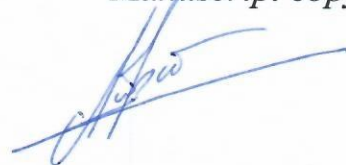


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**COMPARATIVE ANALYSIS OF
WORK-BASED LEARNING INSTITUTIONS
IN RUSSIA AND FOREIGN COUNTRIES**

Speciality - 5.8.7. Methodology and technology
of vocational education and training

Abstract of the dissertation for the degree of
Candidate of Pedagogic Sciences

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Relevance of the study. Practice-oriented learning in the form of apprenticeships, where a significant portion of the educational program is dedicated to work-based training, has become one of the key global trends in initial vocational education and training (IVET). This approach is often linked to countries like Germany, Switzerland, and Austria, where the dual system of vocational education has historically developed, demonstrating its positive impact on the quality of student preparation. Recent studies show that the IVET model, characterized by a close interaction between companies and the vocational education system, leads to broader employment and career growth opportunities for young people in the labor market and a lower unemployment rate among graduates.

For companies, the apprenticeship model offers an alternative to recruiting from the labor market by enabling them to train the workforce they need and select the most productive apprentices. During their training, apprentices internalize corporate values and acquire necessary skills. As a result, companies retain more loyal employees, and employee turnover decreases. Additionally, apprenticeships have been shown to positively impact innovation within companies. Furthermore, companies benefit from the productive contributions of apprentices during the program while saving on costs related to training and onboarding employees.

For students, apprenticeships provide the opportunity to enter the labor market early and earn while studying. The apprenticeship model serves as a means of co-opting individuals who, for various reasons, may not achieve high results in the general education system and are unable to pursue higher education. Work-based learning offers them a chance to acquire skills in a non-academic environment, learn from colleagues, and observe successful role models. The apprenticeship model lays the foundation for these students' future social mobility, enabling them to continue their education in higher education institutions or within corporate training systems.

Alongside the social and economic benefits provided by the apprenticeship system, research in the field of vocational education theory and practice substantiates that work-based learning helps address the shortcomings of training conducted solely

within educational institutions. Researchers argue that the sets of competencies acquired by students in the work-based differ from those gained in educational settings. This is closely linked to the widely studied issue of the transfer of knowledge from educational environments to the work-based, as the contexts of these environments differ significantly. Scholars note that there is no compelling evidence to suggest that the outcomes specified in educational programs can be automatically transferred from the educational context to the work-based. Furthermore, it is claimed that certain competencies, such as the ability to work in a team under real stressful conditions, cannot be formed within educational institutions.

Many foreign countries, where vocational education, like in Russia, is predominantly implemented within educational institutions, have actively integrated the apprenticeship system into their educational frameworks. Countries such as the UK, South Korea, Australia, the USA, Norway, France, and Hungary made significant progress in the 2010s in developing and implementing systematic organizational and pedagogical policies. This led to the development of practice-oriented apprenticeship pathways in IVET systems, an increase in the number of students enrolled in work-based learning programs, and, most importantly, the formulation of policy strategies to involve companies in student training.

In the 20th century, the USSR established a system of vocational-technical training within the framework of the socialist social and economic structure and the command-administrative management paradigm. Vocational educational institutions had their "base enterprises" that participated in all stages of training: from planning the required number of students to conducting graduation exams and ensuring employment. With the dissolution of the USSR, institutional conditions changed dramatically, and enterprises either closed or shed "unnecessary" social functions such as vocational schools in order to integrate into a competitive market economy.

From the late 20th century to the 2020s, the Russian IVET system found itself in a position where the main stakeholders became the state and society. The state, represented by the Ministry of Education of the Russian Federation and the executive authorities of the Russian Federation's regions responsible for public administration in

education, is involved in planning the quotas for student admissions to IVET programs, financing personnel training, and investing in the material and technical base of vocational education organizations (VEOs). The state also sets standards and requirements for the educational process through educational standards and controls the quality of educational outcomes.

Employers, in surveys conducted by the Russian Union of Entrepreneurs and Industrialists (RSPP), consistently highlight the shortage of qualified personnel as one of the main constraints to business development. At the same time, V.E. Gimpelson points out that the systemic role of enterprises in personnel training has been minimal. Russian economic institutions limit planning and decision-making horizons, which fails to stimulate the effective use of qualifications and skills and complicates the formulation of demands to the IVET system for personnel training in both quantitative and qualitative terms.

To address these issues, the Russian Federation began taking targeted measures in the 2010s through state-initiated projects coordinated by the "Agency for Strategic Initiatives", the "Agency for the Development of Professional Skills (WorldSkills Russia) ", and within the framework of national projects. Since the mid-2010s, Russia has been developing a national qualifications system, and the National Council for Professional Qualifications under the President of the Russian Federation was established along with professional qualification councils. Since 2022 The Federal Project "Professionalitet" has been underway.

Nevertheless, both sociological research and official statistical data indicate a slow positive change over the years. According to contracts for targeted training, from 2016 to 2022, an average of 58.3 thousand people were trained annually (less than 2% of the IVET student body), and the number of students whose education was funded by enterprises accounted for less than 0.5% of the total number of students enrolled in paid educational services contracts.

The implemented projects have not brought systemic changes to the national IVET system that would create favorable economic and non-economic conditions for involving companies in the implementation of educational programs, with the exception

of a few examples of best practices. The system still features a significant share of general education, a low proportion of time allocated to practical training, a financing system focused on mass professions and specialties, regional management and funding structures, a weak connection to the national qualifications system, and an emphasis on training for mass professions and specialties. As a result, a situation has developed where there is an imbalanced partnership, with companies actively articulating a demand for a skilled workforce but without proportionate involvement in its formation. The strategy of companies is to minimize long-term financial investments and focus on a quick return on investments by reducing the duration of interaction, primarily within the transitional zone between the IVET system and the labor market.

Main terms of the research:

- *Initial vocational education and training* – formal long-duration vocational education programs at levels 4 and 5 of the International Standard Classification of Education (ISCED), aimed at providing participants with professional knowledge and competencies based on general secondary education, excluding higher education level;
- *Work-based learning* – a specially organized process of workforce training that takes place through real work activities, including observation, participation in the production of goods and services, and reflection within a real working environment. Work-based learning can be combined with traditional classroom training and e-learning, with its intensity depending on the specific form;
- *Apprenticeship* – is a form of work-based learning within the structure of a formal vocational education program, which: combines learning in an educational institution with significant on-the-job training at a company; leads to the acquisition of nationally recognized qualifications; is based on a formal agreement that establishes the rights and obligations of the student, employer, and, if necessary, the educational institution; and necessarily includes the payment of remuneration or other compensation for the practical component of the program;
- *Apprentice* – a student enrolled in an apprenticeship program based on a contract with an enterprise, receiving payment for their work. The terms "apprentice", "student", and "trainee" are used interchangeably;

– in the context of this dissertation, the terms "*company*", "*enterprise*", and "*employer*" refer to legal entities, both commercial and non-commercial, that act as employers for apprentices and participate as one of the parties in work-based learning processes.

Development of the Issue. The issues of didactics in practice-oriented training for workers and work-based learning have long been a focus of Soviet researchers such as S.Ya. Batyshev, A.K. Gastiev, A.Ya. Nayn, S.A. Shaporinsky and others. This line of research was continued by Russian scholars, including V.I. Blinov, V.V. Dubitsky, V.A. Kopnov, P.F. Kubrushko, I.S. Sergeev and V.A. Fyodorov. Their works are dedicated to industrial pedagogy (work-based training) and explore the specifics of vocational education didactics, the role of masters and mentors, and the search for the most effective teaching methods.

The peculiarities of adult and adolescent learning in the work-based environment, the differences in didactic approaches compared to educational institutions, the differences in competencies acquired, and the opportunities and limitations of transferring knowledge and skills from the educational environment to the work-based have been studied by foreign researchers such as S. Akkerman, A. Bakker, M. Eraut, S. Nielsen, J. Raelin, P. Tynjälä and others.

Organizational and pedagogical aspects of forming the work-based learning system in Russia and related issues of building relationships between the IVET system and the labor market have been examined in the works of I.V. Abankina, F.F. Dudirev, E.Yu. Yesenina, T.L. Klyachko, A.N. Leibovich, O.N. Oleinikova, A.A. Faktorovich. These studies address the implementation of the dual education model in the Russian context, the formation of an independent qualification assessment system in Russia, the organizational and pedagogical structure of the IVET system, and the relationship between IVET and labor market demands, among other issues.

The role of companies in workforce training has been studied in the works of D. Acemoglu, A. Bassanini, J. Pischke, B. Hansson, O.V. Lazareva, and P.V. Travkin. Significant findings related to the management (organizational and economic) aspects of work-based learning in the context of modern market relations are presented in the

researches of scholars such as M. Blatter, R. Dionisius, L. Gambin, J. Mohrenweiser, S. Muehlemann, H. Pfeifer, J. Schweri, M. Stevens, S.C. Wolter and others. These works have demonstrated that the key factor in a company's decision to train employees internally or hire ready-made specialists from the labor market is the cost-benefit ratio — specifically, the costs incurred by the company in training specialists versus the revenue generated by employees during their training and subsequent work in the company.

Companies face significant challenges when training specialists on the job, as this process involves building cooperative relationships with educational institutions and other participants in the educational process. These challenges are explained within institutional theory and the theory of the firm, as developed by A.A. Auzan, R.I. Kapelyushnikov, R. Coase, T. Eggertsson, D. North, O. Williamson, and others. The scholars' works focus on the costs that inevitably arise when companies interact with the market and government authorities, while less attention is given to the interactions between companies and educational organizations in the process of workforce training.

The methodology of comparative studies in education has been actively developed by researchers since the 1960s, driven by the need to create methodological recommendations for developing countries. Significant contributions were made by scholars such as B. Adamson, M. Bray, R. Cowen, M. Crossley, S. Marginson, M. Mason, M. Mollis, K. Watson, as well as Russian researchers like V.G. Bezrogov, B.L. Wulfson, A.N. Dzhurinsky, Z.A. Malkova, N.D. Nikandrov, L.L. Suprunova, I.A. Tagunova, and others. Their works developed methodologies for analyzing education systems, with a primary focus on general and higher education. The IVET system, and more specifically the comparison of work-based learning systems and apprenticeships, has been studied to a less extent.

The analysis of the theory and methodology of vocational education, particularly in the area of workplace-based learning, revealed a number of **contradictions**:

- *scientific-theoretical*: there is a contradiction between the need for a unified, theoretically grounded explanatory model of the involvement of companies and

educational organizations in the implementation of apprenticeship programs, and the fact that the problem being studied lies at the intersection of various theories: vocational education theory and methodology, educational systems management theory, human capital theory, firm theory, institutional economic theory and others, between which contradictions are being fixed;

- *scientific-methodological*: there is a contradiction between the large number of described and studied foreign and domestic practices of joint implementation of vocational education programs by companies and educational organizations, including apprenticeships, and the lack of a tool in the form of a comprehensive analytical framework to conduct a comparative analysis. This tool would allow to explore the extensive experience and identify a set of well-founded organizational, pedagogical, normative, and economic conditions for the implementation of the apprenticeship pathway in IVET;

- *organizational-pedagogical*: there is a contradiction between the abundance of practices for implementing the apprenticeship system in foreign countries and the impossibility of transferring educational institutions and practices in their pure form due to differences in the traditions of organizing vocational education in Russia and those in developed foreign countries. Additionally, there is a contradiction between the need for scientific and methodological support in establishing workplace-based learning in the form of apprenticeships in the Russian IVET, considering advanced international experience and the context of the domestic education system and labor market, and the lack of developed organizational-pedagogical models based on theoretical frameworks, foreign practices, and modern domestic experience.

The identified contradictions allowed for the formulation of **the key research problem**, namely, the lack of a unified theoretically grounded set of organizational and pedagogical conditions that would enable the integration of apprenticeship programs into the Russian IVET system as a full-fledged educational pathway.

The relevance of this issue determined the choice of the dissertation **topic**: "Comparative Analysis of Work-based Learning Institutions in Russia and Foreign Countries".

The aim of the research is to develop a conceptual model for the development of apprenticeship in Russia, which includes a set of pedagogical, economic, organizational and regulatory conditions that enable the establishment of sustainable and long-term cooperation between vocational educational institutions and companies in the process of training qualified personnel in the workplace.

The object of the research is work-based learning systems in the form of apprenticeship within the structure of initial vocational education and training.

The subject of the research is the set of conditions that ensure the implementation and functioning of the apprenticeship system as an educational trajectory within both Russian and foreign IVET systems.

The research hypothesis is that there are organizational and pedagogical conditions that make the implementation of apprenticeship programs within the structure of IVET mutually beneficial for companies, educational institutions, and students. These conditions enable the establishment of sustainable and long-term cooperation between the parties, which in turn facilitates the integration of the apprenticeship system into the IVET framework. Conducting a comparative analysis of foreign countries that have successfully integrated apprenticeship into their IVET systems, based on the identified set of conditions, will help uncover and describe effective management decisions and their implementation contexts. The results of this analysis will scientifically substantiate and support the development of a conceptual model for the development of apprenticeship in the Russian Federation.

In accordance with the aim, subject, object, and hypothesis of the dissertation research, the **following tasks** were defined:

1. Based on the study of theoretical concepts of work-based learning and international experience in implementing the apprenticeship model, modern apprenticeship models, and the current context of their functioning, identify, describe, and justify a set of conditions that make the implementation of apprenticeship programs within the IVET system mutually beneficial for companies, educational organizations, and students.

2. Develop a comprehensive analytical framework for comparative analysis of apprenticeship systems within the IVET based on the described set of conditions.

3. Conduct a comparative analysis of apprenticeship systems within the IVET in foreign countries, using the developed comprehensive analytical framework, and identify the most effective organizational, pedagogical, and managerial solutions for engaging educational organizations and companies in the apprenticeship model, along with the context of their implementation.

4. Conduct a retrospective analysis of Russian work-based learning practices in the 20th and early 21st centuries using the developed comprehensive analytical framework to identify deficiencies in organizational-pedagogical and managerial solutions that have prevented the institutionalization of the apprenticeship model in the modern Russian IVET system.

5. Identify the specifics of the Russian IVET system and broader framework conditions relevant to the topic of research and develop a conceptual model for the development of apprenticeships in the Russian Federation.

The theoretical and methodological framework of the study is grounded in the theory of vocational education (V.I. Blinov, B.N. Guzanov, P.F. Kubrushko, E.V. Tkachenko, V.A. Fedorov), and the concept of tacit knowledge as a key characteristic of work-based learning (M. Polanyi, M. Eraut, J. Raelin, J. Lave, E. Wenger).

The analytical framework is built using tools of applied systems analysis (F.P. Tarasenko).

Company behavior modeling in modern market-economy conditions is based on firm behavior theory (R.H. Coase), with investments in training considered as human capital investments (G. Bekker, M. Stevens). Apprenticeship modeling uses a cost-benefit analysis approach, outlining groups of variables and their quantitative evaluation (S. Muehlemann, J. Mohrenweiser, S.C. Wolter). The model is expanded based on transaction cost theory, focusing on costs arising from interactions between parties, using the classification proposed by T. Eggertsson.

Country selection for comparative analysis was based on differentiating labor market institutions characteristic of various country groups (T.N. Vishnevskaya) and on a classification of the scope and depth of existing and potential cooperation between IVET systems and companies (T.F. Remington).

The comparative analysis draws on current works examining national policies for fostering enterprise involvement in the educational process and decision-making based on the economic model of the cost-benefit ratio of participating in student training (M. Kuczera), as well as on methodological materials used by Cedefop, ETF, OECD and ILO.

Stages of research. The research was carried out in three interrelated stages, implemented from 2014 to 2023.

Stage 1 (2014–2018) – Theoretical and Exploratory. During this phase, an analysis of scientific literature on the research problem was conducted, the experience of addressing the issue at both theoretical and practical levels was studied, scientifically grounded approaches to solving the problem were identified, and the research goal and objectives were formulated. The object and subject of the research were defined, and the hypothesis was formulated. The main focus of the first stage was on the organizational and economic aspects of public-private partnerships in the Russian system of IVET.

Stage 2 (2018–2021) – Analytical. This phase included the justification and implementation of the comparative analysis model, as well as the search for and testing of groups of criteria for the comparative analysis. A primary analysis of work-based learning systems in the European Union, North America, and Asia was conducted based on foreign researches and reports of international organizations.

Stage 3 (2021–2023) – Final and Summary. This stage involved summarizing the results obtained in the first two stages: the selection of countries most suitable for analysis, the development of a comprehensive analytical framework for comparative analysis, and its testing using the selected countries. The conclusions were revised, and a conceptual model for the development of apprenticeships in the Russian Federation was developed. The scientific characteristics of the system of managerial decisions and conditions (pedagogical, economic, organizational, and regulatory) ensuring sustainable

interaction between enterprises and educational organizations in Russia were provided. Materials of the dissertation research were published, and the dissertation text was edited, formatted, and the abstract written.

The scientific novelty of the research is as follows:

- a new approach for evaluating the costs and benefits of companies participating in apprenticeship programs has been proposed and tested through scenario-based calculations using samples from IVET programs. This allowed to identify key parameters for the calculation model, which were incorporated into the conceptual model for the development of apprenticeships in the Russian Federation;
- the most effective organizational, pedagogical, and managerial solutions for establishing the apprenticeship system were identified and described. Those solutions, implemented in international work-based learning systems within IVET (Germany, the USA, the UK, South Korea), can be adapted to the Russian IVET system;
- a conceptual model for the development of apprenticeships in the Russian Federation has been developed, integrating foreign experience while adapting it to the national context of the IVET system and labor market.

The theoretical significance of the research lies in:

- the scientific description of two groups of transaction cost factors: at the meso level, related to establishing relationships between companies and educational organizations in the implementation of work-based learning processes, and at the macro level, related to the formation and maintenance of the necessary infrastructure and conditions for establishing partnerships among stakeholders (authorities, companies, educational organizations, and students). These factors complement and expand the explanatory power of the work-based learning model based on the correlation of costs and benefits, proposed by S. Muehlemann, J. Mohrenweiser and S.C. Wolter.;
- the development and scientific justification of a set of conditions for work-based learning in the form of apprenticeships, which includes three groups of stakeholders (companies, educational organizations, and students), for each of which

basic economic and non-economic conditions for participation in apprenticeship programs have been identified and described. This also includes justification for minimizing the costs of interaction with other participants in the educational process;

- the development of a comprehensive analytical framework for comparative analysis of work-based learning systems within IVET, which allows to identify and evaluate the conditions (pedagogical, normative, organizational, and economic) created by countries for involving participants in the apprenticeship programs.

The practical significance of the research lies in the following:

- the conceptual model for the development of apprenticeships in the Russian Federation, taking into account foreign experience and the national context of the IVET, labor market and economy, is aimed at the prospective development of the results of the strategic initiative "Professionalitet". It can serve as a basis for developing a concept for implementing work-based learning in the form of apprenticeships in Russia, including within the framework of the national "Human Resources" project;

- the comprehensive analytical framework for the comparative analysis of apprenticeship systems within IVET can be applied to analyze and scientifically assess work-based learning practices in other countries;

- the research findings have been integrated into the scientific work and educational process of the training programs for scientific and pedagogical personnel at RANEPa. This demonstrates that the results can be used for training specialists in pedagogy and management in the IVET sector.

Provisions to be defended:

1. The systematization of data on contemporary experience in creating conditions within the IVET system for involving companies into the work-based training process led to the following conclusions: 1) in modern theory and practice of vocational education, work-based learning is viewed as a way to create an integrated educational-production environment that ensures the quality of the qualifications obtained by graduates; 2) among the possible forms of work-based learning, apprenticeship is the most attractive form for employers, provided certain conditions are met. The key factors include the ability to influence the scope of practical training

within the educational program (starting at 50%) and the potential to minimize training costs. The balance between individual interests in achieving a specific level of education and employers' interests in the quality and level of qualifications is maintained through governmental management decisions. These decisions create a set of necessary pedagogical, organizational, regulatory and economic conditions that mitigate challenges arising from the integration of two distinct subsystems—vocational education and business.

2. The comprehensive analytical framework for comparative analysis of apprenticeship systems within the IVET structure, developed as part of this dissertation, consists of four interrelated groups of criteria: pedagogical criteria for assessing the design and implementation of the educational process; organizational criteria for evaluating the roles and functions of the parties involved in the educational process; regulatory and economic criteria for assessing management decisions that ensure effective interaction between the parties. Analysis based on this framework allows to determine the advantages of apprenticeship for companies in different countries, to identify strategies for minimizing costs for companies, educational organizations, and students, and to recognize the institutions that protect their interests, reduce risks and maximize benefits from this form of education. It also contributes to the creation of an integrated educational-production environment.

3. Based on the developed comprehensive analytical framework, a comparative analysis of foreign apprenticeship systems within IVET structures was conducted, focusing on Germany (as the benchmark for apprenticeship use, particularly the dual education system) and countries with similar institutional economic structures and labor markets to Russia—such as the USA, the United Kingdom (England), and South Korea. The analysis revealed and substantiated both successful and unsuccessful examples of systemic management decisions, the practice of their implementation, and the set of conditions conducive to sustainable interaction between educational institutions and companies. The following successful practices, which have proven effective, can be adapted for use in the Russian context:

- the process for developing apprenticeship standards, the requirements for apprenticeship standards, and the balance between the theoretical and practical components of programs (experiences from Germany, the United Kingdom, and South Korea);
- methodologies for conducting independent qualification assessments (experience from the United Kingdom);
- regulatory and legal framework that establishes transparent rules and algorithms for the participants in the educational process (experience from the United Kingdom);
- methodological support for the implementation of apprenticeship programs (experience from Germany);
- coordination of activities among the stakeholders involved in the educational process (experiences from Germany, the United Kingdom, and South Korea);
- implementation of platform-based solutions and digitalization of work-based learning (experiences from the United States and South Korea);
- subsidy systems for enterprises, creation of targeted funds, and developed methodologies for cost assessment (experiences from the United Kingdom and South Korea).

4. The conceptual model for the development of apprenticeships in the Russian Federation is based on the theoretical understanding that, on the one hand, educational institutions are deeply rooted in culture, economics, and the social system, and on the other hand, solutions and conditions characteristic of the Soviet era can no longer be applied in modern Russia. The analysis revealed systemic constraints within the current state of Russian IVET that hinder the implementation of workplace-based learning in the form of apprenticeships and, ultimately, sustainable cooperation between IVET institutions and companies. These constraints primarily include: the duration of IVET programs, the fixed ratio of theory to practice in IVET programs with an emphasis on theory, the equalizing principle of financing IVET programs based on per capita

funding mechanisms and student intake quotas, scattered and unsystematic practices in the use of the national qualifications framework, among others.

The developed conceptual model consists of four interrelated blocks: pedagogical, organizational, regulatory-legal, and economic. The blocks are interconnected. The regulatory and economic blocks contain proposals for managerial solutions to ensure the functioning of a distinct sector within the Russian IVET, which is purposefully developing workplace-based learning in the form of apprenticeships. These include, among others, behavioral algorithms for the parties, the delineation of rights and responsibilities, methods for dispute resolution to remove uncertainty in relations, potential economic models for interaction, target funds, and subsidies for company expenses. The pedagogical and organizational blocks contain proposals for creating a hybrid educational environment when implementing IVET programs in the form of apprenticeships, focusing on the functions and roles of participants in the educational process, collegial management forms, electronic platform solutions, and advisory resources to support participants in the educational relationship.

The reliability and validity of the research results are confirmed by adherence to the logic of a systems approach, following the principles and ethics of scientific research, the correctness of research methodologies and the validation of conclusions, calculation methods, the representativity of the initial data, and the testing and implementation of the conclusions presented for defense.

The results of the study are based on the generalization of the principles and methods of vocational education, the theory of practice-oriented learning, modern concepts of human capital theory, management theory and institutional economics. An important method for verifying the methodology based on established facts was the retrospective analysis of national work-based learning practices in the 20th and early 21st centuries using the developed comprehensive analytical framework.

The author's personal contribution lies in the development, based on the comprehensive analytical framework of comparative analysis, of proposals for creating conditions — pedagogical, organizational, regulatory and economic — that take into account the interests of students, educational organizations and companies, and ensure

their sustainable interaction. The analytical framework also enabled the author to identify and formulate the risks associated with the implementation of the strategic initiative "Professionalitet", which could hinder the successful spread of the results of the federal project in the future. The author has developed a conceptual model for the development of apprenticeships in the Russian Federation.

The validation and implementation of the results were carried out within the framework of research conducted at the Federal Institute for the Development of Education of the Russian Presidential Academy of National Economy and Public Administration as part of state-funded researches: in 2020 on the topic "Organizational and methodological approaches to defining priorities and developing scenarios for the development of vocational education and training in the Russian Federation until 2035", in 2021 on the topic "Study of the necessary conditions for the development of Russian vocational education and training in the stage of the formation of the information society", in 2022 on the topic "Study of the transformation processes of the system of initial vocational education and training under conditions of uneven socio-economic development of the regions of the Russian Federation", and in 2023 on the topic "Analysis of the adaptation of regional systems of initial vocational education and training to new economic conditions".

During the research, a Certificate of Registration for the database No. 2020621580 "Development of Public Forms of Management in Vocational Educational Organizations" was obtained.

The results of the dissertation research were used in the development of the "Guidelines on Mechanisms for Involving Public and Business Associations and the Participation of Employer Representatives in Decision-Making on the Management and Development of Educational Organizations, Including the Update of Educational Programs" (approved by the Order of the Ministry of Education of Russia dated December 27, 2019, No. R-154).

The materials of the research are used in educational activities for the training program of scientific and pedagogical staff in the field of scientific specialization

5.8.7 "Methodology and Technology of Vocational Education and training" at the Russian Academy of National Economy and Public Administration.

The theoretical propositions and practical results of the research were presented and discussed at various scientific and practical conferences, including: the III, IV, and V International Scientific and Practical Conferences "System Analysis in Economics" (Moscow, Financial University, November 13-14, 2014, November 9-10, 2016, November 21-23, 2018); the Scientific and Practical Conference "Development Institutes in Attracting Private Investments" (Moscow, Institute of Economics, RAN, April 15, 2014); the Scientific Conference "Public-Private Partnership: Status and Issues" (Moscow, Institute of Economics, RAN, April 21, 2015); the 17th and 18th All-Russian Symposia on "Strategic Planning and Business Development" (Moscow, Central Economics and Mathematics Institute, RAN, April 12-13, 2016, April 11-12, 2017); the V All-Russian Forum "National Qualifications System of Russia" (Moscow, NARK, December 6-7, 2018); the XVI and XVII International Scientific and Practical Conferences on "Trends in Education Development" (Moscow, The Moscow School of Social and Economic Sciences and RANEPA, February 14-16, 2019, February 13-15, 2020); the VIII Slavic International Economic Forum (Bryansk, Bryansk Region Government, October 18, 2019); the International Scientific and Practical Conference "Vocational Education: Practice and Management - 2020" (St. Petersburg, RANEPA, December 15-16, 2020); the 27th International Scientific and Practical Conference on "Innovations in Vocational and Vocational-Pedagogical Education" (Yekaterinburg, Russian State Vocational Pedagogical University, April 19-20, 2022); and the XVIII International Scientific Conference "Russian Regions in the Focus of Change" (Yekaterinburg, Ural Federal University, November 18, 2023).

The results of the dissertation research have been published in over twenty academic publications, including two chapters in scientific monographs, one article in a journal indexed in the international citation database Scopus, one article in a journal recommended by the Academic Council of the RANEPA, as well as other articles in journals included in the Higher Attestation Commission (VAK) list.

The structure of the dissertation includes an introduction, two chapters, a conclusion, a list of references containing 229 sources, a list of abbreviations, and four appendices.