as well as on interaction with all actors of the educational process. At the same time, it is of paramount importance to maintain a balance in the relationship between the novice teacher and the professional pedagogical environment. Special attention should be paid to the characteristic of gradual adjustment of the novice teacher in the professional environment, as well as the orientation to independent decision-making in difficult situations (Nikiforova, 2012).

The study of the issue of novice teachers entering the pedagogical profession also prescribes to identify a separate category called 'young specialists', linking the problem of teachers' adaptation in the professional environment also with age. A young specialist in Russia is a graduate of a higher education institution or a specialised secondary education institution who:

- graduated from an educational institution with state accreditation;
- studied on a full-time basis on a budgetary basis;
- has received an established diploma;
- is employed in the first year after graduation;
- is employed for the first time in his/her speciality (direction);
- chose a budgetary organisation as the place of his/her work.

A young specialist is also defined as a Russian citizen not older than 35 years of age who first entered the workforce immediately after graduating from an educational institution of secondary or higher education and works in his/her speciality until the expiration of a 3-year period from the date of graduation from the educational institution.

According to Andrushchenko et al. (2017), the main stages of professional adaptation of a novice teacher are:

- pre-professional training of a teacher,
- professional training in a higher educational institution,
- the beginning of independent professional activity.

At each stage of a novice teacher's professional adaptation, specific tasks are put forward. Their solution leads to the accumulation of professional knowledge, skills, abilities and experience necessary in the process of professional activity.

Researchers note that professional adaptation has a positive impact on the professional development of a young teacher (Aschepkov, 1998; Babukhina, 2012; Mahmudova & Aliphanova, 2013; Moroz, 1983; Polyakova, 1983). The teacher's stay in one and the same school pedagogical team is a necessary condition for mastering pedagogical skills and professional growth. And, on the contrary, when a teacher has not adapted professionally in a given team, when he/she often moves from one school to another, his/her professional growth slows down.

The system of novice teachers' successful adaptation factors includes training, mentoring system, programme and plan of adaptation of novice teachers, as well as the system of evaluation based on the results of adaptation activities. The success of the adaptation period of a newcomer in school is usually judged by objective and subjective indicators. The former includes the efficiency of work, and the latter includes the social well-being of newcomers.

The Russian experience of introduction to the teaching profession, as well as adaptation of newcomer teachers in it, is characterised by both positive trends in the development of the system and a number of problems. It is important to note the uncertain status of a young teacher in the Russian Federation, insufficiently high prestige of the teaching profession, which to a certain extent affects the level of social organisation and adaptation of young teachers (Pinskaya et al., 2016).

Legal and Regulatory Support for the Adaptation of Young Teachers in School

The implementation of projects related to the induction of young teachers to the professional environment is carried out in Russia in accordance with the national priorities of formal and non-formal pedagogical education legally enshrined in the Law of the Russian Federation of 29.12.2012 No. 273-Federal Law 'On Education in the Russian Federation' (2012), the Labour Code of the Russian Federation (2001), the Federal State Educational Standard of Higher Education (2012), the Teachers' Professional Standard, approved by the order of the Ministry of Labour and Social Protection of the Russian Federation of 18.10.2013. No. 544p (2013). Moreover, it is legislated in the Unified skills guide for positions of managers, specialists and non-manual workers, approved by the Ministry of Health and Social Development of the Russian Federation of 26.08.2010 No. 761p (2010).

In the context of modernisation of the Russian education system, the priority for the state is the development of its human resources potential and the

continuous growth of professional skills of teaching staff. This goal is served by the creation of a unified federal system of scientific and methodological support for teaching staff. One of the key areas of this system is the development of mentoring of teaching staff, which is an effective tool for the professional development of pedagogical staff in general, secondary vocational and additional education (Chernyavskaya & Danilova, 2019; Galaguzova & Golovnev, 2018; Nugumanova & Shaikhutdinova, 2018). The main problem of mentoring in Russian education today is the uncertainty of its conceptual, methodological and normative legal status, which significantly complicates its transformation into a broad social and pedagogical phenomenon. Mentoring in education is developing mainly as a volunteer movement. There is a real need for its transformation into a regulated type of professional activity in education (Ignatieva & Bazarnova, 2018; Kruglova, 2007).

That's why Russian Ministry of education developed jointly with the Trade Union of Workers of National Education and Science of the Russian Federation methodological recommendations on the development and implementation of a system (target model) of mentoring of teaching staff for consideration and use in the work of educational organisations (Ministry of education of the Russian Federation, 2021b).

According to this document the goal of the mentoring system (target model) is to create a system of legal, organisational, pedagogical, educational, methodological, managerial, financial conditions and mechanisms for the development of mentoring in educational organisations in order to ensure continuous professional growth and professional self-determination of teaching staff, self-realisation and retention in the profession, including beginning teachers.

Objectives of the mentoring system are as follows:

- To promote the legal and socio-professional status of mentors and the observance of guarantees of the professional rights and freedoms of those being mentored;
- To provide appropriate assistance in the formation of an inter-school digital, information and communication environment for interaction between mentors and the mentees;
- To provide methodological assistance in the implementation of various forms and types of mentoring of pedagogical staff in educational organisations;
- To promote the formation of a unified scientific and methodological support of teaching staff, the development of strategic partnerships in the sphere of mentoring at the institutional and non-institutional levels.

Russian Practice of Induction and Mentoring Young Teachers

The Russian programmes of support and accompaniment for young teachers provide transfer of theoretical knowledge acquired by them at the university into practical skills, which are necessary for work in educational organisations. The programmes create conditions conducive to the formation of the ability to act

practically in a variety of situations and to overcome professional difficulties in establishing contact with all participants of educational relations.

The mentoring programmes for young teachers include the following directions:

- Professional support and accompaniment (regulatory and legal support of educational activities; psychological and pedagogical support of educational activity; educational and methodological support of educational activities; information support of educational activity);
- Establishing productive professional communication (participation of a young teacher in the methodological work of the educational organisation, in the activities of the subject-specific methodological union, 'School of a Young Teacher'; involvement in professional pedagogical communities and public organisations. Professional communities, including network communities, are an effective means of supporting professional activity allowing specialists to constantly grow and develop) (Drozdova, 2012).
- Setting up a system of measures aimed at public recognition. Identification and dissemination of innovative models of subject, methodological, psychological, pedagogical and communicative competences of young teachers development in the conditions of pedagogical communities, methodological associations of the municipal educational space; public presentation of young teachers' successes in the municipal educational space; promotion of the image of the teaching profession in the media (Polyakova et al., 2017).
- Monitoring the process of young teachers' adaptation, professional growth and retention by identification of their professional competences and professional deficits, successful professional activity, including participation in pedagogical events, competitive movement.

The implementation of induction programmes for novice teachers in Russian educational institutions is carried out in five areas, contributing to the development of teachers' ability to participate in the innovation activities of general education:

(1) Increasing the motivation of novice teachers;
(2) Building up the methodological potential of young teachers;
(3) Advanced training of novice teachers;
(4) Individual support of novice teachers;
(5) Development of corporate culture and social partnership (Valeeva et al., 2021).

One of the forms of the beginners' induction in Russian educational institutions is the Young teacher's school which is designed to foster the skills and creative individuality of novice teachers. It is usually established on the basis of a school where an experienced teacher in a particular speciality works and has experience of mentoring. The head of the school draws up a curriculum and a

programme of classes designed for 3–5 years. Regular students (3–8 people) – teachers of the same speciality – are involved in the classes at the Young teacher's school once a month (Drozdova, 2012).

When working with young colleagues, the school principal uses the following activities:

- implementation of measures to deepen pedagogical knowledge, teaching methodology, study of directive materials, normative documents of the Ministry of Education of the Russian Federation;
- scientific and methodological work to study advanced pedagogical experience and identify ways of using it creatively;
- deepening of scientific and theoretical training in the subject and its teaching methods, supplementing knowledge from related subjects;
- implementation of measures to improve the educational, scientific, methodological and cultural level of a young teacher;
- study of the theory, practice and methodology of education, psychology, ethics, analysis of programme documents on educational work, formation of young teachers' job skills;
- holding seminars, reviews, competitions, excursions, recreation evenings, sports competitions.

While studying at the Young teacher's school, novice teachers attend lessons and extracurricular activities conducted by the school principal and other experienced teachers. Young specialists are provided with individual consultations, they have practical classes where they simulate and discuss proposed models of lessons, extracurricular activities, make samples of didactic materials, and have interviews with the manager of the Young teacher's school and heads of methodological units (Savinova & Kudryavtseva, 2015).

Another widely used form of professional development for young teachers in Russia is the school of excellence, which is organised by municipal education departments in educational institutions of various types under the guidance of a teacher whose experience is approved and recommended for implementation (Pushkina & Zhekova, 2021). The school of excellence works with a permanent staff of students (5–10 people) according to a certain curriculum and schedule of classes during the school year with a frequency of one class per month. Schools of excellence apply various methods of adjustment of young specialists in the school:

- visiting by the head of the school of excellence of lessons and extracurricular activities, which are conducted by the trainees of the school, with subsequent discussion of them;
- attendance by trainees of lessons and extracurricular activities conducted by the head of the school in order to study his/her experience;
- interviews;
- lectures and seminars;
- counselling;

- practical classes on developing lessons and extracurricular activities and making homemade visual aids;
- performance by students of tasks on independent study of literature, application of certain methods, techniques, resources and forms of work in the educational process (Drozdova, 2012).

Russian experience has shown that whatever forms of methodological work are offered to a young teacher, his professional mastery ultimately depends on independent work and self-education. The idea of continuity of education is achieved by constant hard work. Self-education is based on a high level of consciousness development, the need for self-improvement and creative self-actualisation. Self-education of an adult is individual, however, for a young teacher it is possible and necessary to adjust self-educational activity by the administration of the institution.

School principals can apply the following forms and methods of guiding self-education of novice teachers:

- presenting issues related to self-education at the meetings of the pedagogical council, meeting of methodological associations. Systematic explanation of the role of self-education, organisation of teachers' speeches on sharing their self-education experience;
- individual meetings of school managers with teachers on the main directions of self-education;
- joint discussion between school principals and teachers on methods of teaching difficult sections and topics of the programme. Development of individual recommendations to improve the pedagogical efficiency of lessons;
- replenishment of the library fund with literature on self-education and self-improvement, as well as new psychological and pedagogical literature;
- conducting cycles of lectures, group and individual consultations and seminars;
- systematic assessment of the young teacher's self-educational work results (interviews, colloquiums, reports at meetings of the pedagogical council and methodological associations), and determination of the tasks and content of self-education for the new academic year.

The work of school methodological associations holds an important place in the adjustment of young specialists. It is aimed at improving the professional and methodological competence of teachers. Their tasks are to develop the innovative behaviour of novice teachers, to improve their methodological and research culture, to search for new teaching methods and to improve their professional status. Methodological work with novice teachers is based on such principles as: interactive learning, partnership, research, interrelation of learning and practice.

The first of the mentioned principles, interactive learning, means not only transferring knowledge and skills but also developing new values, interests and aspirations. The principle of partnership consists in creating an atmosphere of co-operation, building partnership relationships and the ability to respect the

opinion of the other. The principle of research is based on the establishing a creative environment, conditions for common solution of problematic issues. The principle of interrelation of learning and practice is based on the search for solutions to current problems of professional activity of a young specialist.

Conclusion

Scientific and methodological support significantly contributes to the intensification of the process of a young teacher's professionalism fostering. The result of successful professional adaptation is the mastery of the ability to rationally plan the distribution of their own time and various types of work. The young specialist acquires independence and shows a creative approach to educational activity, strives for professional growth.

The purpose of the abovementioned activities is for the novice teacher to recognise and comprehend his/her own mistakes and achievements, to create a kind of reference point for further professional development. Consequently, overcoming the complications that arise in the first years of a teacher's professional and pedagogical activity is successful with the active assistance of experienced colleagues, the formation of conscious, sustainable motivation and professional methodological support in the process of professional development.

Russian experience shows that adjustment of a young teacher will be best carried out under the following conditions: continuity of training, taking into account the existing educational potential and skills of pedagogical activity; orientation to new spheres of educational activity; advanced nature of training; multivariability and flexibility of forms, methods and means of training; formation of information culture; equipping teachers with the means of personal and professional self-development.

References

Andrushchenko, T. Y., Arzhanykh, Y. V., Vinogradov, V. L., Minyurova, S. A., Fedekin, I. N., & Fedorov, A. A. (2017). Problemy professional'noy adaptatsii molodykh pedagogov [Problems of professional adaptation of young teachers]. *Psikhologo-pedagogicheskiye issledovaniya*, *9*(2), 1–16.

Aschepkov, V. T. (1998). Professional'naya adaptatsiya prepodavateley [Professional adaptation of teachers]. *Vyssheye obrazovaniye v Rossii*, *4*, 67–72.

Babukhina, A. V. (2012). *Upravlencheskoye soprovozhdeniye professional'nogo samoopredeleniya molodykh pedagogov doshkol'nogo obrazovatel'nogo uchrezhdeniya* [*Management support for the professional self-determination of young teachers of a preschool educational institution*]. Doctoral Dissertation, Chelyabinsk State Pedagogical University.

Carr, M. L., Holmes, W., & Flynn, K. (2017). Using mentoring, coaching, and self-mentoring to support public school educators. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, *90*(4), 116–124. https://doi.org/10.1080/00098655.2017.1316624

Chernikova, E. G. (2014). Osobennosti sotsial'no-professional'noy adaptatsii molodykh pedagogov obshcheobrazovatel'nykh shkol [Features of social and professional adaptation of young teachers of general schools]. *Vestnik Chelyabinskogo Gosudarstvennogo Universiteta*, *4*(333), 150–153.

Chernyavskaya, A. P. (2018). Support for young teachers' adaptation in school. In *Metodologicheskie orientiry razvitija sovremennoj nauchno-didakticheskoj mysli* [*Methodological guidelines for the development of modern scientific and didactic thought*] (pp. 676–685). Institut strategii razvitija obrazovanija RAO.

Chernyavskaya, A. P., & Danilova, L. N. (2019). Rol' pedagoga-nastavnika v adaptatsii molodogo uchitelya Teacher-mentor as an assistant in adaptation of the young teacher in school [The role of the teacher-mentor in the adaptation of a young teacher]. *Yaroslavskiy Pedagogicheskiy Vestnik*, *4*(109), 62–70. https://doi.org/10.24411/1813-145X-2019-10453

Dammerer, J., Ziegler, V., & Bartonek, S. (2019). T'yutorstvo i kouching kak osobyye formy nastavnichestva pri vkhozhdenii v professiyu molodykh uchiteley [Tutoring and coaching as special forms of mentoring for young teachers starting their careers]. *Yaroslavskiy pedagogicheskiy vestnik*, *1*(106), 56–69. https://doi.org/10.24411/1813-145X-2019-10278

Drozdova, N. A. (2012). Shkola molodogo uchitelya [School of a young teacher]. *Metodist*, (6), 55–57.

European Union. (2013). *Study on policy measures to improve the attractiveness of the teaching profession in Europe*. Final report. https://ec.europa.eu/assets/eac/education/library/study/2013/teaching-profession1_en.pdf

Fantilli, R. D., & McDougall, D. E. (2009). A study of novice teachers: Challenges and supports in the first years. *Teaching and Teacher Education*, *25*(6), 814–825. https://doi.org/10.1016/j.tate.2009.02.021

Federal Law of 29.12.2012 No. 273-FZ "On Education in the Russian Federation". (2012). https://www.consultant.ru/document/cons_doc_LAW_140174/?ysclid=lmjim4s1el675334035

Federal State Education Standards for Higher Education. (2012). https://fgosvo.ru

Flores, M. A. (2004). *The early years of teaching: Issues of learning, development and change*. Rés-Editora.

Galaguzova, M. A., & Golovnev, A. V. (2018). Nastavnichestvo: iz proshlogo v nastoyashcheye [Mentoring: From past to present]. *Pedagogicheskiy Zhurnal Bashkortostana*, *6*(79), 16–22.

Hebert, E., & Worthy, T. (2001). Does the first year of teaching have to be a bad one? A case study of success. *Teaching and Teacher Education*, *17*(2001), 897–911. https://doi.org/10.1016/S0742-051X(01)00039-7

Hsu, W.-Ch, Chiang, Ch-H., & Chuang, H.-H. (2015). Factors affecting retirement attitude among elementary school teachers. *Educational Gerontology*, *41*(8), 590–603.

Ignatieva, E. V., & Bazarnova, N. D. (2018). Nastavnichestvo v sovremennoy shkole: mif ili real'nost'? [Mentoring in the modern school: Myth or reality?]. *Vestnik Mininskogo universiteta*, *6*(2), 1. https://doi.org/10.26795/2307-1281-2018-6-2-1

Ingersoll, R., Merrill, E., Stuckey, D., & Collins, G. (2018). *Seven Trends: The Transformation of the Teaching Force*, updated October 2018. Research Report (#RR 2018–2). Consortium for Policy Research in Education, University of Pennsylvania.

Kharavinina, L. N. (2011). Tekhnologiya pedagogicheskogo soprovozhdeniya lichnostno-professional'nogo razvitiya molodogo prepodavatelya [Technology of pedagogical support of personal and professional development of a young teacher]. *Yaroslavskiy pedagogicheskiy vestnik*, *2*(4), 214–219.

Kruglova, I. V. (2007). *Nastavnichestvo kak usloviye professional'nogo stanovleniya molodogo uchitelya* [*Mentoring as a condition for the professional development of a young teacher*]. Doctoral Dissertation, Moscow Humanitarian Pedagogical Institute.

Labour Code of the Russian Federation. (2001). https://www.consultant.ru/document/cons_doc_LAW_34683/

Mahmudova, F. A., & Aliphanova, F. N. (2013). Dukhovno-nravstvennyye osobennosti lichnosti molodogo pedagoga v protsesse professional'noy adaptatsi [Spiritual and moral characteristics of the personality of the young teacher in the process of professional adaptation]. *Mir nauki, kul'tury, obrazovaniya*, (3), 48–50.

Ministry of Education of the Russian Federation. (2021a). *Information in the form of federal statistical observation No. OO-1 "Information about the organization carrying out educational activities in educational programs of primary general, basic general, secondary general education" at the beginning of the 2020/21 academic year*. https://docs.edu.gov.ru/document/ed3ca74f26a1dc055a313991f66d2fa3/

Ministry of Education of the Russian Federation. (2021b). *Methodological recommendations on the development and implementation of a system (target model) of mentoring of teaching staff in educational organisations*. https://liczejliczejvolsk-r64.gosweb.gosuslugi.ru/netcat_files/30/69/Metodicheskie_rekomendatsii_po_razraotke_i_vnedreniya_sistemy_nastavnichestva.pdf

Ministry of Health and Social Development of the Russian Federation of 26.08.2010 No. 761p. (2010). https://base.garant.ru/199499/

Ministry of Labour and Social Protection of the Russian Federation of 18.10.2013. No. 544p. (2013). https://normativ.kontur.ru/document?moduleId=1&documentId=281205

Moroz, A. G. (1983). *Professional'naya adaptatsiya vypusknika pedagogicheskogo vuza* [*Professional adaptation of a graduate of a pedagogical university*]. Doctoral Dissertation, Kiev State Pedagogical University.

Nazarova, O. V. (2003). *Professional'naya adaptatsiya nachinayushchikh uchiteley gimnazii v usloviyakh modernizatsii obrazovaniya* [*Professional adaptation of beginning teachers of a grammar school in the conditions of modernization of education*]. Doctoral Dissertation, Stavropol State University.

Nikiforova, M. A. (2012). Professional'noye stanovleniye nachinayushchego uchitelya: sushchnost' ponyatiya v kontekste razvitiya [Professional formation of the beginning teacher: The essence of the concept in the context of development]. *Upravlenie obrazovaniem*, (1), 45–51. https://publications.hse.ru/mirror/pubs/share/folder/4cbilg2z79/direct/71723067?ysclid=lqgnopsoyw853043354

Nugumanova, L. N., & Shaikhutdinova, G. A. (2018). Nastavnichestvo v povyshenii kvalifikatsii pedagogicheskikh kadrov (na primere Respubliki Tatarstan) [Mentoring in improving the qualifications of teaching staff (on the example of the Republic of Tatarstan)]. *Professional'noye obrazovaniye v Rossii i za rubezhom*, (4), 234–236.

Perryman, J., & Calvert, G. (2019). What motivates people to teach, and why do they leave? Accountability, performativity and teacher retention. *British Journal of Educational Studies*, *68*(1), 3–23. https://doi.org/10.1080/00071005.2019.1589417

Pinskaya, M. A., Ponomareva, A. A., & Kosaretsky, S. G. (2016). Professional'noye razvitiye i podgotovka molodykh uchiteley v Rossii [Professional development and training of young teachers in Russia]. *Educational Studies Moscow*, *2*, 100–124. https://doi.org/10.17323/1814-9545-2016-2-100-124

Polyakova, T. S. (1983). *Analiz zatrudneniy v pedagogicheskoy deyatel'nosti nachinayushchikh uchiteley* [*Analysis of the difficulties in the pedagogical activity of beginning teachers*]. Pedagogika.

Polyakova, O. V., Latypova, L. A., & Sungatullina, D. D. (2017). Sistema grantovoy podderzhki molodykh uchiteley kak stimul k obucheniyu v techeniye vsey zhizni: na primere Respubliki Tatarstan [The system of grant support to novice teachers as an impetus for lifelong learning: The case of the Republic of Tatarstan]. *Education and Self Development*, *12*(3), 54–61. https://doi.org/10.26907/esd12.3.05

Pushkina, A. S., & Zhekova, K. Z. H. (2021). Tekhnologii adaptatsii molodykh spetsialistov v shkole [Technologies for adaptation of young specialists at school]. *Vestnik magistratury*, *5–6*(116), 144–146.

Savinova, S. Y., & Kudryavtseva, V. V. (2015). Nastavnichestvo: traditsiia i novyye smysly [Mentoring: Tradition and new senses]. *Nauchnoye Mneniye*, *11*(3), 130–137.

Slastenin, V. A., Isayev, I. F., & Shiyanov, Y. N. (2002). *Pedagogika* [*Pedagogy*]. Izdatel'skiy tsentr "Akademiya".

Struyven, K., & Vanthournout, G. (2014). Teachers' exit decisions: An investigation into the reasons why newly qualified teachers fail to enter the teaching profession or why those who do enter do not continue teaching. *Teaching and Teacher Education*, *43*(1), 37–45. https://doi.org/10.1016/j.tate.2014.06.002

Valeeva, R., Baklashova, T., & Latypova, L. (2018). Management of novice teachers' induction to the profession: Modernization of the Russian school methodological system. *Journal of E-Learning and Knowledge Society*, *14*(2), 39–50. https://doi.org/10.20368/1971-8829/1493

Valeeva, R. A., Kalimullin, A. M., Baklashova, T. A., & Latypova, L. A. (2021). Novice teacher induction in Russia: Management and mentoring. In J. Mena & A. Clarke (Eds.), *Teacher induction and mentoring*. *Palgrave studies on leadership and learning in teacher education* (pp. 1–25). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-79833-8_1

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Chapter 7

Training of Highly Qualified Teaching Staff (Postgraduate and Doctoral Studies)

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Abstract

This chapter analyses the structure, content and development trends of the system of postgraduate teacher training in Russia. It is shown that the system of postgraduate training in Russia has a long history and consists of postgraduate and doctoral levels. The trends that influenced the dynamics and essence of the modernisation processes of Russian postgraduate education are revealed. The content, logic and shortcomings of the not quite successful attempt to standardise the process of training higher-qualified personnel in postgraduate studies are substantiated. Changes in the nomenclature of scientific specialties, which are used to award academic degrees in pedagogy, are revealed.

The main part of the material is devoted to the general characteristics of the current pedagogical postgraduate programmes in Russia. It describes the peculiarities of the admission procedure and the organisation of training for graduate students, the nuances of the choice of supervisor, the definition of the thesis topic, and the current, intermediate, and final certification of graduate students. The essence of co-doctoral studies as a form of dissertation preparation is revealed. The requirements for the preparation, design and defence of candidate dissertations in pedagogy are outlined. The form of advanced training of scientific and pedagogical staff for the preparation of doctoral dissertations is briefly described.

Keywords: Postgraduate studies; doctoral studies; highly qualified personnel; dissertation; scientific specialty; applicant; dissertation council; dissertation defence

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Introduction

The training of scientific and pedagogical personnel of higher qualification has always occupied a central place in the development priorities of the leading countries of the world. Russia is no exception in this. It is believed that it was a well-considered state policy to support and develop the system of reproduction of scientific and pedagogical personnel that allowed the USSR to make a sharp leap in technological development in the 20th century. Therefore, Russia, as a successor of the USSR, has a very successful experience and a rich history in terms of training of highly qualified personnel.

Additionally, in contemporary Russia, emphasis is attempted to be paid to the matters of scientific and educational staff training. For example, since 2008, January 21 has been celebrated annually as the Day of the Postgraduate Student. Although the holiday is not official, it has acquired international status in a number of foreign countries, where the system of higher education was built on the principles established in the USSR. On this day, congratulations from members of the government to graduate students, scientists and teachers of universities are sounded, state and departmental awards are given to the most distinguished researchers.

In order to raise the public status of scientists and increase the attractiveness of research activities for young people in Russia, 2021 was declared the Year of Science and Technology. During this year, many government decisions were made and events were held that had a positive impact on the development of the system of higher education. The results appeared almost immediately. In particular, in 2021, more than 1.6 thousand graduate students received funds for their fundamental scientific research, and 920 graduate research projects were supported. The number of budget places in postgraduate programmes was increased and 17.5 thousand people were admitted, which is 1,000 more than a year earlier. By 2022, the total number of postgraduate students increased by 3.5 thousand people (Ministry of Science and Higher Education of the Russian Federation, 2022). In 2021, as compared to 2020, the key indicator of the efficiency of postgraduate studies – the share of thesis defence by postgraduate students within 1 year after the completion of postgraduate studies – increased by 8.9% (Martynova, 2022).

The support measures adopted in recent years and the ongoing processes largely concern the system of training scientific and pedagogical personnel in the field of pedagogy. In this regard, in this chapter we have tried to reveal the features, structure and content of pedagogical postgraduate education in Russia, as well as to identify key trends in its development.

This chapter includes six sectors. First, it describes the peculiarities of the system of higher education in Russia. The second sector reveals changes in the nomenclature of scientific specialties. Next, attempt to standardise postgraduate studies are considered. The fourth part describes general characteristics of postgraduate programmes in Russia. The fifth sector characterises admission and organisation of training of postgraduate students. The last sector outlines doctoral studies in Russian universities.

Peculiarities of the System of Higher Education in Russia

Traditionally, in Russia, the system of training scientific and scientific-pedagogical personnel is called postgraduate education and is carried out at two levels – through postgraduate studies and doctoral studies. Postgraduate study is the main form of training for scientific and pedagogical personnel in educational and scientific organisations. Persons having higher education at the level of specialist or master's degree are admitted to postgraduate studies for the preparation of a dissertation for the degree of candidate of sciences. Doctoral studies are both a form and the last (higher) level of training for scientific-pedagogical personnel of higher qualification. Only persons who have a degree of candidate of sciences for the preparation of a dissertation for the degree of doctor of sciences are admitted to doctoral studies.

Russian postgraduate and doctoral studies correspond to level 8 – 'Doctoral studies or its equivalent' according to the International Standard Classification of Education, adopted by the General Conference of UNESCO in 2011 (UNESCO Institute for Statistics, 2012). Consequently, in Russian practice, this level of education takes into account those who study under the programmes of training personnel of higher qualification in postgraduate and doctoral studies. In 2019, 91.9 thousand people were studying in Russia under postgraduate and doctoral programmes. This is the sixth place in the world, after the United States (357.2 thousand people), Germany (201.8), Turkey (131.1), Brazil (118.5) and the United Kingdom (112.5 thousand people) (Martynova, 2022).

Thus, there are two levels of academic degrees in Russia: Candidate of Science and Doctor of Science. They both correspond to the highest academic qualification PhD (Doctor of Philosophy), which can be obtained in foreign universities. Unlike the PhD, the Candidate of Science and Doctor of Science degrees are awarded in specific scientific fields. For example, Candidate of Pedagogical Sciences and Doctor of Pedagogical Sciences, or Candidate of Chemical Sciences and Doctor of Chemical Sciences, etc. Currently, in Russia, degrees are awarded in 24 scientific fields, one of which is pedagogy (Ministry of Science and Higher Education of the Russian Federation, 2021a).

At the beginning of its existence, the model of postgraduate education in the USSR was 'educational'. However, given the short period of postgraduate studies, caused by the need for urgent training of new personnel for universities and research institutes, educational training took time away from independent scientific research and led to a decrease in the effectiveness of postgraduate studies. Therefore, further development of postgraduate education followed the path of reducing educational training and transformed into a 'research' model (Yakimovich et al., 2018). Graduates of postgraduate studies were awarded the qualification of 'Researcher' of the relevant profile. And the main result of postgraduate education was the preparation and defence of a PhD thesis.

The key principles of functioning of the Soviet system of higher education remained in place until 2010. By that time, a number of problems had accumulated, which caused the general public to criticise postgraduate and doctoral education. The reason for criticism was mainly the decrease in the percentage of

postgraduate and doctoral graduates who successfully defend their dissertations. Under pressure from the public and politicians, the reform of the system of training of scientific and pedagogical personnel of higher qualification was launched in 2012. As a result, these two institutions of the system of training higher-qualified personnel were separated into different spheres: postgraduate studies became the third level of higher education with subsequent profound changes in the structure and content of postgraduate training, while doctoral studies remained the sphere of science.

Changes in the Nomenclature of Scientific Specialties

A scientific specialty is considered as a set of knowledge, skills and abilities acquired on the basis of higher education as a result of independent creative work on setting and solving professional problems within a specific field of science, ending with the public defence of the dissertation by a candidate for a degree at a meeting of the dissertation council. For each scientific specialty, the Higher Attestation Commission approves a code and passport of scientific specialty (Higher Attestation Commission, 2016). This helps to significantly simplify the process of paperwork for obtaining an academic degree and creates a unified classification of specialties. In the passport of each scientific specialty, in addition to the code and name, the directions of research to which the subject of the dissertant's research should correspond are listed. And it is quite natural that as the field of science develops, as well as depending on the state and socio-economic objectives, the directions of research are constantly adjusted and updated.

In recent decades, due to Russia's integration into the international scientific and educational community and the expansion of the pedagogical research space, several waves of updating the structure and content of scientific specialties in the field of pedagogy have taken place (see Table 7.1).

From Table 7.1 we see that, for example, in the period under review, in the structure of the specialty 'General pedagogy' there appeared the area of research on the history of pedagogy and education. The specialty 'Theory and methodology of teaching' was merged with the specialty 'Theory and methodology of education', the specialty 'Theory and methodology of preschool education' lost its independence. At the same time, in 2021 the specialty 'Theory and Methodology of Physical Education, Sports Training and Recreational Physical Education' was divided into three independent scientific specialties.

With an orientation on the abovementioned scientific specialties the basic professional educational programmes of higher education – programmes of training of scientific-pedagogical personnel in postgraduate studies in the direction of training of personnel of higher qualification 44.06.01 Education and pedagogical sciences are implemented. Consequently, depending on the changes in the structure and content of scientific specialties the postgraduate programmes were modernised.

Table 7.1. Changes in the Nomenclature of Scientific Specialties in Pedagogy.

Names of Scientific Specialties (1995)	Names of Scientific Specialties (2009)	Names of Scientific Specialties (2021)
• 13.00.01 General pedagogy • 13.00.02 Theory and methodology of teaching (by branches of knowledge); • 13.00.03 Correctional pedagogy (typhlopedagogy, sign language pedagogy and oligophrenic pedagogy and speech therapy) • 13.00.04 Theory and methodology of physical education, sports training and health-improving physical culture • 13.00.05 Theory, methodology and organisation of cultural and educational activity • 13.00.06 Theory and methodology of education (by directions and spheres of activity) • 13.00.07 Theory and methodology of preschool education • 13.00.08 Theory and methodology of professional education	• 13.00.01 General pedagogy, history of pedagogy and education • 13.00.02 Theory and methodology of teaching and education (by fields and levels of education) • 13.00.03 Correctional pedagogy (surdopedagogy and typhlopedagogy, oligophrenopedagogy and speech therapy) • 13.00.04 Theory and methodology of physical education, sports training, recreational and adaptive physical culture • 13.00.05 Theory, methodology and organisation of socio-cultural activity • 13.00.08 Theory and methodology of professional education	• 5.8.1 General pedagogy, history of pedagogy and education • 5.8.2 Theory and methods of teaching and education (by fields and levels of education) • 5.8.3 Correctional pedagogy • 5.8.4 Physical education and professional physical training • 5.8.5 Theory and Methodology of Sport • 5.8.6 Recreational and adaptive physical culture • 5.8.7 Methodology and technology of vocational education

Attempt to Standardise Postgraduate Studies

The main factor in the modernisation of postgraduate programmes in Russia was the introduction of federal state educational standards for the training of personnel of higher qualification in postgraduate studies in relevant areas of training (hereinafter – FSES) since 2014 (Ministry of Education and Science of the Russian Federation, 2014c).

The FSES in general is quite a framework document, which gives a description of the main characteristics of the direction of training; characteristics of the professional activities of graduates who have mastered the postgraduate programme; requirements for the results of mastering the postgraduate programme; requirements for the structure of the postgraduate programme and the conditions of its implementation.

The Federal State Educational Standard of higher education training of highly qualified personnel in the direction of training 44.06.01 Education and pedagogical sciences was adopted by the order of the Ministry of Education and Science of the Russian Federation on 30 July 2014 No 902 (Ministry of Education and Science of the Russian Federation, 2014c). According to this standard, the main types of professional activities, for which graduates who have mastered the postgraduate programme can be prepared, are research activities in the field of education and the social sphere, as well as teaching activities under educational programmes of higher education.

An important component of the FSES is the requirement for the results of mastering the postgraduate programme. A graduate who has mastered the pedagogical postgraduate programme must possess universal competencies that do not depend on the specific direction of training (the same for all postgraduate programmes); general professional competencies determined by the direction of training; and professional competencies determined by the orientation (profile) of the postgraduate programme. At the same time, universal (there are only six of them) and general professional (there are only eight of them) competences are defined in the standard and must be included in full in the set of required results of mastering a postgraduate programme. Professional competencies are developed by the institution independently in accordance with the programme focus and/or the nomenclature of scientific specialties. Since the FSES does not specify any quantitative and qualitative requirements for professional competencies, they differ quite a lot from one university to another (see Table 7.2).

As we can see from Table 7.2, postgraduate programmes with the same title in different universities could have different professional competencies in terms of number and content. This could be understood if the specificity of professional competencies revealed the potential of the scientific school of the university. However, the analysis showed that the differences in professional competencies are mainly of a formal and stylistic nature.

The content analysis of all competencies formed in the programmes of pedagogical postgraduate studies has shown that approximately half of them correspond to the qualifications of researcher, the other half – to the qualification of teacher. However, such parity is not maintained in the volume of postgraduate

Table 7.2. List of Professional Competencies in Postgraduate Educational Programs 'General Pedagogy, History of Pedagogy and Education' in Different Universities.

Name of Educational Organisation	List of Professional Competencies
Moscow Pedagogical State University	• Ability to analyse the regularities and principles of training and education of a child at different stages of his/her growing up • Ability to analyse innovative processes in education and to generalise best practices in education • Readiness to use modern technologies for the creation and development of educational environments
Ural State Pedagogical University	• Readiness to preserve national cultural and educational traditions, national and regional peculiarities in education, creative application of pedagogical heritage in their research and pedagogical activities • Possession of systemic ideas about the trends in the development of pedagogical science and education, about the dynamics of development of the chosen field of scientific and professional activity • Acceptance of differences, respect for others and ability to work in a professional community with specialists of other cultures, languages and religions • Readiness for organizational and pedagogical support of students at different levels of higher education • Mastery of oral and written communication to present the results of their research at conferences of various levels, in grant activities, scientific reports, publications of various genres
Bashkir State Pedagogical University named after M. Akmulla. M. Akmulla	• Readiness to analyse the historical development of educational practice • Ability to conduct a monographic study of the pedagogical heritage of outstanding teachers of the past • Readiness for experimental activities of educational institutions

students' educational activities. According to the structure of the postgraduate programme approved in the FSES, Block 1 'Disciplines (modules)', containing disciplines aimed at preparing for professional and pedagogical activity, takes only 30 credit units. And Block 3, 'Scientific Research' is allocated 141 credit units. This means that the programme of pedagogical postgraduate study, although formally called educational, in fact remains research.

Another innovation related to the FSES was the replacement of the PhD thesis defence with the state final attestation. The dissertation defence became a personal matter for a graduate student. The universities, in order to award a graduate of the postgraduate programme the qualification 'Researcher. Teacher-researcher' and to issue a diploma on the completion of postgraduate studies, it was only necessary to conduct the state final attestation. This significantly reduced the aspiration of postgraduates to prepare and defend a candidate's thesis faster and aggravated the performance of the system of higher education training. According to the Federal State Statistics Service, in 2017 only 13% of postgraduate students defended a dissertation, which is 5% lower than the value of the indicator in 2015 and 15% lower than in 2010 (Terentiev et al., 2018).

It should be recognised that there has never been a 100% defence of dissertations by all those who have completed postgraduate studies. However, there has always been an indicator of the effectiveness of postgraduate studies – the share of defences within 1 year after the completion of postgraduate studies. Since 2021, this indicator is one of the criteria for allocating places for postgraduate studies at the expense of the federal budget (Ministry of Science and Higher Education of the Russian Federation, 2020). In this regard, universities and scientific organisations have always had a high interest in increasing the number of theses defended in time by their graduate students.

The contradiction between the system of training of scientific and pedagogical staff and the real requirements for teachers of higher education was aggravated with the introduction in 2015 of a professional standard for teachers of vocational education (Ministry of Labor and Social Protection of the Russian Federation, 2015). According to this professional standard, the teaching component of postgraduate training was to be strengthened, while the research component was to be weakened. In other words, the professional standard was focused only on teaching activities. This was reflected, for example, in the fact that all generalised labour functions referred to the field of teaching and work with students.

It turned out that the structure of the educational programme of postgraduate studies according to the FSES is focused on the development of research competencies, while the professional standard required from a university teacher, including a graduate of postgraduate studies, is the presence of pedagogical competencies. It is this situation that led to the abolition of the professional standard 'Teacher of vocational training, vocational education and additional vocational education' from 2020.

But the matter did not end only with this. On 1 March 2022, Federal state requirements for the structure of training programmes for scientific and scientific-pedagogical personnel in graduate school, the conditions for their implementation, the timing of mastering these programmes, taking into account various

forms of training and educational technologies (Ministry of Science and Higher Education of the Russian Federation, 2021b). This completed almost 10 years of implementation of the FSES and postgraduate studies ceased to be the third level of higher education. Postgraduate programmes again began to be called programmes for training scientific and scientific-pedagogical personnel in postgraduate school.

General Characteristics of Postgraduate Programmes in Russia

At present, postgraduate programmes are developed on scientific specialties provided by the nomenclature of scientific specialties on which scientific degrees are awarded. Mastering of the postgraduate programme is carried out by postgraduate students according to an individual work plan, including an individual plan of scientific activity and an individual study plan. That is, the postgraduate programme includes a scientific component, an educational component, as well as final certification.

According to Federal State Requirements the scientific component of the postgraduate programme includes:

- scientific activity of a graduate student aimed at preparing a dissertation for the degree of Candidate of Sciences for defence;
- preparation of publications outlining the main scientific results of the dissertation in peer-reviewed scientific publications and international databases, as well as preparation, if necessary, of applications for patents for inventions;
- interim certification on the stages of scientific research.

The educational component of the postgraduate programme includes disciplines (modules) and practice, as well as interim certification on these disciplines (modules) and practice.

The final attestation on postgraduate programmes is conducted in the form of an evaluation of the dissertation for its compliance with the established criteria.

Thus, there has been a cyclical evolution of postgraduate programmes. Postgraduate programmes have ceased to focus on competencies as the results of programme mastery. Now postgraduate studies, both formally and substantively, have become a research training programme (see Table 7.3).

As we can see from Table 7.3, over the last 15 years, pedagogical postgraduate education has undergone quite serious changes, both structurally and substantively.

There were 12 academic disciplines in the programme of postgraduate studies in 2008, and they were studied mainly in the first year. The rest of the time (2–3 years) postgraduates were engaged in scientific research and preparing a thesis. At the end of their studies, graduates were awarded a certificate certifying the successful completion of postgraduate studies. Both in terms of the volume of training sessions and the structure of the plan, it can be said that the 2018

Table 7.3. Evolution of Structure and Content of Postgraduate Programs 'General Pedagogy, History of Pedagogy and Education' in 2008–2023 on the Example of Kazan (Volga Region) Federal University (Kazan (Volga Region) Federal University, 2023a).

Structure of the 2008 Programme		**Structure of the 2019 Programme**		**Structure of the 2023 Programme**	
Programme Components	**Volume per Hour.**	**Programme Components**	**Volume in s.e.[a]**	**Programme Components**	**Volume in s.e.**
General professional disciplines	*350*	*Block 1. Disciplines (modules)*	*30*	*1. Scientific component*	*150*
1.1 Foreign language	100	1.1 History of philosophy and science	4	1.1 Scientific activity aimed at the preparation of a dissertation for the scientific degree of candidate of sciences for defence	129
1.2 General problems in the philosophy of science	40	1.2 Foreign language	5	1.2 Preparation and execution of the PhD thesis for defence	1
1.3 Philosophical problems of branches of sciences: pedagogical sciences	28	1.3 Pedagogy of higher education	2	1.3 Scientific seminar	3
1.4 History of science (pedagogical sciences)	32	1.4 Psychology of higher education	2	1.4 Preparation of publications in peer-reviewed scientific publications (applications for patents for inventions, utility models, etc.)	3

1.5 Pedagogy of higher education	20	1.5 Legal protection of intellectual property results	2	1.5 Interim certification by stages of scientific research fulfilment	14
1.6 Psychology of higher education	20	1.6 Social entrepreneurship	2	*(2) Educational component (disciplines and practices)*	23
1.7 Protection of intellectual property	70	1.7 Fundamentals of informatics and computer science	2	2.1 History and philosophy of science	3
1.8 History and philosophy of science	20	1.8 General pedagogy, history of pedagogy and education	5	2.2 Foreign language	4
1.9 Basics of informatics and computer science	20	1.9 Research design/ Educational programme design (elective courses)	3	2.3 General pedagogy, history of pedagogy and education	4
2. Special disciplines	*170*	1.10 Theory and methodology of teaching in higher education/Research methods (disciplines of choice)	3	2.4 Pedagogy of higher education	1
2.1 Pedagogical innovation and foresight	60	*Block 2 Practices*	*6*	2.5 Psychology of higher education	1
2.2 Modern educational technologies	60	2.1 Pedagogical practice	3	2.6 Pedagogical practice	4
2.3 Competitiveness	50	2.2 Practical training in professional skills and experience of professional activity	3	2.7 Interim certification of disciplines (modules) and practice	6

(Continued)

Table 7.3. *(Continued)*

Structure of the 2008 Programme		Structure of the 2019 Programme		Structure of the 2023 Programme	
Programme Components	**Volume per Hour.**	**Programme Components**	**Volume in s.e.[a]**	**Programme Components**	**Volume in s.e.**
TOTAL	*520*	*Block 3: Scientific research (Scientific research activities and preparation of scientific qualification work (dissertation))*	*135*	*3. Evaluation of the dissertation to ensure that it meets the criteria*	*3*
		Block 4: Final State attestation	*9*	*TOTAL*	*176*
		4.1 Preparing for and taking the state examination	3		
		4.2 Presentation of a scientific report on the main results of scientific qualification work (dissertation)	6		
		TOTAL	*180*		

[a]Just as at the undergraduate and graduate levels, 1 credit unit is equivalent to 36 academic hours.

curriculum was focused primarily on the scientific training of a postgraduate student rather than on the training of a higher education teacher.

Since 2013, when the Federal State Standard for Higher Qualification Training was adopted, the curricula have been greatly transformed. In the example of the curriculum of 2019, we see that four blocks appeared in the plan: a block of disciplines, a block of practices, a block of research and a block of final certification. This structure of the curriculum is typical for higher education programmes. The volume of all activities of a postgraduate student is 180 credit units (which is equal to 6,480 academic hours). Postgraduate students are obliged to study 10 academic disciplines, pass two practical training, to pass the state exam and to make a report on the results of their dissertation research. In the first year, the disciplines 'History and Philosophy of Science', 'Foreign Language', 'Pedagogy of Higher School', 'Psychology of Higher School' are studied, practice on obtaining professional and pedagogical skills is conducted. Most of the academic load is devoted to research activities and dissertation preparation. In the second year the disciplines 'Legal Protection of the Results of Intellectual Activity', 'Social Entrepreneurship', 'Basics of Informatics and Computer Science' are studied, pedagogical internship is carried out and work on the preparation of the thesis continues. During the third year, postgraduates study the only discipline 'General Pedagogy, History of Pedagogy and Education', prepare a thesis and pass the state final certification. All those who have successfully completed the educational programme are awarded a diploma of completion of postgraduate studies with the qualification 'Researcher. Teacher-researcher'.

The postgraduate programme of 2023 is already based on the Federal state requirements and consists of a scientific component, which makes up 85% of the total programme volume and an educational component. Eight out of ten academic disciplines are studied in the first year. The second course is devoted to the study of the discipline 'Statistical Methods in Scientific Research', pedagogical practice. In the third year, graduate students must study the only discipline 'General Pedagogy, History of Pedagogy and Education' and pass the candidate examination in the specialty. The third course is mainly aimed at the completion of the scientific research and at the design of the thesis. During the entire period of study, graduate students are engaged in the preparation of scientific publications on the stages of their research. At the end of the programme, the graduate student's dissertation is evaluated for compliance with the established criteria. As well as before the introduction of the FSES, from 2025 graduates of the postgraduate programme will receive a certificate of completion of postgraduate studies.

It should be said that almost from the moment of the emergence of Russian postgraduate studies until nowadays, the main document regulating the activity of a postgraduate student is his individual work plan, including the plan of academic work and the plan of his scientific activity.

An individual plan for scientific activity provides for the implementation by a graduate student of scientific (research) activities aimed at the preparation of a dissertation on an approved topic. This plan is formed by the graduate student himself/herself together with his/her supervisor and is approved by the Academic

Council of the university (or educational subdivision). Each university independently develops and approves the template and structure of the individual plan for a graduate student. Usually, it includes a sample plan for the implementation of scientific research, the stages of the thesis, as well as a plan for the publication of scientific publications in which the main results of the research are presented.

The control of fulfilment of the individual plan is carried out by the participation of the supervisor during the current and intermediate control of progress on the stages of scientific and educational activities of the graduate student. Fulfilment of the individual plan is a key issue for the graduate student, as its failure is the basis for the expulsion of the graduate student from the organisation.

Admission and Organisation of Training of Postgraduate Students

The rules of admission to graduate school have changed many times throughout the development of the system of training for scientific and pedagogical personnel in Russia. In the beginning, the selection was made from among the last year students 6 months before the end of their studies with their subsequent retention at the departments for further scientific and pedagogical work. The previously mentioned decree of the USSR Council of People's Commissars No. 78 of 13 January 1934 'On the training of scientific and scientific-pedagogical workers', defined for the first time the procedure for enrolment in postgraduate studies. According to this decree, the graduates approved by the Academic Councils of higher educational institutions as candidates for postgraduate studies were sent to their places of work in accordance with the distribution of for professional activity in the obtained specialty. During two next years, the universities monitored how the future postgraduate student performed at work. After 2 years, enrolment took place and the graduate student returned to the university for postgraduate studies.

In 1939, significant changes were made in the procedure for admission to graduate school. Admission began to be based on the results of entrance examinations in such disciplines as:

- Special discipline (according to scientific specialty).
- Foreign Language.
- Social and humanitarian discipline, which in different years was called: 'Fundamentals of Marxism-Leninism' (1939); 'History of the CPSU' (1962, 1980); 'Marxism-Leninism' (1987); 'Philosophy' (1995, 1998).

In 1967, in order to involve young people in science, the best graduates of higher education began to be enrolled in postgraduate programmes immediately after graduation. At the same time, they introduced the procedure of passing candidate examinations in philosophy as the methodological basis of modern science; in foreign language, as a means of international communication of scientists; and in specialty.

Algorithm of Admission to Postgraduate School

Traditionally, graduates of Master's programmes or specialisations begin to prepare for admission to postgraduate school in advance, several months before the completion of their studies. This is done by choosing a dissertation topic and negotiating with the head of the postgraduate department (or another department where there is a postgraduate school). Thus, by the time of the completion of training and defence of the thesis, the key persons, on whom the success of admission to postgraduate school depends, are usually aware of and have an opinion about the scientific prospects of the future postgraduate student.

There is a practice when the final attestation commission of the Master's programme, which the future postgraduate student completes, makes a recommendation for admission to the postgraduate programme. This is not a mandatory document but may influence the decision of the commission on admission to graduate school.

At the next stage, the graduate has a preliminary interview with the head of the department, where the training of graduate students in the relevant specialty is carried out. The head of the department helps choose a supervisor, familiarises with the procedure and terms of entrance examinations to postgraduate school. Then it is necessary to prepare a package of documents to be submitted to participate in the competition for admission to graduate school. Documents are submitted to the educational (or scientific) organisation (Graduate School Department or Admissions Committee) within the established deadlines.

At the next stage the applicant passes entrance tests established by the educational or scientific organisation independently. The purpose, objectives, basic requirements for the level of training, the procedure for conducting entrance tests, evaluation criteria are defined in the programmes of entrance tests for admission to graduate school in a particular scientific specialty. For example, for admission to postgraduate studies in the scientific specialty 5.8.1 'General pedagogy, history of pedagogy and education' of Kazan Federal University, applicants will need to pass an entrance test in the form of an examination based on cards. There are two questions in each exam card. The exam is in written form. Preparation for the answer is one academic hour (60 minutes) without a break from the moment the tickets are distributed. The tasks are evaluated from 0 to 100 points depending on the completeness and correctness of the answers. The questions of the programme of the entrance exam are aimed at identifying the applicants:

- ability to analyse the results of scientific pedagogical research and apply them in solving research problems in the field of education;
- readiness to use individual creative abilities for original solutions to research problems in the field of education;
- readiness to independently carry out scientific research using modern methods of pedagogical science.

Persons who have successfully passed the entrance examinations are enrolled in the postgraduate programme. In this case, the organisation is obliged not later than 30 calendar days from the date of commencement of training, to appoint a postgraduate student a supervisor, as well as to approve his or her individual plan of work in postgraduate studies and the topic of the thesis.

Choosing a Supervisor

It is worth noting separately the issue of choosing a thesis supervisor. The most advantageous option is considered when the supervisor invites a graduate of a Master's degree or specialisation to enter the postgraduate school for research on an already-known topic. It will be even better if the Master's student has already begun to work through the preparation of the graduation thesis at the previous level of education. If this is not the case, the newly enrolled postgraduate student is assigned a supervisor by the decision of the head of the department, and the research topic is determined by the supervisor based on the scientific interests of both the supervisor and the graduate student.

According to the Regulation on the training of scientific and pedagogical personnel in postgraduate studies (Government of the Russian Federation, 2021), the scientific supervisor:

- assists the graduate student in selecting a dissertation topic and drafting an individual plan of research activity;
- supervises the research activities of the postgraduate student (including, if necessary, the performance of experiments, technical developments, observations and measurements, study of scientific and technical information, domestic and foreign experience on the subject under study) aimed at the preparation of the thesis;
- advises the graduate student on the preparation of the dissertation for defence;
- performs the primary review of the thesis text prepared by the postgraduate student, as well as the texts of scientific articles and (or) reports prepared by the postgraduate student within the framework of fulfilment of the individual plan of scientific activity, for presentation at conferences, symposia and other collective discussions;
- exercises control over the fulfilment by the graduate student of the individual plan of scientific activity.

Peculiarities of the Organisation of Academic Classes and Practices in Postgraduate Studies

The educational process in postgraduate studies in Russia has deep traditions and practically has not changed since the emergence of postgraduate studies. The date of the beginning of mastering the postgraduate programme is determined by the organisation independently and is divided, as well as at other levels of higher education, into two semesters. During the academic year, postgraduate students

are given vacations of 6–8 weeks. Classes of theoretical character are conducted in the form of lectures for the whole flow of postgraduate students of different specialties, practical classes for groups of individual specialties. Auditorium classes are concentrated for certain academic weeks in order to allocate the period of practical training.

Type, scope, content, list of planned results, place of conduct and form of certification of the results of practice are determined by the organisations themselves. For example, within the framework of the postgraduate programme in the scientific specialty 5.8.1 'General pedagogy, history of pedagogy and education' at Kazan Federal University students undergo pedagogical internship or research practice. The bases of internship are either the relevant department of Kazan Federal University, where the postgraduate programme is implemented, or the organisation where the postgraduate student works. For each type of internship, the individual plan-schedule is prepared for the postgraduate student, where the appointed supervisor determines the forms, volume and terms of practical work of the postgraduate student. Within the framework of pedagogical internship postgraduates should get acquainted with the educational process of the department, to study the experience of scientific and pedagogical activity of teachers, to take part in the development of individual plans of educational work of teachers, to prepare and conduct classes on the assigned topics, to take part in the development of funds of evaluation means, to take part in the organisation and conduct educational work with students. In the framework of research practice, postgraduate students, in addition to implementing the plan of their dissertation research, review dissertation abstracts close to the topic of their own research, participate in the meetings of the dissertation council, write scientific articles, etc., as part of the research practice.

Procedure for Certification of Postgraduate Students

Quality control of mastering of postgraduate programmes includes current progress control, interim certification of postgraduates and final certification of postgraduates. Current progress control and interim attestation provide assessment of the progress of the stages of scientific research, mastering of academic disciplines and practice in accordance with the individual plan.

Traditionally, all postgraduate students take the so-called candidate minimum examinations. The necessity of passing the candidate examinations is defined in the Regulations on the awarding of scientific degrees (Government of the Russian Federation, 2013a). The fact is that the degree of candidate of sciences can be awarded only to those who have successfully passed the candidate exams while mastering the postgraduate programme. Examinations are passed by postgraduate students in accordance with the scientific specialty and branch of science, on which the dissertation is being prepared. The procedure for passing candidate examinations and their list are approved by the Ministry of Education and Science of the Russian Federation (Ministry of Education and Science of the Russian Federation, 2014a).

Examinations are a form of assessment of the degree of preparedness of a candidate for the degree of candidate of sciences to conduct scientific research in a particular scientific specialty and branch of science, in which a dissertation is being prepared or has been prepared.

Currently, all candidates must pass the following examinations:

- History and philosophy of science;
- Foreign Language;
- Section of pedagogy in accordance with the thesis topic.

Normally, at the end of the first year of study, the postgraduate examinations in foreign languages and in the history and philosophy of science are taken. The specialty exam is taken at the end of the second or third year of study. This is due to the fact that during the course of study a scientific specialty may change, and the result of the previously passed postgraduate examination in specialty may not correspond to the scientific specialty of the prepared thesis.

Intermediate attestation of graduate students on the stages of scientific research is carried out at the end of academic semesters with the participation of a supervisor. Failure of a postgraduate student to fulfil the individual plan of scientific activity, established during the interim attestation, is recognised as unfair performance of duties by the postgraduate student to master the postgraduate programme and is the basis for the expulsion of the postgraduate student from the organisation.

The final attestation on postgraduate programmes is conducted in the form of evaluation of the dissertation for its compliance with the established criteria. A graduate student who has fully completed the individual work plan, including the preparation of the thesis for defence, is admitted to the final attestation.

Applicant as a Form of Dissertation Preparation

There is another way to go from a specialist to a PhD (Candidate of Science) and that is to be an applicant (soiskatel'). An applicant in Russia is a person attached to a scientific or educational organisation for the preparation of a dissertation for the degree of candidate of sciences (Ministry of Education and Science of the Russian Federation, 2014b).

Applicant as a form of preparation of a candidate dissertation is possible only in an organisation in which a dissertation council for the corresponding scientific specialty has been established.

Often applicants are persons who have quite a lot of experience in scientific and pedagogical activity and want to formalise the accumulated results of scientific activity in the form of a dissertation. Application is a rather popular way of preparing candidate dissertations. For example, in 2022 for the preparation of dissertations for the degree of Candidate of Pedagogical Sciences without mastering postgraduate programmes 4 people were attached to Kazan (Volga region) Federal University (Kazan (Volga region) Federal University, 2023b), to Moscow Pedagogical State University – 5 people (Moscow Pedagogical State University, 2023), to the Russian

State Pedagogical University named after A.I. Herzen – 17 people (Russian State Pedagogical University named after A. I. Herzen, 2023).

Application has significant differences from postgraduate studies. First, the applicant does not need to take entrance exams. The decision on admission or rejection is made by a specially created commission of the organisation. It is enough to have a master's or specialist's diploma and scientific publications on the research problem. If the specialist or master's degree was completed outside the Russian Federation, a document of nostrification will be required.

Second, unlike a postgraduate student, an applicant does not master the programme of training of scientific-pedagogical personnel, does not attend classes. But at the same time, he works with his assigned supervisor, has access to laboratories, libraries, computer classes of educational or scientific institution.

Thirdly, the researcher himself determines the timeframe of his postgraduate studies. If a postgraduate student studies for the period defined by the educational standard, an applicant can prepare a dissertation and pass the examination in any period up to 3 years.

Fourthly, the cost of a thesis, depending on its duration, can be much lower than for postgraduates. For example, at Kazan (Volga region) Federal University, the cost of scientific consulting services per year for persons attached to prepare a dissertation for the degree of Candidate of Pedagogical Sciences in 2023 is 70,370 rubles (Kazan (Volga region) Federal University, 2023c). While a year of full-time postgraduate study will cost 174,096 rubles.

Fifth, the applicant is not obliged to report on the results of his/her research activities with a set regularity. He has the right, in agreement with his supervisor, to engage in research at his own convenience without taking time off from his main job. He is also not required to publish in scientific journals. His main goal is the successful defence of the thesis. However, the applicant, as well as graduate students, is obliged to pass the candidate's examinations before going to the defence of his thesis.

Traditionally, the thesis advisor, who will advise on the preparation of the thesis, is chosen by the applicant himself, based on the problems of his research. And often this choice is made even before the applicant submits documents for attachment. However, it is also possible that the thesis advisor is determined by the chairman of the thesis council (or the head of the department) already after the attachment.

Thus, the only task of an applicant is the preparation of the dissertation. All other tasks related to the dissertation defence procedure are the same for applicants as for postgraduate students.

Requirements for the Formatting of PhD Theses in Pedagogy

As we have previously noted, dissertation research on pedagogy as an independent genre of scientific qualification works was formed in the late 1920s – early 1930s of the XX century. Traditionally, dissertations on pedagogy should be prepared taking into account the requirements for design and content.

Over time, the requirements for the design of the dissertation have changed very slightly and currently must comply with the National Standard of the Russian Federation (Federal Agency for Technical Regulation and Metrology, 2012). The work should be submitted in hard copy on the rights of manuscript and in electronic form in compliance with the established formats of design. The volume of a thesis according to the requirements of the Higher Attestation Commission should be from 100 to 150 printed sheets of A4 format. On average, most dissertations in practice consist of two or three chapters, 30–40 pages each, with additions in the form of table of contents, list of references and appendices.

The thesis should have the following structure:

- Title page (indicating the educational institution, the topic of the dissertation research, the names of the executor and supervisor, the place and year of writing, etc.);
- Table of contents (listing of all parts with pages);
- Introduction (a brief description of the essence of the work);
- The main part (which describes the scientific work carried out);
- Conclusion (conclusions, results of the study);
- Bibliography;
- Decoding of terms, abbreviations and acronyms;
- Appendices and illustrations.

The main results of the dissertation research before the defence should be approved in the form of scientific publications in peer-reviewed journals and in the form of public speeches at scientific-practical conferences of different levels. The number of publications, in which the main scientific results of the dissertation for the degree of Candidate of Pedagogical Sciences are presented, in peer-reviewed editions should be at least three (Government of the Russian Federation, 2013b). Requirements for the originality of the dissertation text are set by the dissertation council where the work is defended. Usually 80% is considered a sufficient level. However, the higher the uniqueness, the more chances the student has for success.

For the defence an abstract of the dissertation must be prepared, which gives a brief but capacious description of the content of the dissertation of the applicant, divided by meaning in accordance with the sections of the work, and the mandatory description of the results of the research, with conclusions and further possible plan for the development of this topic.

Requirements for the Content and Topics of Postgraduate Theses in Pedagogy

Recently, close attention has been paid to the issues of the content of dissertations (theses) in pedagogical sciences. This is evidenced by the Russian Academy of Education's 'List of Current Topics of Dissertation Research in Education Sciences' (Russian Academy of Education, 2023a). This document states that in the period from 2011 to 2020, 9,749 dissertations in pedagogical sciences were defended: 869 doctoral dissertations and 8,880 candidate dissertations, which corresponds to 4.8%

for doctoral dissertations and 6.8% for candidate dissertations of the total number of defences. At the same time, it was concluded that the topics of dissertation research of degree candidates are chosen by supervisors, often based on previous accumulated experience, and not focused on relevance and prospects. According to the Russian Academy of Education, such relevant topics as interactive learning, networking, volunteering, family–school interaction, functional literacy, academic writing, mentoring, etc. are underrepresented in dissertation research.

The Russian Academy of Education proposed 1989 actual topics of dissertation research correlated with the Nomenclature of Scientific Specialties in the field of educational sciences. It is expected that these topics will become a guideline for degree candidates when choosing dissertation topics in the fields of pedagogical sciences. Moreover, it is recommended to form the main directions of scientific research on education in organisations according to the approved topical themes.

Such expectations and requirements proceed from the fact that dissertation research in the field of educational sciences has a state customer in the person of the Russian Academy of Education, as well as the executor of the state order in the person of educational organisations of higher education. At the same time, the system of attestation of personnel of higher scientific qualification, including the network of dissertation councils and the expert council on pedagogy and psychology of the Higher Attestation Commission under the Ministry of Education and Science of Russia, performs controlling functions for the implementation of the customer's requirements.

In order to improve the scientific level of dissertation research in the field of educational sciences, the Russian Academy of Education has developed Methodological Recommendations 'Application of Evidence Criteria for Dissertation Research in Educational Sciences' (Russian Academy of Education, 2023b). They are oriented towards reconciling the positions of dissertants and experts of all levels with regard to methodological and formal requirements for dissertation research in the field of pedagogy.

The authors have identified 59 criteria of evidence of dissertation research in the field of educational sciences, grouped into such areas as 'Methodological apparatus' (48 criteria), 'Experimental work' (7 criteria), 'Conclusion' (1 criterion) and 'List of publications of the dissertant' (3 criteria). Each criterion is accompanied by recommendations on how to ensure its fulfilment in research. It is declared that the developed recommendations do not limit the creative approach of researchers to the choice of topics, methods and content of research, they are designed to help methodologically and methodologically competent to conduct research and formalise the results in accordance with the requirements of evidence for dissertation research.

The Defence of a Thesis on Pedagogy

The defence of a thesis is the final stage of postgraduate studies. The procedure for the defence is regulated by the Regulations on the Awarding of Academic Degrees (Government of the Russian Federation, 2013c). This document defines the criteria and procedure to be met by theses for academic degrees, and outlines the

procedure for review of theses and attestation files by the Ministry of Science and Higher Education of the Russian Federation.

The thesis is defended in a Dissertation Council established at an educational or scientific institution (Ministry of Education and Science of the Russian Federation, 2017). They are established in accordance with the permission of the Ministry of Education and Science of the Russian Federation on the basis of educational organisations of higher education, educational organisations of additional professional education and scientific organisations that carry out scientific research and experimental design and technological work in the relevant scientific specialties. This requires recommendations of the Higher Attestation Commission under the Ministry of Education and Science of the Russian Federation and approval of the founder.

The dissertation council shall include doctors and candidates of sciences, as well as persons who have an academic degree obtained in a foreign country and recognised in the Russian Federation. The dissertation council shall include at least five doctors of sciences who are specialists in the problems of each branch of science of each scientific specialty for which the dissertation council has the right to accept dissertations for defence.

It takes some time to consider the applicant's application. If the decision of the council is positive, the student is considered admitted to the defence. Then the date of the defence is set, opponents are appointed, who are ready to conduct a scientific discussion with him during the defence. Having received permission to print out the dissertation abstracts, the author distributes them and also provides the obligatory copies to the library of the educational institution on the basis of which the defence will take place. In order for the opponents to familiarise themselves with the text of the scientific work, the author must give them a printed copy of the work in time.

During the defence, the applicant speaks before the dissertation council with a pre-written report, highlighting the purpose, relevance and result of his/her research. During the defence, the Dissertation Council pays attention to:

- the logical structure of the report;
- the validity of all findings;
- visibility of the demonstration of the results of the experimental part;
- the ability to answer questions.

After the report, the applicant is asked questions, the feedback received on the dissertation and the abstract is read out, opponents and supervisor speak. At the end, the Dissertation Council holds a collegial discussion of the dissertant's work and makes a decision on awarding the degree by secret ballot.

If 66.6% of the council members vote positively, the thesis is considered successfully defended. At the final stage, the student's package of documents, together with the materials of his/her work, is sent to the Higher Attestation Commission, where the degree of Candidate of Science is officially conferred. The Higher Attestation Commission at the Ministry of Science and Higher Education

of the Russian Federation is the central body in the field of awarding academic degrees and scientific titles in the Russian Federation and ensuring a unified state policy in the field of state attestation of scientific and scientific-pedagogical personnel. A similar supreme attestation body existed in the Soviet Union and now exists in a number of post-Soviet countries. However, since the late 2010s, dissertation councils accredited by some world-renowned educational institutions, such as state universities in Moscow and St. Petersburg, as well as leading universities and research centres, have been exempted from the requirement to send defended dissertations to the Higher Attestation Commission for control. As of 2023, there are 29 such organisations.

Doctoral Studies

We have already written above that in Russia since Soviet times there is a two-level system of academic degrees, including the levels of candidate and doctor of sciences. A specialised subdivision of a university or research institution for training teaching and research staff of higher qualification – doctors of sciences is called doctoral studies. In other words, doctoral studies is a form of advanced training of persons in order to prepare them for doctoral degrees. Doctor of Sciences is the highest academic degree.

Doctoral studies can be established only in universities that have a council for the defence of dissertations for the degree of doctor of sciences in the chosen scientific specialty. The procedure for sending scientific and pedagogical workers to doctoral studies, requirements for employees, and the terms of stay in doctoral studies are established by the Regulations on Doctoral Studies (Government of the Russian Federation, 2014).

An employee who carries out scientific or pedagogical activity in the sending organisation, having:

- an academic degree of a candidate of sciences or an academic degree obtained in a foreign country recognised in the Russian Federation;
- at least 5 years of pedagogical and (or) scientific work experience;
- work experience in the sending organisation for at least 1 year;
- scientific achievements confirmed by the list of works published in peer-reviewed scientific publications;
- dissertation preparation plan.

Enrolment in doctoral studies is carried out on the basis of competitive selection. Preparation of a dissertation by a doctoral student is carried out within a period of up to 3 years on the basis of a contract between the doctoral student (or sending organisation) and the host organisation where the doctoral programme is functioning. The procedure for defending a doctoral dissertation is similar to the procedure for defending a candidate dissertation.

The requirements for a doctoral thesis have significant differences from the requirements for a candidate thesis and are defined in the Procedure for Awarding

Academic Degrees. For example, a candidate for a doctoral degree in pedagogy must publish at least 15 articles on the topic of dissertation research. All of them must be published in journals reviewed by the Higher Attestation Commission. It is also allowed to provide information about the received patents on the topic of the dissertation. The doctoral dissertation on pedagogy exceeds the candidate dissertation in volume and averages 300–350 pages. Content-wise, it is characterised by fundamentality and more significant scientific novelty. Theoretical and practical significance of the results of doctoral research should be confirmed by the contribution to the relevant branches of pedagogical science, as well as certificates of implementation in the practice of educational organisations. It is assumed that the doctoral student independently develops new methods of research, formulates new laws, works with previously unexplored material, etc. The results of the doctoral research should be confirmed by a contribution to the relevant branches of pedagogical science.

Conclusion

The system of training of scientific and pedagogical personnel of higher qualification in Russia has a long history and retains many traditional elements from the country's Soviet past. This is clearly seen in the still preserved two-tier system of academic degrees and strict state regulation of the processes of awarding academic degrees with the Higher Attestation Commission at the head. However, over the last two–three decades, the Russian system of training of scientific and pedagogical personnel of higher qualification, especially postgraduate studies, has undergone several waves of modernisation. Not all innovations have been successful, but many things have changed, most importantly, continue to change. It seems that the Russian system of training of scientific and pedagogical personnel of higher qualification cannot define its main function – it is aimed at training teachers of higher education or research scientists. Attempts to solve these problems simultaneously within the framework of the educational programme of postgraduate studies proved unsuccessful. As a result, the system abandoned the already implemented standards for training of higher education personnel, and also cancelled the adopted professional standard for teachers of higher education.

Nevertheless, there is an intensified work on increasing the productivity of postgraduate studies, on increasing the practical orientation of research results and on increasing the prestige and attractiveness of the system of higher education.

References

Federal Agency for Technical Regulation and Metrology. (2012). *National standard of the Russian Federation GOST R 7.0.11-2011 "Dissertation and abstract of the dissertation. Structure and design rules" (2011)*. http://www.iki.rssi.ru/rus/gost.pdf/

Government of the Russian Federation. (2013a). *Decree of the Government of the Russian Federation of September 24, 2013 N 842 (as amended on March 18, 2023) "On the procedure for awarding academic degrees" (together with the "Regulations on the awarding of academic degrees")*. https://www.consultant.ru/document/cons_doc_LAW_152458/8ec0e26195993d57a36a55b21f2a885226aca9f6//

Government of the Russian Federation. (2013b). *Regulations on the awarding of academic degrees*. https://www.consultant.ru/document/cons_doc_LAW_152458/3accc895434fd7ce6fd7d8f8a570ab064e960560/

Government of the Russian Federation. (2013c). *Regulations on the awarding of academic degrees*. https://www.consultant.ru/document/cons_doc_LAW_152458/3accc895434fd7ce6fd7d8f8a570ab064e960560/

Government of the Russian Federation. (2014). *Decree N 267 of 04.04.2014 "On approval of the Regulations on doctoral studies"*. https://www.consultant.ru/document/cons_doc_LAW_161545/8a8a49f1dfe01d779e2824f296feee6e86f6038d/

Government of the Russian Federation. (2021). *Decree of the Government of the Russian Federation of November 30, 2021 N 2122 "On approval of the Regulations on the training of scientific and scientific-pedagogical personnel in graduate school (adjunct)" (2021)*. https://base.garant.ru/403137971//

Higher Attestation Commission. (2016). *Regulations on the Higher Certification Commission under the Ministry of Science and Higher Education of the Russian Federation*. Official website of the Higher Attestation Commission. https://vak.minobrnauki.gov.ru/about#tab=_tab:polojenie~

Kazan (Volga region) Federal University. (2023a). *Educational process. Educational plans*. Official website of Kazan (Volga region) Federal University. https://kpfu.ru/postgraduate/obuchenie-v-aspiranture/uchebnye-plany/

Kazan (Volga region) Federal University. (2023b). *Orders on the attachment of persons for the preparation of a candidate's dissertation*. https://kpfu.ru/postgraduate/prikreplenie-lic-dlya-podgotovki-kandidatskoj/prikazy-o-prikreplenii-lic-dlya-podgotovki/

Kazan (Volga region) Federal University. (2023c). *Cost of attachment for preparation of a master's thesis*. https://kpfu.ru/postgraduate/prikreplenie-lic-dlya-podgotovki-kandidatskoj/stoimost-prikrepleniya-dya-podgotovki/

Martynova, S. V. (2022). *Postgraduate studies: A way out of the crisis is in sight*. Official website of the National Research University Higher School of Economics. https://issek.hse.ru/news/634783433.html

Ministry of Education and Science of the Russian Federation. (2014a). *Order No. 247 "On approval of the procedure for attaching persons to pass candidate exams, passing candidate exams and their list"*. https://base.garant.ru/70674050//

Ministry of Education and Science of the Russian Federation. (2014b). *Order No. 248 of March 28, 2014 "On the Procedure and deadline for attaching persons to prepare a dissertation for the academic degree of Candidate of Sciences without mastering programs for training scientific and pedagogical personnel in graduate school (postgraduate studies)"*. https://www.garant.ru/products/ipo/prime/doc/70552360//

Ministry of Education and Science of the Russian Federation. (2014c). *Order No. 902 of July 30, 2014. The Federal State Educational Standard of higher education training of highly qualified personnel in the direction of training 44.06.01 education and pedagogical sciences*.

Ministry of Education and Science of the Russian Federation. (2017). *Regulations on the council for the defense of dissertations for the scientific degree of Candidate of Sciences, for the scientific degree of Doctor of Science*. https://base.garant.ru/71825906/53f89421bbdaf741eb2d1ecc4ddb4c33/#friends/

Ministry of Labor and Social Protection of the Russian Federation. (2015). *Order No. 608n Professional standard: 01.004 "Teacher of vocational training, vocational education and additional vocational education"*. https://docs.cntd.ru/document/420304273

Ministry of Science and Higher Education of the Russian Federation. (2020). *Order No. 550 "On approval of the Procedure for holding a competition for the distribution of admission quotas among specialties and areas of training and (or) enlarged groups of specialties and areas of training for training in educational programs of higher education at the expense of budgetary allocations from the federal budget"*. https://rulaws.ru/acts/Prikaz-Minobrnauki-Rossii-ot-03.04.2020-N-550/

Ministry of Science and Higher Education of the Russian Federation. (2021a). *Order dated February 24, 2021 No. 118 "On approval of the nomenclature of scientific specialties…"*. Official publication of legal acts. http://publication.pravo.gov.ru/Document/View/0001202104060043

Ministry of Science and Higher Education of the Russian Federation. (2021b). *On approval of federal state requirements for the structure of training programs for scientific and scientific-pedagogical personnel in graduate school (adjunct), the conditions for their implementation, the timing of mastering these programs, taking into account various forms of training, educational technologies and the characteristics of certain categories of graduate students (adjuncts)*. Order of the Ministry of Science and Higher Education of the Russian Federation N 951. (2021, October 20) Official publication of legal acts. http://publication.pravo.gov.ru/Document/View/0001202111230037/

Ministry of Science and Higher Education of the Russian Federation. (2022). *There are over 87.7 thousand graduate students studying in Russia/Official website of the Ministry of Science and Higher Education of the Russian Federation*. https://minobrnauki.gov.ru/press-center/news/nauka-i-obrazovanie/46240/

Moscow Pedagogical State University. (2023). *Orders of MPGU*. Official website of MPGU. http://mpgu.su/aspirantura-2/prikreplenie-dissertacii-aspirantury/prikazyi//. Accessed on September 30, 2023.

Russian Academy of Education. (2023a). *List of current topics for dissertation research in the field of educational sciences*. http://rao.rusacademedu.ru/wp-content/uploads/2023/09/3_broshjura_perechen-aktualnyh-tematik-08.09_itog_redaktor-.pdf/

Russian Academy of Education. (2023b). *Methodological recommendations "Application of evidence criteria for dissertation research in the field of educational sciences"* (22 p.). Under scientific. ed. V. M. Filippova. RAO. https://vak.minobrnauki.gov.ru/uploader/loader?type=1&name=92648971002&f=20893/

Russian State Pedagogical University named after A. I. Herzen. (2023). *Attachment for the preparation of a dissertation for the scientific degree of Candidate of Sciences without mastering the program for training scientific and scientific-pedagogical personnel in graduate school*. https://www.herzen.spb.ru/about/struct-uni/contr/upravlenie-organizatsii-dissertatsionnykh-issledovaniy/prikreplenie-/index.php?sphrase_id=60601/

Terentiev, E. A., Bekova, S. K., & Maloshonok, N. G. (2018). The crisis of post-graduate studies in Russia: What bears problems and how to overcome them. *University Management: Practice and Analysis*, *22*(5), 54–66. https://doi.org/10.15826/umpa.2018.05.049

UNESCO Institute for Statistics. (2012). *International Standard Classification of Education ISCED 2011*. https://uis.unesco.org/sites/default/files/documents/international-standard-classification-of-education-isced-2011-en.pdf

Yakimovich, E. P., Surzhik, S. S., Doronina, N. A., & Semenova, D. V. (2018). Development of the system of the training highly qualified workers: Historical aspect. *World of Science. Pedagogy and Psychology*. [online] *6*(6). https://mir-nauki.com/PDF/39PDMN618.pdf

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Chapter 8

The System of Additional Professional Education of Teachers in Russia

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Abstract

The system of higher education in the Russian Federation due to the high share of fundamental training is focused on ensuring the foundation of permanent stability of the graduate, while the system of additional professional education is obliged to take into account the current state of the educational services market, which is characterised by globalisation, diversification, digitalisation and international integration. Therefore, the main focus of the modern system of additional professional education of teachers is the creation of favourable organisational, content, procedural and other conditions that contribute to the professional development and creative self-realisation of teachers, taking into account their individual needs and abilities. In this section, based on the analysis of normative documents and innovative experience of professional development and retraining of education specialists, the goals and objectives, structure and content, main development trends and modern training technologies, features of the internal system of quality assessment of additional professional education of teachers in Russia are disclosed.

Keywords: Additional professional education; teacher education; professional development; professional retraining; internships

Introduction

In the conditions of digitalisation of education, the educational process acquires new features – it becomes more technological, dynamic, creative. In this regard, continuous professional development becomes an attributive property of a modern teacher, and qualification itself acquires a new property – changeability (Adiguzel et al., 2023).

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The objective need for the continuous development of teachers has stimulated a marked increase in attention to the system of additional professional education (APE), which in today's complex and dynamic world performs the function of a flexible organisational mechanism for prompt response to the actual requests of teachers, heads of educational organisations and educational authorities at different levels (de-Armas-González et al., 2023; García et al., 2022; Vachkova et al., 2022).

What is the system of additional professional education of teachers in modern Russia? What are its goals and objectives, structure and content, main development trends and implementation technologies in the conditions of digitalisation of education? These questions are the subject of the authors' research.

To identify and describe the state and trends in the development of teachers' additional professional education in Russia, we used the methods of study, analysis and generalisation of normative documents regulating the system of education in Russia, scientific and pedagogical literature on the issues of additional education of teachers in recent years (2010–2023).

The results of the study will be presented in the following logic: the system of additional professional education as a basis for continuous professional development of teachers; modern trends in the development of additional professional education system in Russia; innovative technologies of teachers' training in the system of professional development; the system of additional professional education quality assessment.

System of Additional Professional Education as a Basis for Continuous Professional Development of Teachers

The Federal Law 'On Education in the Russian Federation' (2012) defines additional professional education as education received on the basis of higher or secondary vocational education, implemented in educational organisations of additional professional education and in structural subdivisions of educational organisations of higher and secondary vocational education on programmes of additional professional education. It is important to note that it is completed with the issuance to the listener of a document on the relevant additional professional education on the basis of final certification (Federal Law of 29.12.2012 No. 273-FZ 'On Education in the Russian Federation', 2012).

Goals and Objectives of Additional Professional Education

The purpose of additional professional education is to meet the educational and professional needs of a person, his professional development, as well as to ensure that the qualifications of the employee correspond to the changing conditions of professional activity and social environment. Achievement of the goal implies the solution of several main tasks.

The first task is to create conditions for meeting the educational and professional needs of a person. The educational needs of a person may be related to the

desire to obtain new knowledge and competencies that he/she were not able to master while receiving basic vocational education. For example, it can be knowledge in the field of psychology of communication, pedagogy of mentoring, foreign language, etc. Besides educational needs, a person may also have professional needs. For example, the need to master the knowledge and skills to apply modern information and computer technologies in professional activities. This may also include the need to master completely new professional competencies that are not related to the main types of his/her basic professional activities.

The second task is to provide a person with opportunities for professional development. Professional development of a person is a multi-vector process, including three vectors: horizontal development, which implies improvement of professional skills and abilities, while remaining at the same level (e.g. a teacher of the first, second category, etc.); vertical development, when a specialist, improving within the framework of his/her professional activity, moves up the career ladder (e.g. a teacher – deputy director – director – head of the department of education). For each of the identified areas of professional development, the additional professional education system should ensure the creation of necessary conditions for the individual.

The third task is to ensure that the qualification of an employee corresponds to the changing conditions of professional activity and social environment. This task is aimed at meeting the needs of the employer in the appropriate qualification of the employee, as well as the requirements of the developing society to moral and other qualities of the individual.

Types of additional professional education are: advanced training, professional retraining and internship (Federal Law, 2012: Part 76:2).

The professional development programme is aimed at improving and (or) obtaining new competence necessary for professional activity and (or) raising the professional level within the existing qualification. The programme of professional retraining is aimed at obtaining competence necessary for performing a new type of professional activity, acquisition of new qualification. The internship programme is aimed at the formation and consolidation in practice of professional knowledge, skills and abilities obtained as a result of theoretical training. The internship is individual in nature and in various forms of training provide independent work in production conditions, individual accounting and control of work performed, as well as group or individual consultations.

Programmes of additional professional education can be implemented in different *types of educational organisations*, which include: organisation of additional education – educational organisation, carrying out as the main purpose of its educational activity on additional general educational programmes; organisation of additional professional education – educational organisation, carrying out as the main purpose of its educational activity on additional.

According to the Law 'On Education in the Russian Federation' training on programmes of additional professional education can be carried out in different forms – both one-time and continuous, and in stages (discrete). Discrete training assumes the possibility of the student to pass the programme by means of mastering separate subjects, courses, disciplines (modules), practice, application of network forms, in the order established by the educational programme and (or) the agreement on education.

Mastering of additional professional educational programmes is completed by final attestation of students in the form determined by the organisation carrying out educational activity independently. Persons who have successfully mastered the relevant additional professional programme and passed the final attestation are issued a certificate of professional development and (or) diploma of professional retraining (Federal Law, 2012: Part 76:14; 15).

Currently in Russia there are 85 organisations of additional professional education of education workers of the subjects of the Russian Federation (institutes of education development and professional development and retraining of education workers and managerial staff), 8 autonomous centres of continuous professional development of pedagogical staff and more than 100 such centres in the structure of organisations of additional professional education and educational organisations of higher education, other organisations of additional professional education and educational organisations of higher education, other organisations of additional professional development and retraining of education workers and managerial staff.

Let's consider the structure of APE on the example of the system of additional professional education of teachers of Kazan (Volga Region) Federal University (KFU).

The local normative act regulating the field of additional education is the Regulation on the organisation and implementation of educational activities under programmes of additional professional education at Kazan Federal University (2019). The basis of the system of additional professional education at KFU consists of both individual structures that provide additional education and structural subdivisions of the main educational structures. According to the data as of the end of 2023, seven schools and centres belong to the separate structures of KFU additional professional education. In addition, each of the 12 Institutes and the Faculty of Law of KFU has one to four centres of additional education. For example, the Institute of Psychology and Education has four centres (advanced training and professional retraining; scientific and educational centre of pedagogical research; scientific and educational centre of practical psychology, ethnopsychology and intercultural communications: East-West (training centre); centre of continuous professional development of pedagogical staff). More than 90 professional development and professional retraining programmes for teachers are implemented here annually. Up to 10 thousand teachers are trained annually.

Professional development programmes are in the highest demand among students, which accounted for 82% of all trainees at KFU in 2022. This is due to the fact that short-term programmes are less costly for customers and more effective due to the fact that they allow promptly responding to new requests and requirements of employers. In addition, short-term professional development programmes are practice-oriented, as they are developed for specific tasks and requests.

About 18% of the total number of students at KFU are enrolled in *professional retraining programmes* for educational workers. However, it can be noted that in recent years there has been a trend of gradual growth of interest in professional retraining programmes (Kazan Federal University, 2019).

The growing demand for professional retraining programmes is associated with various factors. First of all, it is caused by structural changes in the Russian economy, characterised by the release of workers from the sphere of production and the growth of employment in the social sphere, including education. In addition, two other factors played a significant role: the introduction of professional standards and the reduction of the minimum volume of professional retraining programmes (at least 250 hours). The reduction of the minimum timeframe for mastering these programmes made them more attractive, as it affected not only the efficiency of obtaining new competence but also significantly reduced the cost of training. In view of the above, professional retraining programmes act as a convenient alternative to the second higher education.

Structure and Content of Programmes of Additional Professional Education

The solution of tasks of additional professional education is carried out through the implementation of an additional professional programme (APP), which is a document (or a set of documents) defining the educational content of a certain type of additional professional education.

The content of an additional professional programme is determined by the educational programme developed and approved by the organisation carrying out educational activities, taking into account the needs of the person, organisation, at the initiative of which additional professional education is carried out, the requirements of the following professional standards, qualification requirements specified in qualification directories for relevant positions, professions and specialties.

Since the additional professional programme is developed and approved by the educational organisation carrying out educational activities, it is also responsible for its quality and relevance. In addition, it is important to note that APP is developed taking into account the needs of those subjects at the initiative of which additional professional education is carried out: a particular person or organisation (Notova & Podosenova, 2021). In modern educational practice, on this basis, personalised APP that takes into account the needs of an individual employee and a particular organisation is actively developed. For example, a number of educational organisations of additional professional education in Russia organise professional development courses for teachers of a particular educational institution with a visit to the location of the educational institution or in the form of distance (remote) synchronous training. It should also be noted that more and more often the initiative of additional professional education comes from specific educational institutions.

In order to ensure that the content of programmes of additional professional education corresponds to the main trends of educational development (digitalisation, democratisation, humanisation, anticipatory nature, continuity), the requirements of modern principles of interdisciplinary integration, humanitarisation, dynamism, practice-orientation, personalisation, problematic, modularity, continuity and professional self-development of the individual are taken into account (Ferreira et al., 2013; Ha et al., 2021; Mongar, 2022).

Trends in the Development of the System of Teachers' Professional Development in Modern Russia

The study of the regulatory and legal framework and analysis of innovative experience allowed us to identify the following trends in the development of additional professional education: personalisation of educational programmes; digital transformation of additional professional education of teachers; practice-oriented training of teaching teams (team teaching); development of additional professional education quality assessment system.

Personalisation of Additional Professional Education Programmes

The Law 'On Education in the Russian Federation' stipulates the requirement that programmes of additional professional education should be built taking into account the interests, opportunities and needs of students (Federal Law, 2012: Part 76). The concept of training teachers for the education system for the period until 2030 provides for 'ensuring the retention of novice teachers in the profession, including through the construction of *individual routes of* postgraduate support together with educational organizations and employers' (Government of the Russian Federation, 2022).

These normative documents stimulated a rapid process of forming personalised (client-oriented) APP for teachers. What are the features of a personalised additional professional programme?

Firstly, each teacher has the opportunity to independently, based on his/her own interests and capabilities, develop the content of the training programme based on the choice of appropriate disciplines and modules. Secondly, the teacher can independently determine the schedule and sequence of mastering the selected disciplines and modules. Thirdly, each teacher can choose a convenient educational platform for his/her, necessary for mastering the training programme. Thus, the teacher forms an individual personalised educational programme (Decree of the Government of the Russian Federation, 2020).

The experience of implementing personalised APE has been accumulated in a number of universities and institutes in Russia (Gevorkyan et al., 2018, 2020; Plotnikova, 2022; Podchalimova & Belova, 2021; Yakovleva, 2019). Thus, for example, at the Institute of Continuing Education of the Moscow State Pedagogical University, the content of the teacher professional development programme is developed based on the principle of modularity, according to which a specific professional development programme is assembled from modules as completed didactic units. For reasonable formation of a set of modules by an individual student on the basis of diagnostics professional deficits (psychological, pedagogical, subject, methodological) of each teacher are revealed and on this basis a set of modules aimed at filling existing gaps and eliminating deficiencies is determined. The forms and time for mastering programs may vary depending on the requests of teachers, and, accordingly, each of them can build their own individual educational route.

Each set of modules necessarily includes a block for independent work, which involves solving cases and then discussing them with peers (Gevorkyan et al., 2020).

The composition of the diagnosed competencies is determined on the basis of the requirements of regulatory legal documents, professional standard of a teacher, expert opinion and analysis of pedagogical practice. For example, the list of diagnosed methodological competencies based on the professional standard of a teacher includes teacher's actions on: planning a training session, setting goals and objectives, creating a personal-developmental environment and building students' motivation to learn, using modern information technologies, forming students' universal learning activities (cognitive, regulatory and communicative), developing students' emotional and value sphere, using problem-based learning, selecting and applying the following methods.

The described model, as we can see, is aimed at the development of reflexive culture in each teacher, which implies the presence of such reflexive skills as the ability to self-assess the development of professional competencies, to identify positive and promising pedagogical techniques, to see shortcomings and find ways to overcome them.

In order to support the reflexive position of the teacher, *the* model provides for the organisation of *systemic feedback* involving: questionnaires and analysis of its results; finding out individual goals and needs; creating a space for questions and answers within the framework of the conducted lessons; mapping of development (personal growth, achievements, portfolio of successes (Gevorkyan et al., 2018)).

The implementation of a personalised additional professional programme implies the emphasis and fixation not so much of the conditions of educational work (terms, time, order of mastering, etc.) as its expected results in the form of formed competencies. For this purpose, a number of higher education institutions that implement APE programmes develop a profile of competencies for a specific category of teachers. Such experience has been accumulated at Kursk State University, where a module course 'Self-designing competence-oriented individual educational programs' (Podchalimova & Belova, 2021) is being implemented in the online format. This module is designed for teachers of general educational organisations and aims to develop their psychological, pedagogical, methodological, subject and communicative competencies in the conditions of digital transformation of additional professional education. A special feature of the project, which is of interest to teachers, is the fact that it is supposed to provide targeted personalised methodological support to teachers. It includes such measures as: diagnostics (and self-diagnosis) of professional competencies to identify problem areas; methodological assistance to the teacher at the stages of independent design and mastering of a personal educational programme using the capabilities of the electronic information educational environment of the university; methodological support of the teacher's activity in the process of applying modern interactive educational technologies and digital resources. This approach, as experience shows, contributes to more effective professional self-development of teachers.

It is important to pay attention to the fact that the analysed experience of professional development and self-development of teachers is based on the creation of conditions for creative self-realisation of each teacher, consideration and further development of his/her subjective experience, disclosure of innovative potential in the design and implementation of individual educational routes of professional growth.

Personalisation of the educational process in the system of additional professional education allows teachers: on the basis of independent identification of the level of possession of professional competencies and assessment of their own opportunities for their development, to develop and implement an individual programme for updating and improving the level of their professional competence; to get acquainted with the most effective trends in domestic and world pedagogical practice and theory; to update and supplement their own knowledge and acquire additional knowledge and skills; to develop and implement an individual programme for improving the level of professional competence; to develop and implement an individual programme for updating and improving the level of their professional competence.

The Moscow State Regional University implements a client-oriented (personalised) model of additional professional education of teachers, which takes into account the needs of a particular teacher and educational authorities of the Moscow region in the interrelation (Yakovleva, 2019). The model details the technology of its realisation in the form of six interrelated main stages, including: (1) monitoring of professional deficits in teachers; (2) formation of the need to overcome the identified professional deficits; (3) selection of proposals in the form of relevant VET programmes; (4) implementation of the relevant programme; (5) post-analysis of learning outcomes; and (6) organisational and pedagogical support of teachers, carried out through conferences, master classes, webinars open to teachers (Yakovleva, 2019).

The peculiarity of this model is the presence of such two stages as the formation of teachers' needs to overcome the identified professional deficits and organisational and pedagogical support of teachers after the completion of the educational programme. Organisational and pedagogical support of teachers allows not only to support new competencies formed in teachers but also to promote their professional self-development through the involvement of teachers in the forms of non-formal education – conferences, webinars, master classes, etc.

The following professional development and retraining programmes are in demand: 'Designing an inclusive educational space in an educational organisation'; 'Prevention of suicidal behaviour of children and adolescents'; 'Psychological and pedagogical aspects in working with migrant children: peculiarities of adaptation, learning and communication'; 'Teaching Russian to bilingual children in multi-ethnic classes'; 'Media education of a teacher under the requirements of professional standards' (Yakovleva, 2019).

One of the most demanded by teachers is the professional development programme for patriotic education and formation of civic position of schoolchildren 'Spiritual and moral culture' (History and culture of religions. Orthodoxy). The programme is focused on the development of listeners' understanding of the

meaning of culture as a form of human existence, the ability to solve the problems of education and spiritual and moral development of students' personality. The programme is also aimed at forming the teachers' attitude to be guided in their activities by basic cultural values, principles of tolerance and cooperation.

Despite its undoubted advantages, the personalised model of additional professional learning for teachers also has some *limitations, the* main one being that excessive emphasis on this model may lead to excessive isolation of trainees from personal communication among themselves.

Digital Transformation of Additional Professional Education of Teachers

It is impossible to imagine the modern educational process without the use of digital tools and technologies to solve various educational tasks. One of the distinctive features of digitalisation in education is the undeniable fact that the digital tools and technologies used in education are continuously updated, which requires the formation of teachers' readiness to master and use new digital tools. The latter includes smart technologies, which are being actively introduced in modern schools. Smart technologies are a set of e-learning tools based on a unified information educational platform. The composition of these tools is continuously updated and supplemented in connection with the development of technical and technological base. At the present stage, smart technologies include various electronic systems for assessing learning and education results, software, interactive whiteboards, document cameras and others.

Smart technologies have great opportunities for improving the efficiency of teacher labour. However, as research conducted among teachers of computer science in the Republic of Tatarstan (a sample of 75 people) shows, only 28% of teachers have little experience of working with an interactive whiteboard, even fewer teachers (12%) are familiar with new software. About 80% of teachers are not ready to use smart technologies to solve teaching and learning tasks: they do not have enough knowledge and skills, and most importantly, there is no desire to master and realise the great potential of smart technologies to enhance the capabilities of teachers and students in the educational process (Plotnikova, 2022).

In the advanced pedagogical experience, there is an active search for ways to develop teachers' readiness to use modern smart technologies in the educational process. One of the pioneers in this direction is KFU, which provides advanced training for teachers on the basis of the modern Edu Tech Centre. The head of this centre Plotnikova (2022) has developed and implemented in educational practice a modular programme of professional development for teachers 'Application of smart technologies in the educational process'. The modular structure of the programme allows each teacher, depending on his/her readiness level, to choose his/her own educational trajectory. The full course (96 academic hours) includes 10 modules, of which a debutant learns 7 modules, a master – 8 modules, a mentor – 10 modules. Mastering the course involves the use of active and interactive lectures, independent work, practical classes and various forms of control and evaluation.

The active lectures familiarise students with the composition, structure, software, role and place of smart technologies in the learning process. Here the components of smart-technology software (SMART Notebook, SMART Response, SMART Lab, SLS online), as well as the peculiarities of smart-technology application in the structure of a modern lesson, etc., are considered.

Practical classes and independent work are aimed at teachers' mastering the ways and techniques of developing various tasks for organising *interactive learning process* on the basis of smart technologies. For example, to create simulators for practicing students' skills and abilities, teachers create tasks using SMART Lab interactive templates, and to control students' knowledge at different stages of learning, they create test tasks, etc.

Implementation of the educational programme can be carried out both within the framework of concentrated learning technology (Ibragimov, 2010) and dispersed. As a rule, the concentrated form is used when the programme is mastered by a team of teachers from one educational organisation directly within the school. In this case, the main invariant organisational structure is a training block, including an interrelated set of forms of learning organisation (lecture – independent work – practical training – mini-credit), implemented simultaneously within a 2–6-hour class.

Experimental work to test the described professional development programme, conducted over several years (2014–2023) showed its effectiveness by such criteria as the development of aspiration to master smart technologies and the improvement of the quality of relevant knowledge and skills to apply them in the learning process (Plotnikova, 2022).

It should be noted that due to the close connection of the Edu Tech Centre with the companies supplying the latest smart technologies in the education system, the programme is promptly updated, which allows to acquaint students with the pedagogical possibilities of the most relevant digital technologies.

In the conditions of total digitalisation of production and social processes, various formats of *distance learning* with the use of digital tools and technologies began to play a significant role in the system of professional retraining. The distance format has a number of advantages that make this form the most demanded in the system of additional professional education. These include: the opportunity to obtain additional or new competencies at the place of residence and work; saving material and financial resources; individual training schedule, taking into account the capabilities of each student; the opportunity to receive prompt feedback from the instructor, etc. The distance learning format has a number of advantages.

However, studies have shown that the implementation of programmes of additional professional education using only distance education technologies requires a longer period of time to master these programmes compared to the traditional format. This is due to the fact that training is often on-the-job training. Therefore, in order to ensure high quality, the implementation of these programmes is carried out in a mixed format, which involves a combination of traditional and distance forms of training organisation.

The processes of digitalisation in the system of additional professional education are manifested in the development and implementation of educational programmes aimed at the formation of digital competencies in teachers. It should be noted that due to the specifics of the system of additional professional education, educational programmes are developed by universities independently and approved by the developers themselves. Therefore, there are many additional educational programmes on various topical aspects of professional development in the educational space. One of the most relevant areas is professional development in the field of digital technologies.

An interesting experience has been accumulated at the Faculty of Philosophy of Lomonosov Moscow State University, where a professional development programme for teachers 'Digital Pedagogy of the Modern University' is being implemented (Bryzgalina et al., 2021).

The structure of the programme (36 academic hours) includes three modules devoted to the issues of digital transformation of education (module 1); digital competencies of a modern teacher (module 2); psychological peculiarities of communication in the conditions of distance learning (module 3).

This programme is noteworthy because the authors of the programme develop teachers' understanding that the choice of educational technologies is conditioned by ideas about the values and objectives of university education. In this regard, the peculiarities of online course design are revealed depending on the concept underlying the organisation of the educational process: behaviourist, cognitive or connectivist.

It is also noteworthy that the programme is focused on developing the trainees' skills of mastering the methods of assessing the reliability of information obtained on the Internet, which often becomes its priority source. Thus, for example, it is proposed to give trainees the following task: 'find unreliable information on a given topic posted on the Internet. Justify their unreliability' (Bryzgalina et al., 2021). Periodic setting of such tasks contributes, as the authors note, to the development of the ability to choose reliable information from a huge array of information, the culture of critical thinking.

We cannot but agree with the authors' conclusion that, affecting the educational environment, transformation processes do not change the essence of education, but affect the functions of the teacher. New functions appear, manifested in the fact that in the new educational environment the university teacher becomes a 'creator of learning experience', a creator of 'development programs for students' (Bryzgalina et al., 2021).

Practice-Oriented Learning for Teaching Teams

What do we mean when we talk about practice-oriented training of teachers? First of all, it means that the result of training should be the readiness of the trainee to meet the continuously updated requirements of the state, society, production and service sector to the education system. This can be ensured if the design and implementation of APP is carried out in close partnership and coordinated

interaction between the university and secondary schools in the region. This approach allows to respond promptly and reasonably to the actual demands of the general education school and its teachers.

In such interaction between higher education institution and general education school, a clear algorithm of designing and implementing the additional professional programme is built up, including the following stages: identification of the key tasks of the school on the basis of diagnostics (development of actual competences of teachers; preparation for implementation of new pedagogical technology, etc.); formation of an order from the school to the higher education institution for the development of an additional professional programme; development of an additional professional programme by the higher education institution and its coordination with the customer; conducting training for teachers on the developed programme; development of a program of additional professional education by the university and its coordination with the customer; conducting training for teachers on the additional professional programme; development of an additional professional programme for the general education institution.

For example, scientists of the Moscow City State Pedagogical University in cooperation with teachers of general education schools in Moscow revealed a discrepancy between the need to form meta-subject competencies in basic school students, which required coordinated activities of teachers of different subjects working in a particular class – on the one hand, and the lack of such interaction in the actual practice of the school – on the other hand. Hence, a *practical problem* arose: how to teach teachers working in the same parallel to work as a team for purposeful and coordinated formation of students' universal learning activities.

In order to respond to this request of educational practice, an additional professional programme 'Technologies for the formation of metacognitive competencies of students of general educational organizations' (Gevorkyan et al., 2018), focused on the formation of teaching *teams*, was developed. The pedagogical team includes teachers working with one group of students who have identified specific problems due to insufficient interaction between teachers. The team also includes deputy directors for educational and upbringing activities, the head of the school methodological association, and educational psychologist.

The learning process is organised in such a way that teams of teachers develop a pedagogical project, offer options for solving the identified problem taking into account the peculiarities of their subject area, and form a system of tasks for students. Such coordinated work aimed at the development of certain skills of students is carried out for a certain period of time. At the end of the project there is a reflection, during which the results achieved are analysed and evaluated, as well as self-assessment.

It is important to pay attention to the fact that the implementation of the described model contributes to the creation of an educational environment that encourages creativity and provides each teacher with a new experience of team interaction (Gevorkyan et al., 2018).

Innovative Technologies of Educators' Training in the Professional Development System

It is known that the effectiveness of additional professional education is influenced not only by the quality of the content of programmes of additional professional education but also by the teaching technologies used to implement these programmes. Based on the analysis of studies (Klarin, 2016; Shestak & Podymova, 2015) and modern trends in the development of education, we have identified several generalised pedagogical technologies implemented in the system of additional professional education of teachers. Let us consider them in more detail.

Technology of Blended Learning

One of the developing organisational models of pedagogical process is blended learning, which involves a combination of face-to-face contact and remote distance forms of learning. According to the estimates of experts (Isaev, 2016; Margolis, 2018; Shestak & Podymova, 2015; Timchenko, 2019), blended learning is one of the trends of modern education and will remain so in the next decade.

The experience of professional development of university teachers based on the blended learning model has been accumulated in a number of educational organisations of higher education in Russia. One of them is the experience of Novosibirsk State Technical University (NSTU) (Astashova & Legan, 2018), where the programme 'Designing the educational process of blended learning based on the technological map' is designed and implemented. The methodology of designing the educational process in blended learning proposed in the programme involves several stages.

At the first stage, students design independent work, in which part of the classes are transferred to the information and electronic environment of the university. The hourly load is distributed at the discretion of the students, evaluation activities and evaluation criteria are also thought out and recorded (Table 8.1).

Table 8.1. Evaluation Activities and Evaluation Criteria.

Training Activity, Hours		**Designing**		
Event (Example)	**Hours**	**Electronic Environment/ Auditorium**	**Evaluation Activity**	**Criteria**
Practical work				
Laboratory work				
Coursework				
Working with virtual simulators				
Essays et al.				

Then, during the *second stage, the* goals and objectives of the course are formulated on the basis of identification and analysis of the needs sphere and the basic level of knowledge and skills of students. At the *third stage*, forms, methods and means of organising learning activities in the format of blended learning are developed. At the *fourth stage*, students master the techniques and methods of creating tools of virtual reality and interactivity. This can be the development of a multimedia resource using Flash technology, wiki-document, podcast in order to ensure interaction with students, as well as students among themselves. The *fifth stage is* related to the definition by teachers of criteria for assessing the quality of the developed materials and the training course as a whole.

Experimental work on testing this technology allowed us to conclude that it allows teachers to provide flexibility in the learning process, involvement of students throughout the course, optimise the organisation of students' independent work and thus improve the quality of learning (Astashova & Legan, 2018).

Technology of Concentrated Learning

Historical and theoretical foundations and models for the implementation of this technology were developed and justified in the early 1990s of the last century by G.I. Ibragimov (2010). This technology is aimed at improving the efficiency of the educational process by optimising the organisational structure of the educational process. The organisational structure of the educational process is understood as the composition, combination and temporal sequence of study of academic disciplines within the framework of various forms of learning organisation (lectures, seminars, etc.). The traditional organisational structure of the learning process assumes that the student simultaneously learns a lot of sometimes heterogeneous disciplines, and the study of one academic discipline is noticeably stretched in time. Such organisation of training leads to the scattering of students' attention and does not contribute to the deepening of students in the content of a particular discipline, etc.

Concentrated learning allows to remove these disadvantages, as it involves reducing the number of simultaneously studied disciplines and due to this provides concentration of students' attention on studying and mastering the necessary knowledge, skills and competencies.

The idea of concentrating students' attention on the studied learning material is realised in different ways, depending on the model of concentrated learning used. In the studies of Ibragimov (2010), the models of concentrated learning are proposed and justified, differing in the degree of concentration, which depends on two factors: the number of simultaneously studied disciplines and the time allocated for their study. Taking this into account, three basic models of concentrated learning are distinguished: the 'immersion' model – studying one subject in full for a certain period of time; the 'study day' model, in which the number of disciplines studied is reduced within a school day (no more than two); the 'modular' model, which assumes simultaneous and parallel study of no more than three or four

disciplines forming a module aimed at the formation of a certain professional competence.

The most important condition for the effectiveness of concentrated learning in the system of additional professional education of teachers is the mandatory combination of active and interactive forms, methods and means of learning in the educational process (problem lectures and seminars, analysis of practical situations, business, role-playing and other types of games, smart tools, etc.). The variety of methods and means of learning with the dominant content of the studied material contribute to maintaining the attention of students at all stages of learning, develops critical thinking, teamwork and communication skills (Ibragimov, 2010).

The technology of problem-modular learning has the purpose of assimilation of knowledge by students in a system characterised by the application of the principle of problematic in the structure of the modular programme. The peculiarity of this type of problem-based learning is the integration of the contradictory content of subjects in the modular programme with the techniques and methods of problem-based learning of the material (Choshanov, 1996).

The problem module as a content unit of this technology structurally consists of two substructures (invariant and variant), including different blocks of learning elements. The invariant substructure includes blocks: 'input', 'generalisation', 'theoretical', 'generalisation' and 'output'. It is mandatory for all trainees, as it is aimed at ensuring the normative requirements. The variable substructure consists of blocks of training elements that take into account the level of basic training of listeners, their needs and interests. It is formed on the basis of the results of the entrance control.

The technology of contextual learning is aimed at the development of professional competencies of students by immersing them in the socio-professional context of pedagogical activity. For this purpose, the system of forms, methods and means is used to model the subject and social content of a specialist's pedagogical activity. The subject content of future professional activity is provided mainly by the educational material of disciplines that are part of the theoretical and practical training of students. As for the social context, it is mastered through the inclusion of students in various types of activities: academic learning activities, educational-professional and quasi-professional activities.

The main unit of work with learning content is a problem situation, solved in the process of joint activity and dialogical communication of participants of the educational process (Verbitsky, 2006). For this purpose, a system of active and interactive forms and methods of teaching is provided, modelling the social context of professional activity. Let us pay attention to the fact that the control of learning outcomes in this technology involves the diagnosis and assessment of not so much the level of knowledge assimilation as the level of formation of individual fragments of activity or activity (cognitive, communicative, etc.) as a whole. For this purpose, the means of intermediate and output control are tasks for analysing specific practical situations, observation and evaluation of teamwork skills during the educational-business game, etc.

In this way, the student's assimilation of theoretical knowledge is superimposed on the 'canvas' of professional activity.

Development of Quality Assessment Systems for Additional Professional Education

Purposeful management of the quality of additional education of teachers objectively requires the presence of an internal system of quality assessment of additional professional education in the educational organisation (Federal Law, 2012: Part 28(13)). What does it represent?

The purpose of the system of quality assessment of additional professional education is to ensure compliance of educational achievements of students, quality of content and conditions of its implementation with the requirements and demands of students, society, state and employers. For this purpose, the system should provide mechanisms for objective measurement and correlation of the process and results to the relevant requirements.

Achievement of this goal is connected with the solution of the following *tasks*: identification of the most important directions of additional professional education development in the context of the national project 'Education'; identification and description of specific skills, abilities and competencies as learning outcomes, allowing to really contribute to the professional growth of trainees; ensuring the development of subject, psychological, pedagogical, methodological and communicative competencies of trainees.

The design of an internal quality assessment system for additional professional education is a process that includes four main stages that meet the requirements of productive activity methodology and quality management system (Podchalimova & Belova, 2019).

The first stage (conceptual) implies the substantiated determination of actual demands and needs of educational workers. Based on the results of monitoring studies in the education system, as well as special studies, professional deficits of teachers are identified; the main contradiction is identified; the problem, goal and objectives are formulated; and the choice of evaluation criteria is justified. Also at this stage, a list of products that meet the needs of users and customers of programmes of additional professional education is developed; organisational structures of the system of quality assessment of additional professional education are formed. The *second stage (technological preparation)* involves the development of normative support of the internal system of quality assessment of VET, plan-schedule of monitoring studies of additional professional education quality for a calendar year. Depending on the level of educational process organisation, the subjects of additional professional education quality assessment are: at the level of educational organisation – Council on the quality of scientific and educational activity; at the level of institutes, faculties – Scientific and Methodological Council; at the level of department – methodological commissions of departments; at the personal level – self-assessment of students. The *third stage (realisation)* provides for the implementation of the developed projects at

different levels – educational institution, structural subdivision, training session, personal. At the *fourth stage* (reflection), self-examination and self-analysis are carried out, as a result of which the issues requiring various kinds of changes – correction, improvement, strengthening, etc. – are identified.

A systematic and purposeful internal system of additional professional education quality assessment acts as an organisational and pedagogical mechanism that encourages the improvement of the educational process – its content, forms, methods, means and conditions in unity.

An important condition for the effective implementation of the internal quality assessment system of additional professional education is the compliance of the teaching staff with the normative and current requirements. Taking into account the fact that the requirements are continuously updated and complicated, there is a task to organise training of teachers themselves. Such training is carried out in different formats: formal, non-formal and informal training.

The role and place of such training for teaching staff is not only to ensure that their activities meet the requirements. It is also important because it contributes to the formation of a unified understanding of the internal quality assessment system of additional professional education, common criteria and indicators and, on this basis, common approaches to the diagnosis of professional competencies of teachers at all stages (input, current, final, delayed).

Conclusion

The system of professional development and professional retraining of teachers, due to its objectively inherent advantages (readiness to respond more quickly to the constantly changing and increasingly complex requirements of the state, society, employers and teachers themselves; direct connection with practice; short training periods; higher criticality and motivation to master innovations) acts as the most mobile link in the overall system of continuing education, designed to solve the problems of ensuring compliance with the qualifications of teachers.

At the same time, we emphasise one important aspect that, in our opinion, requires special research. It is about the fact that the system of additional professional education practically does not address the issues of teachers' pedagogical self-awareness development, formation of abilities to self-analysis of professional activity and professional self-development. Meanwhile, these components of pedagogical labour should be an important task of additional professional education, because, being extremely important for a modern teacher, they are practically not formed and cannot be formed purposefully in the system of basic pedagogical education. The fact is that professional self-awareness and self-determination in the teaching profession require direct inclusion in real pedagogical activity. And it is not a one-time or even within two or three months of inclusion in professional activity, but a long-term experience of pedagogical activity in the position of an active teacher. Only in these conditions a teacher really gets into the essence of pedagogical activity, as he/she does not just give lessons or conducts educational activities, but lives all the nuances of professional

activity from within, as he/she faces real difficulties and problems, directly looks for ways to solve and overcome them, participates in real processes of pedagogical interaction with students, colleagues, school administration, develops an individual style of pedagogical activity. Such experience cannot be acquired in the course of pedagogical practice, no matter how long it was. It follows that professional self-awareness and reflexive abilities of a teacher cannot be formed in principle in the process of basic training. This is one of the important tasks of the system of additional professional education of teachers.

References

Adiguzel, T., Kaya, M. H., Bulut, M. A., Mete, S. E., & Nalkesen-Akin, Y. (2023). Integrating cognitive presence strategies: A professional development training for K-12 teachers. *Contemporary Educational Technology*, *15*(2), ep417. https://doi.org/10.30935/cedtech/12987

Astashova, T. A., & Legan, M. V. (2018). Povysheniye kvalifikatsii v oblasti proyektirovaniya kursov pri smeshannom obuchenii [Advanced training in the field of course design in blended learning]. *Pedagogika*, *1*, 86–94.

Bryzgalina, E. V., Alekseeva, D. A., & Dreeva, E. D. (2021). Tsifrovyye transformatsii pedagogiki: Opyt povysheniya kvalifikatsii [Digital transformations of pedagogy: Experience in advanced training]. *Vysshee obrazovanie v Rossii*, *30*(5), 161–167. https://doi.org/10.31992/0869-3617-2021-30-5-161-167

Choshanov, M. A. (1996). *Gibkaya tekhnologiya problemno-modul'nogo obucheniya: Metodicheskoye posobiye* [*Flexible technology of problem-modular training: Methodological manual*]. Narodnoye obrazovaniye.

de-Armas-González, P., Perdomo-Díaz, J., & Sosa-Martín, D. (2023). Peer assessment processes in a problem-solving activity with future teachers. *Eurasia Journal of Mathematics, Science and Technology Education*, *19*(4), em2245. https://doi.org/10.29333/ejmste/13057

Decree of the Government of the Russian Federation. (2020). *On the state information system "Modern digital educational environment"*. November 16, 2020, No. 1836. https://base.garant.ru/74922854/

Federal Law of 29.12.2012 No. 273-FZ "On Education in the Russian Federation". (2012). https://www.consultant.ru/document/cons_doc_LAW_140174/

Ferreira, C., Baptista, M., & Arroio, A. (2013). In-service training of chemistry teachers: The use of multimedia in teaching chemistry. *Eurasia Journal of Mathematics, Science and Technology Education*, *9*(3), 301–310. https://doi.org/10.12973/eurasia.2013.937a

García, J. M. G.-V., García-Carmona, M., Trujillo Torres, J. M., & Moya-Fernández, P. (2022). Teacher training for educational change: The view of international experts. *Contemporary Educational Technology*, *14*(1), ep330. https://doi.org/10.30935/cedtech/11367

Gevorkyan, E. N., Ioffe, A. N., & Shalashova, M. M. (2020). Diagnostika pedagoga: Ot kontrol'nogo izmereniya k opredeleniyu defitsitov dlya professional'nogo rosta [Diagnosis of a teacher: From control measurement to determination of deficits for professional growth]. *Pedagogika*, *1*, 74–86.

Gevorkyan, E. N., Ioffe, A. N., & Shalashova, M. M. (2018). Povysheniye kvalifikatsii pedagogov: Podkhody i aktsenty rezul'tativnosti [Increasing the qualifications of teachers: Approaches and accents of effectiveness]. *Pedagogika*, *6*, 70–77.

Government of the Russian Federation (2022). *Kontseptsiya podgotovki pedagogicheskikh kadrov dlya sistemy obrazovaniya na period do 2030 goda* [*The concept of training teachers for the education system for the period until 2030*]. Approved by Order of the Government of the Russian Federation dated June 24, 2022 No. 1688-r. http://static.government.ru/media/files/5hVUIZXA2JMcPrHoJqfohMeoToZAwtA5.pdf

Ha, H. T. L., Pham, A. T. K., Nguyen, H. T., & Duong, H. T. T. (2021). Training pedagogical skills: Evaluation of lecturers and teacher training students at educational universities in Vietnam. *Eurasia Journal of Mathematics, Science and Technology Education*, *17*(12), em2054. https://doi.org/10.29333/ejmste/11418

Ibragimov, G. I. (2010). *Kontsentrirovannoye obucheniye* [*Concentrated training*]. Tsentr innovatsionnykh tekhnologiy.

Isaev, E. A. (2016). Ispol'zovaniye elektronnogo obucheniya v realizatsii programm professional'noy perepodgotovki [The use of e-learning in the implementation of professional retraining programs]. *Professional'noye obrazovaniye v Rossii i za rubezhom*, *2*, 127–131.

Kazan Federal University. (2019). *Regulations on the organization and implementation of educational activities for additional professional programs in the federal state autonomous educational institution of higher education "Kazan (Volga Region) Federal University"*. https://kpfu.ru/do/normativnoe-obespechenie/polozheniya-i-reglamenty-kfu/dopolnitelnoe-obrazovanie-391602.html

Klarin, M. V. (2016). Instrument innovatsionnogo obrazovaniya: Organizatsionno-deyatel'nostnaya pedagogika [Tool of innovative education: Organizational and activity-based pedagogy]. *Nepreryvnoye Obrazovaniye: XXI vek*, *1*(13), 86–103.

Margolis, A. A. (2018). Chto smeshivayet smeshannoye obucheniye? [What mixes up blended learning? *Psikhologicheskaya nauka i obrazovaniye*, *23*(3), 5–19.

Mongar, K. (2022). Teachers' preparedness to teach environmental science in Bhutan. *Eurasia Journal of Mathematics, Science and Technology Education*, *18*(10), em2166. https://doi.org/10.29333/ejmste/12454

Notova, S. V., & Podosenova, I. A. (2021). Sistema DPO kak osnova nepreryvnogo professional'nogo obrazovaniya [Further education system as the basis of continuous professional education]. *Vysshee obrazovanie v Rossii*, *30*(8–9), 134–143.

Plotnikova, L. A. (2022). *Razvitiye gotovnosti pedagogov k ispol'zovaniyu smart-tekhnologiy v uchebnom protsesse* [*Development of teachers' readiness to use smart technologies in the educational process*]. Unpublished Doctoral Dissertation, Kazan Federal University. https://www.dissercat.com/content/razvitie-gotovnosti-pedagogov-k-ispolzovaniyu-smart-tekhnologii-v-protsesse-obucheniya

Podchalimova, G. N., & Belova, S. N. (2019). Vnutrennyaya sistema otsenki kachestva dopolnitel'nogo professional'nogo obrazovaniya [Internal system for assessing the quality of additional professional education]. *Pedagogika*, *10*, 27–35.

Podchalimova, G. N., & Belova, S. N. (2021). Metodika personalizirovannogo povysheniya professional'noy kompetentnosti pedagogov v usloviyakh tsifrovoy transformatsii DPO [Methodology for personalized improvement of professional competence of teachers in the conditions of digital transformation of further education]. *Pedagogika*, *4*, 72–81.

Shestak, N. V., & Podymova, N. M. (2015). Realizatsiya obrazovatel'nykh programm s primeneniyem distantsionnykh obrazovatel'nykh tekhnologiy [Implementation of educational programs using distance learning technologies]. *Vysshee obrazovanie v Rossii*, *7*, 131–140.

Timchenko, V. V. (2019). Rol' DPO v formirovanii kompetentsiy budushchego v innovatsionno-obrazovatel'noy srede [The role of additional vocational training in the formation of competencies of the future in the innovative educational environment]. *Dopolnitel'noye professional'noye obrazovaniye v strane i mire*, *1*(43), 29–38.

Vachkova, S. N., Petryaeva, E. Y., Tsyrenova, M. G., Shukshina, L. V., Krasheninnikova, N. A., & Leontev, M. G. (2022). Competitive higher education teacher for the digital world. *Contemporary Educational Technology*, *14*(4), ep391. https://doi.org/10.30935/cedtech/12553

Verbitsky, A. A. (2006). Kontekstnoye obucheniye v kompetentnostnom podkhode [Contextual learning in a competency-based approach]. *Vysshee obrazovanie v Rossii*, *11*, 39–46.

Yakovleva, N. I. (2019). Kliyentooriyentirovannaya model' dopolnitel'nogo professional'nogo obrazovaniya pedagogov v MGOU [Client-oriented model of additional professional education for teachers at Moscow State Educational Institution]. *Pedagogika*, *3*, 100–110.

Chapter 9

Preparing Teachers for Work in an Ethnocultural Environment

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Abstract

This chapter presents the research findings of the study aimed at identifying the features of the content of teacher training for working in ethnocultural environment. This content depends on the language policy and geopolitical processes taking place in the world. Modern ethnocultural training at universities should include the flow of continuous transformation and development of the content and methods of teaching: the actualisation of only innovative or digital methods makes young teachers powerless when faced unpredictable ethnocultural situations in pedagogical practice.

The effectiveness of teacher training for ethnocultural education depends on properly constructed bilingual, multicultural, civic and patriotic education. The foundation of this training should be a properly formed national-cultural code, the indicators of which are ethnocultural knowledge, mechanisms of understanding, feelings, behaviour and self-realisation. The multicultural (intercultural) environment in the modern world is being transformed: the degree of use of native languages in Russia and abroad is decreasing. To prepare teachers to work in this changing environment (based on the principles of dialogue of cultures, languages equality, recognition of the right to speak and receive education in their native language), it is necessary to restructure the content and system of teacher training, the content of educational and methodological materials, taking into account the real facts of ethnogenesis.

Keywords: Teacher training; ethnocultural environment; state bilingualism; national cultural code; multicultural environment; native language

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Introduction

The content of national education is influenced by Russia's multi-ethnic structure, religious diversity, specifics of personnel training in universities and specifics of national education in regions.

According to Rosstat, 142,856,536 people live in Russia, seven peoples of the Russian Federation with a population of more than one million people: Russians, Tatars, Ukrainians, Bashkirs, Chuvash, Chechens and Armenians. At the same time, according to Rosstat estimates, at least 194 peoples live on the territory of Russia (Rosstat, 2023).

The peoples inhabiting the Central part of Russia (Central Volga region) use their native languages as state languages. Therefore, multilingualism is the most important characteristic of Russia's cultural diversity. This diversity affects pedagogical education, the peculiarities of self-realisation of the language personality of the future teacher in a bilingual or multilingual environment. As a result, teacher education becomes a special problem in the multicultural development of Russia.

To reveal the features of teacher training in Russia, it is necessary to analyse:

- multinational structure of Russia;
- state policy in the field of ethnocultural education, its practical implementation in the activities of universities;
- features of national education using the example of one of the main subjects of Russia – the Republic of Tatarstan;
- the prevailing types of bilingualism in the national education of the constituent entities of Russia;
- the evolution of the content and methods of ethnocultural training of teachers in Russian universities;
- main directions of training teachers to work in an ethnocultural environment;
- trends and prospects for the development of the system of ethnocultural pedagogical training in Russian universities.

Multi-Ethnic Structure of Russia

Modern Russia is a multi-ethnic state, as reflected in its Constitution more than 190 ethnic groups live on the territory of Russia, including indigenous small peoples of the country.

The population of the Russian Federation is predominantly Russian, Tatar, Chechen, Bashkir, Chuvash, Avar, Armenian, Ukrainian, Dargin and Kazakh. Russians make up 80.85% or 105.6 million out of 130.6 million who identified their nationality, while representatives of other nationalities account for 19.15% or 25 million people. The number of people who did not specify their nationality was 16.6 million (or 11.3% of the total population of 147.2 million) (Rosstat, 2023).

The Middle Volga region and the North Caucasus are the most multi-ethnic regions in Russia. In the Middle Volga region, Russians predominate with 19,811,351 (66.26%), followed by Tatars – 3,999,568 (13.38%), Bashkirs – 1,282,794 (4.29%), Chuvash – 1,272,790 (4.26%), Mordovians – 617,050 (2.06%), Udmurts – 497,214 (1.66%), Mari – 473,015 (1.58%) and others (Rosstat, 2023). They live in the constituent entities of the Russian Federation – Tatarstan, Bashkortostan, Chuvashia, Mordovia, Udmurtia, Mari El.

In the North Caucasus, Russians also predominate with 2,857,851 (28%), followed by Chechens – 1,586,720 (15.6%), Kabardins – 502,817 (5%), Ingush – 501,544 (5%), Ossetians – 455,765 (4.4%), Karachays – 222,211 (2.2%), Lak – 165,737 (1.6%), Balkars – 122,831 (1.2%), Circassians – 88,075 (0.86%) and others (Rosstat, 2023). They also live densely in their republics – the Chechen Republic, Kabardino-Balkaria, Ingushetia, North Ossetia, Karachay-Cherkessia, Dagestan and others.

Russians predominate in the national composition of Siberia – 16,542,506 (85.91%), followed by Buryats – 442,794 (2.30%), Tuvinians – 259,971 (1.35%), Altaians – 72,841 (0.38%), Khakassians – 70,859 (0.37%), Shors – 12,397 (0.06%), Koreans – 11,193 (0.06%), Evens – 10,243 (0.05%), Jews – 9,642 (0.05%) and others (Rosstat, 2023). These ethnic groups are concentrated in the subjects of the Russian Federation of the Siberian Federal District – in Buryatia, Tuva, Altai, Khakassia, the Jewish Autonomous Region and others.

Russians also predominate in the Far East – 4,964,107 (78.88%), followed by Yakuts – 469,897 (7.47%), Koreans – 56,973 (0.91%), Evens – 27,030 (0.43%), Evenks – 22,172 (0.35%), Chukchi – 15,396 (0.24%), Nanai – 11,784 (0.19%), Buryats – 10,942 (0.17%), Chinese – 8,788 (0.14%), Koryaks – 7,723 (0.12%) and others (Rosstat, 2023). In the Far Eastern Federal District, most of the subjects have access to the sea. The federal district borders Mongolia, China and North Korea by land, and Japan and the United States by sea.

Migrants complement the national composition of Russia. According to statistics (Rosstat, 2023), in the first quarter of 2023, 1.3 million foreigners (mostly from the CIS countries, more precisely from Central Asia: Uzbeks – 630,000, Tajiks – 340,000, Kyrgyz – 172,000) came to Russia in search of work. This is one and a half times more than in 2022 when during the same period, 841,000 foreign people arrived in Russia in search of work. The flow of labour migrants is distributed unevenly throughout Russia, with approximately 40% going to Moscow and the Moscow region, and 12% to St. Petersburg and the Leningrad region.

In such circumstances, the training of teachers to work in a multicultural environment requires coordinated and balanced national policies from the country's leadership and the constituent entities of Russia.

Russia is a secular state, but the population of the country has a constitutional right to freedom of conscience and freedom of religion. Among the professed religions, the primary ones are world religions: Christianity, Islam and Buddhism. National religions (Judaism) and traditional beliefs (shamanism, clan cults) also play an important role.

The peoples of Russia practice various religions, both world religions (Christianity, Islam and Buddhism) and national religions (Judaism) and traditional beliefs (shamanism, clan cults). About 74% of the country's population consider themselves representatives of religious confessions. The overwhelming majority of believers in Russia adhere to Orthodoxy. This includes not only Slavic peoples (Russians, Ukrainians, Belarusians) but also Finno-Ugric peoples. Islam is the main religion of Turkic peoples and the North Caucasus language family (except for Ossetians). Mongolian peoples practice Buddhism (Rosstat, 2023).

As for Tatarstan, in many Tatar mosques in the republic, courses are held on reading the Quran's basics in Arabic. Several hundred people attend them. Over the past 3 years (2021–2023), courses on learning the Tatar language have been held in mosques for 327 people. These are predominantly adults who try to introduce their children or grandchildren to the values of national culture (Rosstat, 2023).

Thus, in modern conditions in Russia, religious upbringing intertwines with national culture.

State Policy of Ethnocultural Education in the Practical Activities of Universities

Ethnocultural education in Russia has always been considered both in educational science and in educational practice as a multicultural education. Multiculturalism in Russia (in the post-October period, since 1918) has always meant equality of national languages and cultures, the right of every nation to speak and receive education in their native language.

However, until now, the *problem* of bilingual personality development in all educational institutions (especially in pedagogical ones) is considered as a complex problem, sometimes unsolvable. Until now, graduates of pedagogical universities with a good command of their native language feel insufficiently comfortable when switching to Russian (they make communicative and various speech mistakes), experience serious difficulties in organising the education process by means of two languages, literatures, cultures.

The state strategy of ethnocultural and multicultural education is formulated in the Concept of Multicultural Education Development in the Russian Federation (Concept of Multicultural Education Development in the Russian Federation, 2023). The most important purposes of multicultural education include the reproduction and development of national cultures and native languages of the peoples of Russia as necessary tools for the socialisation of younger generations and the most important basis for forming and functioning of the Russian civil nation at its basic levels – ethnocultural and national-territorial (Concept of Multicultural Education Development in the Russian Federation, 2023).

The requirements of the Federal State Educational Standard of General Education of the second generation (Order of 31 May 2021, no. 287), of the Concept of Multicultural Education Development in the Russian Federation (Concept of Multicultural Education Development in the Russian Federation, 2023) rely upon the humanistic and multicultural nature of education.

Restructuring Russian pedagogical education is also based on the strategy of multi- and ethnocultural orientation. The aims, objectives, content, technologies of education and training are focused on developing and socialisation of an individual. The future teacher is considered as a subject of an ethnos, as a citizen of a multinational state, capable of self-determination in the multinational world civilisation.

The ethnopolitical strategy of the Russian Government allows the use of elements of ethnoculture in the pedagogical process. Therefore, formation of ethnocultural competence of aspiring teachers presupposes the deepening of ethnocultural education during the period of study at the university, due to mastering an integral system of knowledge on ethnopedagogics, ethnopsychology, pedagogics of interethnic communication, ethnoculturology, etc.

Implementation of this strategy receives significant attention in the constituent entities of Central Russia. In the teacher training system, native languages are studied at the departments of native language teachers training. Without language, culture gradually disappears, becomes educational information, ceases to be a form of people's life.

In some subjects of the Russian Federation (Tatarstan, Bashkortostan, Chuvashia, Udmurtia, Mari El, Mordovia), laws on state languages have been enacted. For example, in Tatarstan, according to the Law of the Republic of Tatarstan, there are two equal state languages: Tatar and Russian (the Law of the Republic of Tatarstan, 1992); in Bashkortostan, according to Article 3 of the Law, Bashkir and Russian are the state languages throughout its territory: Bashkir as the language of the Bashkir nation, which has realised its right to self-determination, Russian as the state language of the Russian Federation (the Law of the Republic of Bashkortostan, 1999); in Mari El, according to Article 1 of the Law, the official languages are Mari (Hill Mari and Meadow Mari) and Russian (the Law of the Republic of Mari El, 1995); in Chuvashia, according to Article 1 of the Law of the Chuvash Republic, the official languages are Chuvash and Russian (the Law of the Chuvash Republic, 2003); in Mordovia, according to the Law, the official languages are Russian and Mordovian (Moksha and Erzya) languages (the Law of the Republic of Mordovia, 1998).

Similar laws have been enacted in all subjects of Russia with compact ethnic population. All these laws emphasise that the status of state languages does not derogate from the rights of other nationalities inhabiting the republic in the use and development of their languages. For example, in Tatarstan there are educational institutions with different ethnocultural components – Russian, Tatar, Chuvash, Mari. However, teachers are trained only for educational institutions with a Tatar ethnocultural component. The same can be observed in Chuvashia and Mari El. There are educational institutions in Chuvashia with a Tatar ethnocultural component, but pedagogical education is associated with

meeting the needs of Chuvash schools and kindergartens. The same is true in Mari El and other republics.

This state of affairs does not derogate from rights of ethnic minorities: Tatars living in Chuvashia can enter pedagogical universities of Tatarstan, Chuvash living in Tatarstan – in pedagogical universities of Chuvashia, Mari – in Mari El universities, etc. All these regional subjects of Russia are close by and maintain relations of cooperation in economic life, science, education and culture.

However, the laws on state languages in the subjects of Russia with ethnic population rather declare the statesmanship and parity of mother tongues. In practice, the real state language and the language of interethnic communication is Russian. Therefore, Russian national culture, through Russian literature and Russian mass media, influences and continues to influence the ethnic cultures of different peoples, to develop and enrich them with Russian national values, images, motives, etc.

The model of Kazan Federal University is recognised as the most successful model for preparing teachers to work in an ethnocultural environment in Russia. This university provides bilingual teacher training. To better understand the specifics of this training, let's consider the features of national education in Tatarstan.

Features of National Education in Tatarstan

According to the Ministry of Education and Science of the Republic of Tatarstan, as of 2023, there are 853 educational institutions with Tatar language of instruction, 205 schools with classes for advanced study of Russian language and culture, 96 schools with Chuvash, 18 with Mari, 34 with Udmurt, 4 with Mordovian, 1 with Bashkir and 1 with Jewish ethnocultural components of education (Ministry of Education and Science of the Republic of Tatarstan, 2023).

In Kazan, the capital of Tatarstan, out of 179 schools, 38 are Tatar or Tatar and Russian, but only 3 of them can be considered 'really Tatar schools'. In most Tatar schools, Russian is the language of tuition, and Tatar language is only used in extracurricular activities and clubs. In Tatar schools in Kazan, Tatar is no longer the language of tuition, these schools remain Tatar only in status (Ministry of Education and Science of the Republic of Tatarstan, 2023).

Though, there are schools in Tatarstan where 100% of the educational process is carried out in Tatar language. They are called full-fledged Tatar schools. They are concentrated in rural areas of the republic.

In recent years, the Ministry of Education and Science of the Republic of Tatarstan has focused on national education in preschool institutions. Currently, there are 2,020 preschool educational organisations operating in Tatarstan (including groups in general education organisations). They educate more than 222,000 children, with 768 teachers who are proficient in Tatar language. However, more than 20,000 teachers working in these institutions can only conduct the educational process in Russian (Ministry of Education and Science of the Republic of Tatarstan, 2023).

Thus, the pedagogical education system faces a large-scale task – to prepare bilingual teachers capable of conducting the educational process in two languages.

Types of Bilingualism in the National Education of Russian Subjects

It is known that bilinguals differ in typology (Karaulov, 1987; Vereshchagin, 2014; Zakiryanov, 2011; Zhinkin, 1982). To diagnose the prevailing types of bilingualism in Russia, we used semantic indicators of communication – the ability of a bilingual to recode semantic content freely (coordinative type), with the help of translation (subordinative type), with the help of difficult (or incorrect) translation (mixed type).

The coordinative type, when a student freely switches from the semantic base of one language to the semantic base of another, tells us about fluency in two languages. Such a student feels comfortable in both environments of his native language and the second language. He is able to perceive two national cultures as his native ones. A student with a coordinative type of bilingualism can freely switch from one language to another, think and speak in one or another language.

The subordinative type assumes fluency in one language. This is usually the native language or the language of communication, the language of the environment in which he was formed as a linguistic personality. The second language is perceived by the person as a secondary or as a non-native language. Generally, a second language for a linguistic personality of a subordinate type does not matter much for everyday life, education or professional activity. Therefore, students are not fluent in this language and are reluctant to speak it.

In Russian educational institutions, the subordinative type of linguistic personality is usually present in two subtypes:

Subtype 1: the native language (Tatar, Bashkir, Chuvash, Mari, Udmurt, Mordovian) is the language of communication, the Russian language is secondary;

Subtype 2: the language of communication is Russian (the language is not native to the ethnic origin of the students), the second – secondary – is the native language (the language of parents and ancestors – Tatar, Bashkir, Chuvash, Mari, Udmurt, Mordovian).

The first subtype is more typical for urban educational institutions, where Russian language dominates in communication. The second subtype is more typical for rural educational institutions: they prefer to communicate in their native language. There is ethnic tension between these two types.

Students who speak their native language demonstrate latent intolerance towards those who speak Russian. Native speakers (as a language of communication) call Tatars, Bashkirs, Mari, etc. who speak Russian with the common name *mankurt*. Mankurts are people who have broken their connection with their

native language, national culture and national traditions. Mankurts have Russian national identity and many, indeed, call themselves Russians.

The mixed type of linguistic personality in the professional literature has different interpretations: some researchers identify positive characteristics, others – negative ones (Karaulov, 1987; Vereshchagin, 2014; Zhinkin, 1982). In our research (Gabdulkhakov & Khisamova, 2012), we paid attention to the ability of a bilingual to speak correctly in two languages, and paid attention to those who could not speak correctly in a second language or in two languages (both native and Russian). The inaccuracy of statements was manifested in the inability to use grammatical categories of gender (masculine, feminine or neuter), case (especially genitive, accusative, prepositional), verb aspect (perfect or imperfect), tense (present, past or future), in the inability to use prepositions and various complicated syntactic constructions. The inability to speak correctly negatively affected the ability to think correctly and to demonstrate a communicative culture. Such an interlocutor could unknowingly cause dislike even or aggression in the listener.

Mixed bilingualism has not always been related to poor study results. More often it could be observed in the family, educational process, conversation with friends or relatives – where there were no such linguistic methods in communication as:

- transposition (positive transfer of the features of the native language on the second one);
- overcoming interference (negative influence of the features of one language on another).

For example, in many native languages of the peoples of the Middle Volga region there are no categories of gender, aspect, no prepositions, etc. Accordingly, their speech in the second – Russian – language is perceived by the interlocutors as the speech of a non-educated person. The similar reaction was in communication in the native language, when the speaker used in his speech grammatical or syntactic elements of the second language, strange to communication in the native language.

The degree of prevalence of different types of bilingualism in educational institutions with an ethnocultural component is presented in Table 9.1 (see Table 9.1).

It is shown in the table that the coordinative type (fluency in two languages) is only typical for a small part of the students (from 6% to 12%). Subordinative type is presented more in the Russian-national subtype (about 40–60%), in the national-Russian subtype it is presented less (from 14% to 27%). A relatively large number of bilinguals with a mixed type (from 19% to 29%) is alarming. The latter negatively affects the development of cognitive functions, memory, thinking and speech, in two languages.

Tests on ethnic identity allowed us to establish that national (ethnocultural) consciousness is mainly possessed by respondents with a coordinative type of bilingualism and with the first subtype of subordinative bilingualism. That is,

Table 9.1. Prevalence of Different Types of Bilingualism in Educational Institutions With an Ethnocultural Component (Number of Students in %).

Distribution of Types of Bilingualism by Languages	Coordinative	Subordinative		Mixed
		Subtype 1	Subtype 2	
Mordovian	6	14	61	19
Tatar	12	27	38	27
Bashkir	10	21	40	29
Chuvash	8	18	45	29
Mari	7	16	51	26
Udmurt	7	15	53	25

those who speak two languages fluently and those who speak their native language fluently. In Mordovia, this is 20% of students, in Tatarstan 39%, in Bashkortostan 31%, in Chuvashia 26%, in Mari El 23%, in Udmurtia 22%. Thus, in educational institutions with an ethnocultural component, only about a third of students have an ethnocultural consciousness.

Russian national identity is characteristic of students who possess the second subtype of subordinative bilingualism (that is, Russian-national bilingualism). This is from 40% to 61% of students, on average almost 50% of all students. Students with a Russian-national subordinate type of bilingualism often declare their commitment to the ethnic values of their nation, but mentally they are still guided by the values of the Russian national culture. Again, they prove that language and culture are inseparable.

Mixed bilingualism (almost a third of students) often negatively affects development of cognitive abilities. This part of students is often of particular concern.

The Evolution of the Content and Methods of Ethnocultural Teacher Training at Russian Universities

In the 1930s–1960s of the 20th century, the ethnocultural training of teachers was based on a linguocentric concept. This concept assumed systematic organisation of linguistic and literary material.

The language was described and considered at school and university as a system. The systemically important principle was the principle of the level organisation of the language – from the phonetic level to the morphological (word-formation), grammatical and syntactic levels. Accordingly, the language was studied gradually from sounds and letters to morphology, grammar and syntax. This principle was cyclically repeated at different stages of education – preschool, primary, secondary. At universities, these levels were also repeated and deepened.

In the 1980–1990s, the level organisation of the language system was supplemented by the syntax of the text.

In the 1930s of the 20th century, national (non-Russian) languages in Russia did not have such a systematic linguistic and methodological interpretation as Russian, English, French, German and other languages. So, first linguists and methodologists in national regions of Russia took as a basis the system of linguistic and methodological description of the Russian language (from phonetics, morphology, vocabulary to syntax and culture of speech) and Russian literature (from mythology and folklore to modern poetry and prose). On the basis of the Russian system of linguistic and methodological description of the language, the began to develop similar systems of Tatar, Bashkir, Chuvash, Mari and other languages. The system of literature education was the foundation for national systems of literature and ethnocultural development of students.

In the 1930s–1940s of the 20th century, the first variants of the systematic description of Tatar, Bashkir, Chuvash and other languages of the peoples of Russia, the first programmes of teaching national languages and programmes of national literature education appeared (Tatarica, 2023).

In the course of improving these programmes, teaching methods developed. These were mainly explanatory and illustrative methods. These methods assumed different forms of explanation (individual, group, differentiated, multilevel, etc.) and different forms of visuals (tables, diagrams, illustrations, filmstrips, etc.). Later on, these methods were supplemented by the inclusion of new technical training tools for that time (epidiaprojectors, video projectors, tape recorders, etc.).

In the 1970s–1980s, the national educational institutions of Russia switched to a new – logocentric – concept (Gabdulkhakov & Zinnurova, 2022). This concept did not reject the previous – linguocentric – one and assumed the implementation on its basis of the principle of practical focus of teaching. Practical focus meant a predominant focus not on the theory of language (as it used to be), it meant a focus on applying theory in speech, that is, on the practice of mastering coherent native speech. The syntax of the text became not only the final level of the language system, it began to permeate the entire content of language teaching: sounds, vocabulary, morphology, grammar, sentence syntax began to be considered on the basis of a text. Examples of sounds, new words, grammatical categories, etc. began to be considered not separately, but directly in the text. As a result, the students saw how sounds, morphological and grammatical structures can be used in the construction of coherent speech, that is, text (Tatarica, 2023).

Since the state strategy of ethnocultural pedagogical education assumed multiculturalism, the teaching materials in kindergartens, schools and universities were made as bilingual. The second language was studied based on the first one. Russian was the second language in national educational institutions, and in ordinary institutions (with Russian as the language of study) the second language was the national (Tatar, Bashkir, Chuvash, etc.).

Reliance on the native language (or the language of communication) was the most important methodological principle of ethnocultural education. This support considered two linguistic phenomena: transposition (similarity of the features

of one language with the features of another language) and interference (difference of the features of one language with the features of another). That is why, in the learning process, it was important to carry out transposition and overcome interference.

The practical focus was associated with the implementation of the principle of text-centric orientation. Learning was based on a coherent text (not a sound or a letter, a word or a phrase – as it used to be). The text-centric focus required creating new educational and methodological complexes that reveal the features of coherent native speech and stimulate the speech – text – activity of students in their native language.

This stage of the evolution of ethnocultural education was accompanied by the transition to the methods of developing. The methods of developing learning assumed activation of the zone of proximal development in students, mastering educational material at a high level of difficulties and overcoming cognitive difficulties in a game.

The methods of problem-developing learning assumed creation of problem situations in the classroom, awareness of contradictions in the educational material, resolution of these contradictions, construction of coherent judgements and conclusions in the native and second language.

In the 1990s of the 20th century – the 1920s of the 21st century, a new concept of teaching a native language, literature and national culture appeared (and is currently developing) – anthropocentric. This concept, despite introducing new standards and a competence-based approach, persists and is currently developing.

The concept is connected with the development of new programmes, but it does not cancel either the linguocentric or logocentric concepts. Therefore, the content of teaching the native language, literature and national culture is based on a system basis, carries out practical focus and a coherent text remains at the centre of learning.

Anthropocentrism was associated with a predominant focus on linguistic personality in all its forms (communicative, spiritual, moral, intellectual). Therefore, the priority in education has become not the personality as a product of collective interactions, but the individuality of the student (as a form of realisation of the self-concept). The phrase *linguistic personality*, meant for researchers' individuality, which is realised through the means of communication as an original linguistic individuality.

This approach was associated with rejection of standard requirements for the student, with development of individual routes, trajectories of communicative, literature, ethnocultural development of students.

In addition, anthropocentrism in Russia was associated with rejection of traditional standards, habitual patterns of speech behaviour. Anthropocentrism began to support development of an individual image of speech behaviour. As a result, rhetoric was again introduced into the curricula of Russian educational institutions as a discipline that promotes communicative self-realisation and eloquence development. Prior to that, rhetoric in Russia partially disappeared from the curricula in the 1820s of the 19th century and completely disappeared 100 years later in the 1920s of the 20th century as a discipline associated with idle

talk. In the 1990s, programmes and manuals on children's and professional rhetoric began to be created in native languages for all levels of continuing education.

In recent years – the 1920s of the 21st century – anthropocentrism in pedagogical education in Russia sounds more often as the anthropology of pedagogical education. Understanding the need to actualise the anthropological foundations of pedagogical education was associated with the digital transformation of education (development of remote, transnational forms of teacher–student interaction). The drastic restructuring of the content of pedagogical education, its digitalisation and depersonalisation provoked actualisation of the anthropological foundations of education and training.

The effectiveness of teacher training at the university is usually verified by how these teachers then influence the quality of ethnocultural education in educational institutions.

Directions for Preparing Teachers to Work in an Ethnocultural Environment

Teachers are currently being trained to work in an ethnocultural environment in the system of pedagogical education, which includes teacher training colleges and institutes, federal universities. Ethnocultural pedagogical education in Russia is understood as education related to the training of specialists for educational institutions with ethnocultural content.

The effectiveness of teacher training for ethnocultural education depends on properly constructed bilingual, multicultural, civic and patriotic education. The basis of such training is the national cultural code, the indicators of which are ethnocultural knowledge, mechanisms of understanding, feelings, behaviour and self-realisation.

Ethnocultural content includes studying native languages, literature, national cultures, teaching general education subjects in the native language of students (Tatar, Bashkir, Chuvash, Mari, Udmurt, etc.).

The Federal State General Education Standard (FGOS) provides opportunities to study the state language of a republic.

The Ministry of Education and Science of the Republic of Tatarstan continues to develop new generation textbooks for Tatar language and literature. A total of 17 educational and methodological packages have been included in the federal list, with applications submitted for another 18. The next step in this direction is to include the entire range of 'translated textbooks' – that is, textbooks for all subjects in Tatar language – in the federal register.

The Institute of Philology and Intercultural Communication at Kazan Federal University currently trains pedagogical staff for the national education system in Tatarstan in several directions:

The first direction is pedagogical education in Tatar language, Tatar literature and primary education. The duration of the programme is 6 years of distance

learning. The entrance exams are taken in social studies, Russian language and Tatar language as part of the Unified State Exam (USE).

The second direction is pedagogical education in Tatar language, Tatar literature and preschool education. The duration of the programme is 6 years of distance learning. The entrance exams are taken in social studies, Russian language and Tatar language as part of the USE. The Tatar language exam can also be taken at Kazan Federal University.

The objectives of studying the subject *Tatar language* are: to cultivate a tolerant linguistic personality, a conscious attitude towards language as a means of communication; understanding the importance of learning Tatar language as a means of education, knowledge, self-realisation and social adaptation in society; applying acquired knowledge and skills in one's own speech practice.

When teaching Tatar language to bilingual students, professional competencies are developed – abilities to:

- use linguistic knowledge about the norms of the Tatar language and speech etiquette, enrich vocabulary and grammatical structure necessary for mastering oral and written speech in Tatar language;
- communicate in Tatar language in accordance with different types of speech activities;
- use Tatar language in different spheres and communication situations;
- demonstrate tolerance towards intercultural and foreign language communication;
- master the spiritual values of the Tatar people: customs, culture, art and literary works.

In educational institutions with an ethnocultural component (Tatarstan, Bashkortostan, Chuvashia, Mari El, Udmurtia, etc.), they are constantly working on expanding the national (native for students) language environment. This environment, despite all the political, regulatory and pedagogical efforts, tends to narrow: every year the number of students who are able to speak their native language well decreases. There are objective reasons for this: globalisation of the economy, internationalisation of culture and education, expansion of the functions of world languages (English, Russian), acculturation of rural youth in urban (Russian-speaking) conditions, the dominance of mass media in Russian or English, digitalisation of education mainly in English and Russian, etc.

The language environment is the basis for the development of national culture, the formation of ethnocultural (or national) identity. The level of ethnocultural (national) self-awareness depends on how well the students speak their native language (Karaulov, 1987; Vereshchagin, 2014; Zakiryanov, 2011; Zhinkin, 1982).

During the surveys of students conducted by us in educational institutions with an ethnocultural component in Central Russia (in the national bilingual republics – Mordovia, Tatarstan, Mari El, Chuvashia, etc.) in 2012–2022, it has been found that three languages are used in educational communication in varying degrees.

When interviewing students (in which language your educational process is taking place), respondents indicated three languages (see Table 9.2).

Russian is in the first place in urban conditions (88%), in rural areas (with a native language of communication) Russian and native languages are used almost equally (about 45%), English is mainly used only in English lessons and lies in the last place (5% in the city, 1% in the village).

Tatar (the language of Tatars, Mishar, Kryashen), Bashkir, Chuvash, Mari (Hill Mari and Meadow Mari), Mordovian, Udmurt acted as the native languages.

At the same time, the language preferences of students (which language they like more or which language they would like to learn) do not always correlate with the language they speak, receive education in or consider native.

Among the most preferred (necessary, promising) languages students of urban educational institutions ranked English first (72% on average), Russian second (23% on average) and native language third (5% on average) (see Table 9.3).

In rural areas (in educational institutions with a native language of communication), the opposite is true: students ranked Russian first (on average 70%), their native language second (about 21%) and English third (about 9%).

This is due to the fact that bilinguals in urban areas speak Russian quite well, their interest is aimed at a foreign language – English. In rural areas, bilinguals are fluent in their native language and poor in Russian. They are interested in Russian language. But in both cases, their interest in the native language is at the lowest level (in urban areas – 5%, in rural areas – 9%).

Trends and Prospects for the Development of the System of Ethnocultural Teacher Training at Russian Universities

The analysis of regulatory, academic, archival and journalistic materials shows that the trends in the development of the system of ethnocultural teacher training in Russia in the post-Soviet period (1990–2023) are due to the transformation of the state strategy for the development of ethnocultural education.

The *first stage* (1920–1970) is the stage of creating national programmes and textbooks in the native language and literature, creating textbooks in general education disciplines (mathematics, physics, chemistry, etc.) in the native language, creating university schools of training national personnel to teach native language and literature. During this period, there is a *tendency* to expand the

Table 9.2. What Language Is My Education in (Number of Respondents in %).

Languages	Russian	Native	English
City	88	7	5
Rural areas	45	44	1

Table 9.3. Which Language Matters the Most to Me (Number of Respondents in %).

Languages	Russian	Native	English
City	23	5	72
Rural areas	70	21	9

sphere of ethnocultural education, to create new programmes and teaching materials on the native language, literature, culture. The development of ethnocultural education takes place as the development of unreligious (atheistic) education. Almost all the students were atheists, Komsomol members.

The *second stage* (1970–1990) is the stage of development of academic (linguistic, psycholinguistic, didactic) fundamentals of methods of ethnocultural education in schools and pedagogical universities, the period of reorientation of programmes and teaching materials to the practical focus of teaching – to master coherent speech in the native language. This period is characterised by a *tendency* to move from the word as a system unit of language (linguocentrism and logocentrism) to the text as a form of expression of linguistic personality (anthropocentrism).

The *third stage* (1992–2012) is the stage of the rise of ethnocultural education. In the 1990s, owing to the declared sovereignty of the ethnic regions of Russia, the adoption of regional laws on state languages, there is a *tendency* to rise in the development of the system of ethnocultural training of teachers: the number of directions and profiles of training increases, the number of students – aspiring teachers – to meet the needs of developing national educational institutions (kindergartens, primary and secondary schools). The number of learning hours in the native language was increased in schools, and the number of hours in the Russian language was reduced. Two state languages were included in the curricula of universities – Russian and the language of the indigenous ethnic group. Religious – Islamic – education is actively developing in Tatarstan and Bashkortostan: madrassas and Islamic universities are created. Muslim traditions are closely intertwined with national ones.

The *fourth stage* (2014–2021) is the stage of integration of ethnocultural education into the European space. During this period, there was a sharp reduction in the number of pedagogical universities, transformation of classical universities into federal universities, accession of pedagogical universities to federal universities. A new *trend* emerged: ethnocultural training focused on European bachelor's and master's degree standards, research activities – on international databases Scopus, WoS, etc. In ethnocultural training, along with the native language, the role of the English language became more active. The number of areas of dual training increased – the teacher of the native language and English. In secondary educational institutions, the number of academic hours of the native language decreased, the Russian language was studied in the same volume, the

number of hours for English increased. Religious – Islamic – education increased. Religious traditions became the norm for ethnocultural behaviour. Most of the students became believers. In Tatarstan and Bashkortostan they were Muslims.

The *fifth stage* (2021–present) is a stage of regionalisation of ethnocultural education, the period of decline in cooperation with European universities. During this period, the opposite *trend* appeared: there is a refocusing of ethnocultural training to meet the needs of the region, returning to traditional for Soviet universities specialist degree, establishing cooperation with universities of Asian and Eastern countries. During this period, interest in the Chinese language, culture and education is growing. Modules for integrating the study of the national (ethnic, native) language with the Chinese language are appearing in the higher education system. Islamic education has become prestigious for aspiring teachers.

These trends (the rise of ethnocultural education, the development of scientific foundations and the transition from linguocentrism and logocentrism to anthropocentrism, the integration of ethnocultural content into the European educational space, Islamisation, regionalisation and refocusing of areas of cooperation) influenced the ethnocultural code of participants in the educational process. This is evidenced by the results of our research conducted in the period from 1993 to 2023.

Conclusion

The evolution of ethnocultural pedagogical education in the 20th–21st centuries is integratively connected with the development of multicultural (Russian-national) content. At the same time, this evolution presupposed transformation of the content and methods of mastering linguistic, ethnocultural and multicultural content.

The modern system of developing consciousness and morals, citizenship and patriotism should take into account the complexity of interethnic relations and the harmful influence of certain mass media, social networks, digital resources and extremist disinformation centres on these relations.

Historically, in Russia (since the establishment of the USSR), there have been traditions of multicultural education – traditions of bilingualism, tolerance, intercultural and inter-confessional dialogue. These traditions are important to preserve peace and social well-being of the peoples of Russia.

The prospects for the development of ethnocultural training of teachers in Russia should be related to ethnocultural code developing, expanding the scope of native language and supporting national culture. This training requires the use of modern educational technologies not only in universities but also in school and preschool institutions.

The support of ethnocultural (especially Turkic) education is impossible without its integration with religion (Islam) as a basis for national culture development. The peoples of other subjects of Russia (Chuvash, Udmurts, Mari, etc.) are Orthodox and this unites their ethnocultural codes with the Russian ethnocultural code.

The coordinated policy of the Government of the Russian Federation with the subjects of Russia allows for successful solutions to the tasks of multicultural education in the regions and the development of effective technologies for training teachers to work in an ethnocultural environment at universities.

The teacher training system at Russian universities is based on the principles of humanisation and democratisation, personalisation, cultural dialogue and parity of state languages. This ensures national harmony, intercultural interaction and friendship between all peoples of the Russian Federation.

References

Gabdulkhakov, V. F., & Khisamova, V. N. (2012). *Lingvodidaktika polikul'turnogo obrazovaniya* [*Linguodidactics of multicultural education*]. Nacional'nyj knizhnyj centr.

Gabdulkhakov, V. F., & Zinnurova, A. F. (2022). *Prikladnye aspekty povysheniya effektivnosti vysshego obrazovaniya* [*Applied aspects of improvement of higher education effectiveness*]. Akademiya nauk Respubliki Tatarstan.

Karaulov, Yu N. (1987). *Russkij yazyk i yazykovaya lichnost'* [*Russian language and language personality*]. Nauka.

Koncepciya razvitiya polikul'turnogo obrazovaniya v Rossijskoj Federacii [*Concept of multicultural education development in the Russian Federation*]. https://pnu.edu.ru/media/filer_public/1b/a5/1ba5a122-7f0f-4008-a73d-9f5c2a8c922b/concept.pdf. Accessed on February 26, 2023.

Ministerstvo obrazovaniya i nauki Respubliki Tatarstan [*Ministry of Education and Science of the Republic of Tatarstan*]. (2023). https://mon.tatarstan.ru/about.htm

Rosstat: Federal'naya sluzhba gosudarstvennoj statistiki [*Rosstat: Federal State Statistics Service*]. (2023). https://rosstat.gov.ru/folder/56580

Tatarica: Online encyclopaedia [*Tatarika: Online encyclopedia*]. (2023). https://tatarica.org/ru/razdely/kultura/literatura/personalii/derzhavin-gavriil

Vereshchagin, E. M. (2014). *Psihologicheskaya i metodicheskaya harakteristika dvuyazychiya (bilingvizma)* [*Psychological and methodological characteristics of bilingualism*]. Direct-Media.

Zakiryanov, K. Z. (2011). *Aktivnoe dvuyazychie: sushchnost' i funkcionirovanie* [*Active bilingualism: Essentials and functioning*]. Izdatel'stvo "Kitap Zainab Biisheva".

Zakon Respubliki Bashkortostan "O yazykakh narodov Respubliki Bashkortostan" [*Law of the Republic of Bashkortostan "On the languages of the peoples of the Republic of Bashkortostan"*]. https://docs.cntd.ru/document/935103425. Accessed on February 15, 1999.

Zakon Chuvashskoj Respubliki "O yazykakh v Chuvashskoj Respublike" [*Law of the Republic of Chuvashia "On the languages in Chuvash Republic"*]. https://docs.cntd.ru/document/802015027. Accessed on November 25, 2003.

Zakon Respubliki Marij Ehl "O yazykakh v Respublike Marij Eh"l [*Law of the Republic of Marij El "On the languages in the Republic of Marij El"*]. https://docs.cntd.ru/document/804919247. Accessed on October 26, 1995.

Zakon Respubliki Mordoviya "O gosudarstvennykh yazykakh Respubliki Mordoviya" [*Law of the Republic of Mordovia "On the state languages of the Republic of Mordovia"*]. https://docs.cntd.ru/document/804950557. Accessed on May 6, 1998.

Zakon Respubliki Tatarstan "O yazykakh narodov Respubliki Tatarstan" [*Law of the Republic of Tatarstan "On the languages of the peoples of the Republic of Tatarstan"*]. https://base.garant.ru/8119056/. Accessed on June 8, 1992.

Zhinkin, N. I. (1982). *Rech' kak provodnik informacii* [*Speech as an information conductor*]. Nauka.

Conclusion

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Modern educational systems of any country in the world have been shaped by various historical, political, economic, socio-cultural and religious factors. They combine to varying degrees features of internal identities and external borrowings, which, taken together, have brought them to their present state. This is much of the basis for current processes in teacher education, nationally and internationally. In this context, one of the key tasks of teacher education researchers is to try to establish a productive research dialogue, on the one hand by presenting knowledge about their national system to international colleagues, and on the other hand by obtaining information from them about the processes taking place in other countries.

Unfortunately, past and present realities have given rise to many inaccuracies, myths and subjective interpretations about the Russian education system. Moreover, such works came out from under the pen of not only international but also Russian scientists, either because of unprofessionalism and lack of knowledge of the issues, or because of political conjuncture. Unfortunately, such errors often move from one book to another, generating numerous falsifications. At the same time, the main task of any honest and objective researcher is to cover the history and current state of the national education system as truthfully as possible. Therefore, the authors of this research have defined its two following tasks:

(1) To determine the main stages and directions of development of the teacher training system taking into account the peculiarities of the historical process in Russia;
(2) To show the current structure and content of continuing teacher education in the country, combining numerous features of the Soviet past and the results of reforms of the last three decades.

On this basis, an attempt was made to fulfil the key idea of the book – to identify the historical prerequisites and current trends in the transformation of continuous teacher education in Russia as it enters the global scientific and pedagogical community, to correlate the features of the formation of the national

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model with the experience of other countries, to identify the best aspects and practices of the Russian continuous teacher training system for the purpose of their subsequent comparative analysis.

The introduction to this book sets out the rationale for the volume. It argues that while the development of the continuous teacher education in Russia is interesting in itself, it also has much wider significance. Reference is made to parallel developments elsewhere, including Europe and North America in order to demonstrate how important the Russian case is as a way of understanding how 'vernacular globalisation' is being played out. The overarching perspective adopted in the volume is also explicated, being a broadly sociohistorical view, with particular attention to policy studies and comparative education.

There is no doubt that the Russian system of teacher education is an organic part of the world experience, which is extremely diverse in its content. At the same time, even within any one country, each historical epoch brings something new. This is clearly shown in Chapter 1 'Historical development of the continuous teacher education in Russia', the authors of which – Valeeva et al. examined the evolution of teacher education at different stages of the country's history. The interrelation of this sphere of professional education with the socio-economic growth of Russia and the expansion of school education seems important. The researchers rightly reveal many collisions of struggle around the problems of historical choice, political situation and scientific concepts that influenced the forms and content of teacher education at this or that moment of national history.

Throughout the chapter there is a cross-cutting idea that each epoch bears its own unique imprint of time, with its problems, joys and hopes. Therefore, emphasising the uniqueness of each stage of teacher education, the authors tried to fit them into the general framework of the development of teacher training in the country. As a result, this allowed them to trace the mechanism of continuity that connects past approaches to modernity and to a greater or lesser extent defines it. Therefore, this chapter helps to comprehensively understand the current state of continuous teacher education, which is impossible without knowledge of the past.

World progress has inevitably been accompanied by the interaction and interpenetration of national cultures. They permeated the processes of regionalisation and globalisation, which played a contradictory role for the development of many countries. Against this background, the diversity of national variants, on the one hand, enriched the world experience, but on the other hand, allowed to avoid unification and preserve their richness, spirituality and identity. Russia, one of the largest countries in the world with a rich and diverse historical past, is no exception. The historical and cultural code of the country has absorbed both unique features and global trends, which to a greater or lesser extent have always influenced Russian life. The reforms of Peter the Great, Catherine the Great, and Alexander II the Liberator were particularly important for the formation of the national system of secular education, which seriously changed the life foundations of Russians. Their transformations provoked waves of educational boom at the level of school and vocational training, which inevitably required more and more teachers. Since the end of the 18th century, teacher training has become a separate sphere of professional education in Russia. The opening of the teachers' seminary

at Moscow University in 1779 began almost 250 years of pedagogical education history. During this time, it has gone through numerous ups and downs, successful and unsuccessful reforms and experiments. Therefore, Valeeva et al. naturally conclude that as a result of these complex processes, a multilevel system of continuous pedagogical education has been formed in the country.

Without this it is impossible to understand its specificity, which is revealed in the following chapters of this book, which familiarise the reader with each stage of continuing pedagogical education in Russia. Traditionally, the modern Russian philosophical and pedagogical concept considers lifelong learning as a process covering the whole life of a person. Theoretical and methodological approaches to this problem, formed in Russian pedagogical science, are reflected in Chapter 2. This section is important in terms of the understanding of the methodological foundations of lifelong learning by Russian scientists and the extent to which their approaches correlate with international experience. Within the national tradition, Valeeva and Kalimullin consider it in three interrelated dimensions:

(1) as an aspect of educational practice, which provides for the continuous purposeful learning of socio-cultural experience;
(2) as a consistent passage of a person through all links of the educational system;
(3) as a principle of educational organisation and educational policy at the national level.

These three dimensions serve as a key to understanding the national system of continuing professional education. The ideology of continuous renewal of professional knowledge and growth is already reflected in the Federal Law 'On Education in the Russian Federation' (2012). Section 5 of Article 10 establishes the following levels of professional education: secondary vocational education, higher education – bachelor's degree, higher education – specialisation, master's degree, higher education – training of personnel of higher qualification. Section 6 presents the characteristics of additional education, which includes such subtypes as additional education for children and adults and additional vocational education. Section 7 states that the education system as a whole creates conditions for continuous education through the implementation of basic educational programmes and various additional educational programmes, providing opportunities for simultaneous mastering of several educational programmes, as well as taking into account the existing education, qualifications and practical experience in education. In modern educational practice, this is mainly understood as: acquisition and improvement of professional qualifications, retraining in the process of changing professions, education during adaptation to changing social conditions, leisure education, etc.

As applied to teacher education, profile psychological-pedagogical classes (groups) at the senior level of general education school have been considered as the initial stage of continuous teacher education in recent years. This rather original experience, widespread in Soviet times, has been restored in the current

decade in some countries of the former USSR. In modern publications on various problems of teacher training in Russia, available to foreign readers, there is practically no information about psycho-pedagogical classes. At the same time, even in the context of early self-determination of a schoolchild as a future teacher, this stage occupies an important place in the system of continuing professional education. Therefore, Baklashova, who became the author of Chapter 3, presented in detail the main characteristics of this form of pre-profile training. The researcher revealed the modern Russian concept of profile psycho-pedagogical classes, in which today more than 50,000 high school students are studying. In total, this is more than 3,300 classes (groups) in 80 regions of our country. It is planned that thanks to the active work of the Ministry of Education of Russia, the Academy of the Ministry of Education of Russia, pedagogical universities and subjects of the Russian Federation by December 2024 there will be at least 5,000 of them. The state policy in this direction is primarily aimed at systematically solving the shortage of teachers in schools. Therefore, the creation of psychological and pedagogical personnel is linked to the achievement of the target indicators of the Action Plan for the implementation of the Concept of training of pedagogical personnel for the Russian education system for the period up to 2030.

Within a short time, various models of pre-professional teacher training were formed in the country, to which Baklashova paid special attention. For example, a typical model of pedagogical classes involves training a group of children of relatively constant composition in an additional general education programme. It is developed taking into account the peculiarities of the conditions of the educational organisation and the needs of the students. Pre-professional education of senior pupils is obtained through the resources of profile and elective courses, extracurricular, extracurricular (out-of-class and extracurricular) activities, additional education, etc. The basics of psychological and pedagogical knowledge in an entertaining form and educational pedagogical (socio-pedagogical, organisational) practice are compulsory.

Promising in the context of scientific and practical perspective is the regional and institutional differentiation of pedagogical classes presented by the author. In particular, they are now developing on the basis of:

- general educational organisations, a number of which are part of the university structure;
- pedagogical colleges, pedagogical universities;
- organisations of additional education;
- the municipal district;
- a reference school with the involvement of specialists from schools and professional organisations.

However, the variability of pre-professional pedagogical education does not mean that the system is fragmented, as a unified national Concept of Profile Psychological and Pedagogical Classes is currently being implemented in the Russian Federation.

The next stage of continuous pedagogical education is related to secondary vocational education. Its modern model also grew out of the historical past, which began in pre-revolutionary Russia. Vlasova and Zakirova in Chapter 4 emphasise the peculiarity of secondary vocational education, which has its own tasks, but is also a kind of 'pre-university' education. In any case, the important role of this stage for the future teacher's professional self-determination is undoubted, when he or she can study at a teacher training college (technical college) instead of studying at a senior secondary school. Given the shortage of teachers in the first decades of Soviet power, the realisable range of specialities was quite extensive. But nowadays, pedagogical colleges mainly cover only preschool and primary education levels and narrowly specialised areas of activity. Nevertheless, their popularity is now quite high. Vlasova and Zakirova point out that:

> The demand for secondary professional pedagogical education today is associated with high public expectation of the quality of practical training, productivity of professional activity and personality of a teacher who is able, in addition to solving their professional tasks, to promote the development and embodiment of human potential, to protect students from incompetent influence on them by society. (p. 70)

An important argument for trainees is the subsequent simplified entrance to higher education institutions. As a rule, then graduates of teacher training colleges prefer to work in educational organisations and receive higher education in the format of distance learning. Especially since their education is supported by the state, which provides a number of social guarantees for such students. Numerous studies show a higher retention rate of secondary vocational education graduates in schools. However, full continuity of their educational programmes with higher education remains an urgent task. While this issue is not regulated by normative documents, there are many initiatives at the regional level between higher and secondary vocational education institutions. There are hopes to solve this problem in the development of fourth generation standards, which are planned to be implemented in the 2024–2025 academic year.

Higher teacher education today is at another turning point. In Chapter 5, Kalimullin and Sakhiyeva describe in detail its organisation and content, which has been shaped over the last 30 years in the context of a shift away from the Soviet model. The authors paid considerable attention to the modern organisational structure of teacher education, which includes more than 300 higher education institutions of various specialisations. It is based on 38 (with branches) specialised pedagogical universities and institutes. At the other pole are federal, classical, technical, humanitarian and other universities, where teacher training programmes are also implemented. Despite the diversity, as the researchers emphasise, the training of future teachers is based on unified Federal State Educational Standards. Chapter 5 devotes considerable attention to their analysis, which allows us to create a holistic picture of how the educational process is organised in Russian universities. The specifics of forms and terms of study, the

structure and content of curricula based on the Federal State Educational Programmes, the competences to be mastered, etc. are described in detail. The presented Russian approaches to modular learning and organisation of practical training are promising for scientific comparison with international experience.

In concluding Chapter 5, Kalimullin and Sakhiyeva point to another round of transformation that the national system of teacher education is now entering:

> The year 2023 became the reporting point of a new stage of reforms related to the actualisation of education levels in the country. On 12 May 2023, President of the Russian Federation Vladimir Putin signed the Decree "On Some Issues of Improving the System of Higher Education". The document envisages the unification of bachelor's and specialist degrees into one level of higher education - basic education, while master's degree will become part of higher specialised education (Decree of the President of the Russian Federation, 2023). The pilot project for the academic years 2023–2024 and 2025–2026 has already started in six higher education institutions of our country. Among them are the leading specialised educational institution - Moscow Pedagogical State University and the Baltic Federal University, which implements teacher training programmes. The Russian scientific and pedagogical community is developing a new federal state educational standard, which will specify the characteristics of different training areas, supplement the requirements for the results of the educational programme, clarify the requirements for the conditions for the implementation of the educational programme at the level of basic higher education and specialised higher education (Master's degree), and make other adjustments in the context of the ongoing changes in higher education in Russia. (p. 135)

Undoubtedly, it will be a time of scientific search and experimentation for scientists and teachers of universities implementing teacher training programmes. It is already obvious that the current Federal State Educational Standard has solved its tasks, but under the influence of political, economic and social processes it has gradually lost its relevance and flexibility. It is not by chance that it has undergone three revisions over the years. Therefore, on the basis of the formed experience and new tasks, a new content of teacher education will be created, which, possibly, will entail structural and organisational changes.

One such overdue task is to integrate mechanisms for the professional development of novice teachers into the process of initial teacher education. It is necessary to admit that the systematic and comprehensive approach to organising profile psychological and pedagogical classes (Chapter 3) has not yet been achieved in solving the problem of a young teacher's entry into the profession (Chapter 6). Here, unlike in Soviet times, effective modern approaches are just beginning to take shape. Nevertheless, Latypova and Baklashova, actualising this task, write in Chapter 6:

> The problem of novice teachers' entry into the profession and professional development of future teachers is relevant due to the social significance of the professionalism factor in Russian continuing teacher education. Special attention from the country's government, as well as local authorities, is paid to projects related to the effective adaptation of novice teachers in the professional pedagogical environment. This process involves the joint work of school, university, ministry and department heads and staff. (p. 141)

A large number of studies in the USA, Great Britain, Australia and other countries have been devoted to the problem of adaptation of young teachers at school. It was also developed in Soviet pedagogy in sufficient depth. However, under the new socio-economic conditions, the former approaches required adjustment. This was manifested in the outflow of young teachers from schools and, as a result, in the shortage of teaching staff. Nowadays, the talk is more about retaining teachers in the profession rather than attracting them. As the main reasons for leaving school in the first years of work, respondents usually highlight low salaries, internal bureaucracy, conflicts with pupils or their parents, etc., as the main reasons for leaving. It should be recognised that this problem is characteristic of many educational systems in the world. However, the leading countries of the world have formed their own experience of its partial solution, usually considering adaptation as an additional stage of professional education after the training of a specialist teacher.

Latypova and Baklashova emphasise the importance of introducing induction and adaptation programmes for beginning teachers in modern conditions in order to ensure comprehensive support and development of the beginning teacher. In this regard, the authors have analysed federal and regional practices of modernisation of initial teacher education, technologies of reflexive management in schools and various mechanisms of professional development of beginning teachers. It is quite natural to conclude that it is necessary to create a qualitatively new content and conditions of scientific and methodological support for beginning teachers, which requires the development of network and productive innovations in the education system. This also implies the development of organisational models of professional development of novice teachers implemented at different levels.

Postgraduate and doctoral training as the next stage of continuing pedagogical education was explored in Chapter 7. Russian normative legal acts refer to the personnel of higher qualification as those who have mastered the third level of higher education, subsequently received a degree and are engaged in research and (or) teaching activities in educational organisations at various levels. The attribution of postgraduate studies to the third level of education should be considered as a relatively new phenomenon for Russia, associated with the country's accession to the Bologna Declaration. Under the influence of this, there have been serious changes in the content and approaches to the training of personnel of higher qualification, which have received ambiguous assessment among scientists

and administrators. In this regard, Galimov naturally appeals to the previous experience, pointing out:

> ...it was a well-considered state policy to support and develop the system of reproduction of scientific and pedagogical personnel that allowed the USSR to make a sharp leap in technological development in the twentieth century. (p. 156)

Therefore, Russia, as a successor of the USSR, has a very successful experience and a rich history in terms of training highly qualified personnel.

Nevertheless, the researcher tried to present objectively the structure, content and development trends of the system of postgraduate teacher training in modern Russia. Taking into account the presence of fundamental differences in the national system of awarding academic degrees from the awarding of PhD and similar degrees in foreign countries, Galimov devoted considerable attention to the general characteristics of the current programmes of pedagogical postgraduate studies in Russia. Additionally, the peculiarities of the procedure of admission and organisation of postgraduate studies, the nuances of choosing a supervisor and determining the topic of the thesis, current, intermediate and final certification of postgraduates were described. The essence of co-research as a form of dissertation preparation is revealed. The requirements for the preparation, design and defence of candidate dissertations in pedagogy are outlined. The form of advanced training of scientific and pedagogical staff for the preparation of doctoral dissertations is briefly described.

The researcher's conclusions, which correspond to the recent discussion in the scientific and pedagogical environment about Russia's commitment to the principles of the Bologna Declaration, are interesting:

> It seems that the Russian system of training of scientific and pedagogical personnel of higher qualification cannot define its main function - it is aimed at training teachers of higher education or research scientists. Attempts to solve these problems simultaneously within the framework of the postgraduate educational programme proved unsuccessful. As a result, the system has abandoned the already implemented standards of higher education training, as well as cancelled the adopted professional standard for teachers of higher education. (p. 178)

The final stage of continuous pedagogical education is the professional development and professional retraining of teachers, which is essentially an endless process of improving a person in the profession up to the end of his/her career. This phenomenon in foreign countries is also labelled professional development, teacher development and other definitions. In Russia, the need for teacher professional development is enshrined in legislation. The Law on Education of the Russian Federation obliges all teachers to systematically improve their professional level at the expense of the educational organisation, i.e. the

state. The national peculiarity is manifested in the fact that regular professional development is a condition for continuing work and indirectly affects the size of salary and career growth, which, for example, is ignored in some countries. The content and specifics of the Russian model were discussed in Chapter 8.

Masalimova and Ibragimov describe it in the logic of the most important professional task – the need to form productive interaction with schools and teachers in order to improve the quality of education. This system began to emerge in Russia in the early 20th century and has a rich heritage in the form of different organisational approaches. At present, the Soviet tradition is largely preserved, with the leading link being the regional Institutes for Education Development (formerly called Institutes for Advanced Teacher Training), which exist within the structure of ministries (departments) in the constituent entities of the Russian Federation. They are financed by regional governments and carry out their work within the framework of unified approaches to the activities of organisations of additional professional education.

In some regions of the country, higher education institutions with teacher training programmes play a prominent role alongside Education Development Institutes. There are examples of large universities with significant potential becoming the centre of regional professional development systems in the last decade. An example is Kazan Federal University, which has a specialised centre within its structure that performs these functions. Every year, more than 15,000 teachers are trained on its programmes, covering more than 50% of the teaching staff in the region. This model is fundamentally important for the continuous training of teachers, as it allows for an organic link between initial training at the university and the subsequent professional development of the teacher. On the other hand, working directly with teachers allows the university teacher to see current school problems and translate new knowledge into the initial training of students.

The liberalisation of educational policy in the country in recent decades has led to the fact that advanced training in the educational sphere has been provided by various non-state and private companies. The rather simple conditions for obtaining the relevant licences have led to decentralisation of the system and often to a decline in the quality of training. Negative indicators of this are the lack of laboratory equipment, permanent teachers and their low qualifications. Nevertheless, the legislation is quite liberal towards such companies.

Masalimova and Ibragimov devoted considerable attention to the challenges of teacher professional development and retraining in a rapidly changing world. The authors rightly point out:

> In the conditions of digitalisation of education, the educational process acquires new features – it becomes more technological, dynamic and creative. In this regard, continuous professional development becomes an attributive property of a modern teacher, and qualification itself acquires a new property – changeability. The objective need for continuous development of teachers has stimulated a noticeable increase in attention to the

> system of additional professional education (APE), which in today's complex and dynamic world performs the function of a flexible organisational mechanism for prompt response to the actual needs of teachers, heads of educational organisations and educational authorities at different levels (p. 183).

The modern system of continuous professional development of teachers in Russia cannot be understood outside the context of philosophical and worldview foundations of Russian education. It is natural that each national educational system simply must have its own methodological basis, developed by many generations of scientists and practitioners. At the same time, it should be understood that this is not a static scientific capital, but a continuous process, changing under the influence of new changes and challenges. At present, modern civilisation is also undergoing another global transformation associated with new political, economic, technological and cultural conditions. This again increases the role of teacher education as one of the key mechanisms for the formation of values, attitudes, moods, worldview. Politicians and scientists realise the importance of worldview training of the future teacher, in whose hands the next generations of citizens are placed. In turn, the strengthening of stability, moral and technological sovereignty of the country, its progress today and in the future depends on them. It is no exaggeration to say that any state, regardless of its political regime, inevitably seeks to influence the process of education and socialisation of a student – a future teacher. First of all, in order to form his sociocultural values that meet the interests of other people, society and the state. It is well known that the positive results of the educational process are determined not so much by educational standards, curricula, programmes and textbooks as by the teacher, the level of his/her general and professional culture, readiness to work effectively in the era of global socio-economic changes.

The system of continuous pedagogical education in Russia is developing in line with this global rule. The philosophy of education development in the country is based on centuries-old traditions, which are based on the historical, cultural and mental characteristics of the multi-ethnic, multi-confessional Russian people. It is not by chance that the concluding Chapter 9 is devoted to preparing teachers to work in an ethno-cultural environment. Gabdulkhakov rightly emphasises the special status of this problem for Russia, which is home to almost 200 peoples. Therefore, the content of ethnic education is influenced by the multinational structure of the country, religious diversity, peculiarities of staff training at universities and the specifics of educational processes in the regions. Many peoples use their native languages as state languages. Multilingualism is the most important characteristic of the cultural diversity of a significant number of regions with a complex ethnic structure (Far East, Middle Volga, Siberia). This diversity influences pedagogical education, the peculiarities of self-realisation of the future teacher's linguistic personality in a bilingual or multilingual environment. Undoubtedly, the solution of ethnic, linguistic problems has national specificity in the modern world and carries a threat to the internal political stability of some states. In the evolutionary context, a significant danger is the process of language

loss, ethnic self-identification and ultimately the risk of extinction of small peoples. Characterising the Russian experience, Gabdulkhakov argues:

Historically, Russia (since the formation of the USSR) has developed traditions of multicultural education – traditions of bilingualism, tolerance, intercultural and interfaith dialogue. These traditions are important for the preservation of peace and social well-being of the country's peoples.

The prospects for the development of ethnocultural teacher training in Russia should be related to the development of an ethnocultural code, expansion of the sphere of native language and support of national culture. Such training requires the use of modern educational technologies not only in universities but also in school and preschool institutions.

Thus, teacher training is in the focus of state educational policy. There is a clear understanding that the quality of teacher training determines how educated, moral and responsible the young generation will be. This is one of the main conditions for strengthening the stability, moral and technological sovereignty of the country, its progress today and in the future. In the Russian tradition, the role of the teacher is seen as crucial in the context of educating the younger generations as bearers and continuers of the development of spiritual and material culture. It is not by chance that the word Teacher is often capitalised.

However, teacher education in Russia at least twice radically changed the natural course of its development. The first change occurred in 1917 after the socialist revolution, which was marked by the construction of a new Soviet state and, accordingly, the Soviet education system. The second break occurred in 1991, when the Union of Soviet Socialist Republics collapsed, leading to the liquidation of the socialist model and the introduction of market, capitalist relations, including in education.

The transformation of the educational system of the country has had a serious impact on the value-purpose bases and content of teacher education. These changes in the modern system of teacher education are manifested in the simultaneous development of the trends of unity and variability while preserving the integrity of the educational space of Russia. This principle of construction provides educational unity, determines the specificity of the national education system and its development in line with traditions. Therefore, the current transformation trends are aimed not only at modernising subject, psychological, pedagogical and methodological training of teachers, but also at forming sociocultural attitudes and values aimed at strengthening the foundations of Russian society. The goal of modern teacher education is not simply to enrich future teachers with a system of scientific and ethical knowledge, but to develop their intellectual, emotional and technological abilities. Based on this, the main tasks of state policy in this sphere are centred around the following ideas: the necessity of integration on a meta-pedagogical basis of psycho-pedagogical, subject-methodological, socio-humanitarian and cultural training of a future teacher; realisation of an optimal balance between theoretical and practical blocks of training.

On this basis, such important qualities of the future teacher as professional competence of the graduate, the value of personal development, intercultural

competence, social responsibility and continuous professional development are formed.

Russian pedagogy has always been characterised by a broad socio-historical view of education as a special social institution of transmission and multiplication of national values, traditions of science and culture in the triune process of education, upbringing and personal development. At the present stage, the value bases of teacher training reflect the current requirements and challenges of the educational sphere and are aimed at creating conditions for the formation of highly qualified, competent and responsible teachers. Such values as humanism, tolerance, justice, respect for others, social responsibility, intercultural understanding are the basis for the formation of personal qualities of future teachers. Teacher training seeks to be based on these values as much as possible, integrating them into the content of education and educational practice. The realisation of values in the educational process creates real conditions for the development of a future teacher's personality. This includes the development of his/her emotional and social intelligence, self-esteem, ability to adapt and self-development. Accordingly, the educational environment should provide opportunities for the development of civic and ethical qualities, as well as promote the formation of creative and critical thinking in future teachers.

Personal results achieved through the realisation of values in the educational process play an important role in the future professional activity of teachers. Self-confidence, high motivation, ethical principles and skills of interpersonal interaction, readiness for creative and innovative approaches – all these are the basis for successful pedagogical work.

The principle of unity of the educational space in teacher training is enshrined in legislation, but in practice effective practical mechanisms for ensuring it have been insufficient until recently. Unified model curricula and programmes disappeared with the collapse of the USSR. The state and then federal state educational standards from generation to generation became more and more framework in nature, containing only general requirements. Sufficiently popular in the pedagogical community until the 1990s, the Exemplary Basic Educational Programmes as a normative document in higher education were cancelled. The monitoring of educational programmes of pedagogical universities, conducted in 2022, showed significant discrepancies in curricula even for the same training profiles, which differed in the list, name, labour intensity and sequence of disciplines. As a result, not only the academic mobility of students was hampered, who could hardly move from programme to programme even within the same HEI, but also the readiness to provide a single state examination was questioned.

In order to address these challenges, measures have been launched since 2021 to train staff in pedagogical undergraduate programmes on the basis of unified approaches to their structure and content. As a result, methodological recommendations were prepared, called 'The Core of Higher Teacher Education', analysed in Chapter 5. The Core has been adopted by most higher education institutions implementing teacher education programmes. In order to improve it, the implementation of the recommendations is monitored on a regular basis, proposals from HEIs for its adjustment are summarised, and changes in the list,

names and labour intensity of disciplines are made centrally. In essence, a mechanism for systematic updating of the content of teacher education has been created.

The principles of the 'Core of Higher Teacher Education' on the introduction of common approaches to the content and structure of the basic elements of educational programmes have begun to be extended to the system of secondary teacher education. Researchers and practitioners see this as a real step to ensure the conjugality and continuity of training at different levels of teacher education. Now, under the conditions of the development of the fourth generation Federal State Educational Standard, this approach will be transferred to the programmes of a new level – basic higher education. However, there is no doubt that they will retain wide opportunities for variability in their own concepts and programmes of teacher training in higher education institutions. Moreover, some leading universities will still have the right to develop their own educational standards.

Thus, under the influence of the specifics of Russia's cultural and historical destiny, a unique system of continuous pedagogical education has developed here. The peculiarities of the country's cultural, economic and geopolitical development and the originality of the national mentality are inherent in it. The Russian Federation has always been and is part of the world community, which is inevitably and rapidly changing before our eyes. New targets and benchmarks have been defined at the state level to guide the processes of systemic transformation of society. The changing political and social context requires not fragmentary improvements, but a new philosophy and methodology of pedagogical education. Today Russia is at a milestone for itself, experiencing a period of cardinal, irreversible changes in the world, the most important historical events that determine the future of our country and our people (from the Address of the President of the Russian Federation to the Federal Assembly of 21.02.2023). Therefore, the challenges facing the country will stimulate significant changes at all levels of the national educational system in the short and long term.

It is known that there is a deep connection between national character and the type of state structure. Despite the fact that world history confirms the existence of common laws of development of civilisations, the vectors of development of each nation and ethnos differ significantly. This is manifested not only in the diversity of state systems, thinking, beliefs, language, everyday life and other components of human life but also in the uniqueness of educational systems. As a result, specific ways of transmitting, storing and reproducing the experience of generations, reflected in the content and forms of education, have been formed in different countries. These need to be studied internationally more than ever, so that educators in different countries can learn more about each other, adopt best practices and consistently bring teacher training to a new level of quality.

Reference

Federal Law of December 29, 2012 No. 273–FZ On Education in the Russian Federation. https://www.consultant.ru/document/cons_doc_LAW_140174/?ysclid=lmjim4s1el675334035

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