Abstract

of the dissertation for the degree of Doctor of Philosophy (PhD) in the educational program: 8D01702- "Foreign Language - Two Foreign Languages" by Saltanat Bolatovna Jangeldinova on the topic "Pre-service foreign language teachers training to work with children with special education needs "

Relevance of the study. As the education system of the Republic of Kazakhstan undergoes modernization, the development of inclusive education is receiving special attention alongside other objectives. This area is a priority of the state's educational policy, guaranteeing equal access to quality education for all learners.

The implementation of inclusion principles in Kazakhstan has been proceeding steadily since 2011 within the framework of state programs for educational development. These principles are consistently reflected in key strategic documents, most notably the Concept of Inclusive Policy of the Republic of Kazakhstan (2025–2030), the Concept for the Development of Preschool, Secondary, Technical, and Vocational Education (2023–2029), and the Concept for the Development of Higher Education and Science (2023–2029), as well as in the Law "On Education" and the Law "On Amendments and Additions to Certain Legislative Acts of the Republic of Kazakhstan Regarding Inclusive Education" (2021). These measures aim to ensure accessible and inclusive education for every child, taking into account their individual characteristics and educational needs.

Implementing an inclusive education policy requires the creation of specific organizational and pedagogical conditions that address the educational needs of all learners, particularly those with special educational needs (SEN). Psychological and pedagogical support plays a vital role in this process, fostering a favorable environment for children's learning and upbringing while ensuring their successful socialization and personal development.

The teacher plays a crucial role in realizing the principles of equal educational opportunities, as the effectiveness of inclusive education largely depends on them. A modern teacher must be prepared to work with students who have diverse educational needs. They must be able to organize instruction and provide the necessary support to each child. In the context of foreign language education, the foreign language teacher plays a particularly important role in implementing inclusion; the process of mastering a foreign language entails active interaction between students and the teacher, the development of communicative skills, and participation in various forms of collaborative activity, all of which require the teacher to take into account each child's individual characteristics. Within an inclusive educational setting, the foreign language teacher performs a wide range of professional tasks. They identify students experiencing learning difficulties and

determine the causes and nature of these challenges, a process that involves pedagogical assessment.

Adapting curriculum content is a key aspect of the foreign language teacher's work. Consequently, when necessary, the teacher participates in developing individualized educational pathways for students. Furthermore, they organize differentiated instruction that takes into account the children's individual characteristics.

In inclusive settings, particular attention is paid to assessing students' academic achievements. Assessment is conducted with due regard for their educational capabilities and needs. This approach fosters conditions for the successful learning of every child and ensures the implementation of inclusive education principles.

Issues surrounding inclusive education and the training of teaching staff for inclusive environments are actively researched by both domestic and international scholars. Academic literature examines various aspects of organizing inclusive education, with special emphasis on the support provided to children with special educational needs. Significant attention is also devoted to the professional training of teachers and the development of their readiness to work in an inclusive educational environment.

Domestic and international researchers have made substantial contributions to developing the theoretical foundations of teacher training for inclusive education. Their work explores how teachers develop the professional readiness to work with students who have diverse educational needs. Particular focus is placed on the structure of teacher readiness, the conditions for its formation, methods for developing professional competencies, the organization of inclusive instruction, psychological and pedagogical support for students with special educational needs, and the preparation of teachers for professional practice in inclusive settings. Significant contributions to these topics have been made by N. Zendarsky, I.G. Eliseeva, Zh.B. Akhanova, A.K. Akisheva, A.S. Kenzhegulova, S.V. Alekhina, A.R. Ray, S.V. Evans, J.M. Langberg, N.N. Zavadenko, A.S. Mustafina, S.A. Amitova, D. Hernandez-Torrano, K. Faucher, M. Tynybayeva, L.A. Belozerova, E.A. Bragina, O.I. Romanchuk, M. Al-Yagon, and I.V. Vozniak, D.V. Vorobyova, S.E. Gaidukevich, V.Z. Kantor, O.V. Karynbaeva, E.V. Ketrish, E.Yu. Konovalova, O.S. Kuzmina, E.G. Samartseva, I.N. Khafizullina, V.V. Khitryuk, S.A. Cherkasova and other researchers.

Issues regarding the training of teachers for inclusive education settings occupy a significant place in the contemporary research of Kazakhstani scholars. In Kazakhstan, various aspects of training teachers for professional practice within inclusive education are examined in the works of Z.A. Movkebayeva, K.Sh. Kumarova, G.A. Abayeva, P.Zh. Parmankulova, A.R. Rymkhanova, G.K. Tleuzhanova, I.A. Oralkanova, and other researchers. Their studies address the development of professional and inclusive competence among future teachers, the cultivation of readiness to work with students who have special educational needs,

the enhancement of pedagogical education curricula, and the organizational and methodological support for training personnel for inclusive educational environments.

An analysis of the academic literature indicates that the issue of teachers' professional readiness for inclusive education is one of the most pressing topics in modern pedagogical science. Most researchers view professional readiness as a complex, multi-component construct comprising motivational, cognitive, value-based, communicative, and activity-related components.

Academic studies present various approaches to defining the structure of an teacher's professional readiness. Researchers have developed criteria and indicators to assess the level of this readiness and have identified distinct stages of preparedness for working in inclusive education settings. Furthermore, various models and mechanisms for fostering this readiness have been proposed.

Specific aspects of teachers' professional readiness for work within inclusive education settings have been the subject of numerous scholarly studies. For instance, issues regarding the psychological readiness of teachers for professional practice in an inclusive educational environment are examined in the works of S.V. Alekhina, V.V. Khitryuk, Z.A. Movkebaeva, A. Stambekova, D. Kaldiyarov, K. Akhmedieva, M. Schmidt, I.K. Amanova, and M.K. Amanova.

The research conducted by S.V. Alekhina, V.V. Khitryuk, Z.A. Movkebaeva, A.Zh. Kalykbaeva, U. Mirzakhmedova, and G.N. Kasymzhanova places particular emphasis on fostering specialists' empathetic readiness, the acceptance of inclusive education values, and the development of an emotional-evaluative attitude toward students with special educational needs.

Furthermore, the development of professional tolerance toward children with disabilities, the cultivation of an inclusive culture, readiness for interprofessional collaboration, and the development of teachers' communicative, reflective, and adaptive competencies are explored in the works of V.V. Khitryuk, Z.A. Movkebaeva, D. Bilyalov, A. Duzelbaeva, D.S. Khamitova, A. Kudarinova, and A. Autaeva.

Scholarly literature also addresses the value orientations and professional attitudes of teachers in the context of inclusive education (S.V. Alekhina, V.V. Khitryuk, Z.A. Movkebaeva, I. Orlakanova). These researchers pay special attention to fostering a teacher's value-based attitude toward inclusion, as well as their professional responsibility and readiness to accept students with special educational needs. A distinct area of research focuses on the ethical aspects of professional interaction within the context of inclusive education (Z.A. Movkebaeva, D.N. Bilyalov, A. Duzelbaeva, D.S. Khamitova, V.V. Khitryuk). The works of these authors address pedagogical ethics, the acceptance of students with special educational needs, professional responsibility, collaboration with families, and interdisciplinary interaction among specialists.

Considerable attention is also paid to developing the communicative competence of specialists working with diverse categories of learners (Z.A.

Movkebaeva, D.N. Bilyalov, N. Syu-fu-shun, B. Dyusenbaeva, S.S. Zhubakova, B.S. Baimenova). Research focuses on fostering a communicative culture among teachers and developing skills for interacting with children with special educational needs, their parents, and psychological-pedagogical support specialists.

It should be noted that pedagogical science has accumulated significant experience in preparing teachers for inclusive practice. Researchers identify the most common training methods as professional development programs, specialized courses, contextual and project-based learning technologies, the resolution of professionally oriented pedagogical problems and scenarios, the simulation of professional activities, and various forms of methodological support for teachers.

Research examines various forms of support for teachers working in inclusive education settings, including mentoring, consulting, and the facilitation of professional interaction. Tutor support and the organization of professional teacher communities play a significant role. Researchers also highlight the effectiveness of psychological-pedagogical training sessions and humanistic approaches aimed at the personal development of the teacher.

These forms of support foster the professional growth of specialists and the enhancement of their pedagogical practice. They help develop professional competencies, improve readiness to work in an inclusive educational environment, and build skills for effective interaction with students.

At the same time, a review of the literature reveals a number of unresolved issues. Many studies focus on examining individual components of professional readiness, typically treating them in isolation from one another. Insufficient attention is paid to their interrelationships and systemic interaction. Such an approach does not always provide a holistic view of the process by which teachers develop the readiness for professional practice within inclusive education.

Furthermore, existing approaches do not fully capture the specific nature of a foreign language teacher's work in an inclusive educational setting. This highlights the need for further research in this area.

The analysis of the scientific literature leads to several conclusions. Despite the active development of inclusive education in the Republic of Kazakhstan, certain challenges persist in this field. One of the most significant is the inadequate level of teacher preparation for working with children with special educational needs. This issue affects various levels of education and requires a comprehensive solution. It is particularly relevant in the realm of foreign language education, where the work of a foreign language teacher in an inclusive setting is characterized by a high degree of complexity and a multifaceted nature.

A modern teacher must not only ensure the effective acquisition of a foreign language but also take into account the individual characteristics of each learner. Understanding the psychophysical developmental traits of children with special educational needs is of great importance. Teachers must be able to adapt instructional content, select effective teaching methods and techniques, and create

an environment that successfully integrates all learners into the educational process.

Thus, the issue of preparing pre-service foreign language teachers for work within an inclusive education setting remains relevant and requires further scholarly analysis and practical solutions.

A theoretical analysis of the current state, development trends, and international experience regarding inclusive education has highlighted the need to integrate subject-specific linguistic, psychological-pedagogical, methodological, and inclusive components into the professional training of pre-service foreign language teachers. The specific nature of their training for working with children with special educational needs is defined by the need to combine specialized knowledge about these learners' characteristics with the professional skills to adapt content, methods, tools, and assessment techniques during foreign language instruction. For the Republic of Kazakhstan, this area is of particular importance given the ongoing development of the regulatory and organizational-pedagogical frameworks for inclusive education and the need to improve the specialized training of teaching staff for its practical implementation.

In the current educational landscape, preparing pre-service foreign language teachers to work with students who have Attention Deficit Hyperactivity Disorder (ADHD) has become particularly relevant. The number of such children in mainstream schools is steadily rising. This necessitates that teachers possess specific knowledge, skills, and professional competencies. International studies indicate that the prevalence of ADHD among school-age children is approximately 5–7%, meaning that virtually every mainstream classroom may include one or more such students. Moreover, the majority of children with ADHD receive their education in mainstream schools within inclusive settings. Despite the absence of significant intellectual impairments, students with ADHD face considerable academic challenges due to issues with attention, impulsivity, and deficits in self-regulation and executive functions. These difficulties are particularly evident in foreign language classes, where academic success depends directly on the ability to sustain attention, comprehend and process spoken language, follow task sequences, engage in dialogue, switch between different types of language activities, and exercise self-monitoring.

At the same time, an analysis of the curricula at teacher training institutions reveals that the training of pre-service foreign language teachers focuses primarily on developing subject-specific and methodological competencies; it fails to adequately foster the professional readiness required to organize instruction for children with ADHD in inclusive classrooms. Prospective teachers often lack systematic knowledge regarding the psychological and pedagogical characteristics of this group of learners, as well as the skills needed to adapt foreign language content, apply positive behavioral support techniques, facilitate inclusive interaction, and manage student behavior.

Existing research focuses largely on general aspects of preparing teachers for inclusive education, whereas the specific issue of professionally preparing pre-service foreign language teachers to work with children with ADHD remains under-researched. There is a particular scarcity of studies aimed at scientifically substantiating a training model that integrates modern advances in inclusive pedagogy, foreign language teaching methodology, Universal Design for Learning (UDL), and positive behavioral support technologies.

Students with ADHD have specific educational needs. They often struggle with attention span, self-control, and the organization of learning activities. Consequently, the teaching process requires the application of specialized pedagogical approaches. Adapting instructional content, employing effective behavior management strategies, and creating a supportive educational environment are of critical importance.

The foreign language teacher plays a pivotal role in this process. Teachers must be able to account for students' individual characteristics and select teaching methods that foster active engagement in the educational process. Furthermore, teachers need to create conditions that sustain learning motivation and facilitate the successful acquisition of the foreign language.

Thus, despite growing interest in inclusive education, the preparation of pre-service foreign language teachers to work with students with ADHD remains insufficiently explored. Existing studies address this issue only partially. Both the theoretical foundations of teacher training and the practical mechanisms for developing professional readiness to work with this category of children require further development.

An analysis of the theory and practice regarding the training of pre-service foreign language teachers for work in inclusive education settings has revealed the following contradictions:

– between the education system's growing need for foreign language teachers prepared to work in inclusive settings and the insufficient theoretical and methodological development of the process of preparing them to work with children with special educational needs;

– between the need to foster professional readiness in pre-service foreign language teachers to instruct children with special educational needs and the inadequate inclusion—within their professional training curricula—of specialized psychological, pedagogical, and methodological resources that address the specific nature of foreign language education in inclusive settings;

– between the need for practical training in designing, adapting, and organizing the foreign language educational process to accommodate students' special educational needs (including those of children with ADHD) and the insufficient use of practice-oriented technologies, methods, and tools during training that simulate real-life professional scenarios.

These contradictions confirm the study's relevance and highlight the need to improve the training system for pre-service foreign language teachers working

with students who have special educational needs. Furthermore, they allow for the formulation of a research problem centered on the need to provide a theoretical rationale for, develop, and experimentally validate a training model that prepares pre-service foreign language teachers for professional work with children with special educational needs—specifically, students with attention deficit hyperactivity disorder (ADHD).

In light of the foregoing, the research topic has been defined as follows: "Preparing pre-service foreign language teachers to work with children with special educational needs."

The aim of the study is to provide a theoretical rationale for, and to develop and pilot, a structural-functional model designed to provide scientific and methodological support for the process of preparing pre-service foreign language teachers for professional work with children with ADHD.

The object of the study is the process of professional training for pre-service foreign language teachers within the higher pedagogical education system.

The subject of the study is the process of developing professional readiness among pre-service foreign language teachers to work with students with attention deficit hyperactivity disorder through the implementation of the developed structural-functional training model.

The research hypothesis posits that if the training of pre-service foreign language teachers for professional work with children with special educational needs (specifically, students with ADHD) is conducted based on a scientifically grounded structural-functional model—comprising training content, organizational and methodological support, and pedagogical conditions aimed at fostering the personal-meaning, cognitive, and technological components of professional readiness—then the teachers' level of professional readiness for inclusive education settings will increase; this is because the model’s implementation ensures the holistic development of the professional knowledge, skills, values, and practical experience required to effectively teach and support students with ADHD.

In accordance with the research goal, object, subject, and hypothesis, the following **objectives** have been defined:

1. To analyze the current state, development trends, and international experience regarding the organization of inclusive education, as well as the specifics of its implementation in the Republic of Kazakhstan.

2. To clarify the essence, content, and structure of the professional readiness of pre-service foreign language teachers to work with children with special educational needs, specifically students with attention deficit hyperactivity disorder (ADHD).

3. To provide a theoretical rationale for and develop a structural-functional model for preparing pre-service foreign language teachers to work with children with special educational needs (using the example of children with ADHD).

4. To experimentally verify the effectiveness of the structural-functional model for preparing pre-service foreign language teachers to work with children

with special educational needs, as well as the organizational and methodological support for its implementation.

Research methodology and methods.

The methodological basis of the study comprises a set of philosophical, general scientific, and discipline-specific approaches, concepts, and theoretical tenets that facilitate a holistic understanding of the issue of preparing pre-service foreign language teachers for professional work with children with special educational needs within the context of inclusive education.

At the philosophical level, the study is grounded in:

- the tenets of the systems approach, which views pedagogical phenomena as integral systems of interconnected elements (R. Ackoff, V.G. Afanasyev, L. von Bertalanffy, T.A. Ilyina, V.S. Sadovsky, A.N. Uyomov, V.D. Shadrikov, E.G. Yudin, et al.);

- the fundamental principles of humanistic personality theories, which prioritize the individual learner, recognizing their intrinsic value and right to full development regardless of their specific educational needs (K.A. Abulkhanova-Slavskaya, A.G. Asmolov, R. Burns, M.N. Berulava, G.A. Berulava, C. Rogers, V.I. Slobodchikov, V. Frankl, et al.);

- the axiological approach, which elucidates the value-based foundations of pedagogical activity and the formation of the future teacher's professional stance within the context of inclusive education (N.S. Rozov, V.S. Stepin, V.I. Genitsiansky, V.A. Slastenin, V.A. Yadov, et al.).

At the general scientific level, the study draws upon:

- the theory of social attitudes, which reveals the mechanisms underlying the formation of an individual's professional attitude toward the objects of pedagogical activity (I.G. Eliseeva, F. Znaniecki, D. Myers, G. Allport, M. Rokeach, W. Thomas, et al.); -scientific approaches to the study of an individual's professional and psychological readiness for activity (P.K. Anokhin, K.M. Gurevich, M.I. Dyachenko, V.L. Zinchenko, L.A. Kandybovich, E.A. Klimov, B.F. Lomov, A.K. Markova, K.K. Platonov, D.N. Uznadze, V.D. Shadrikov, et al.);

-the concept of the competence-based approach in higher education, focused on developing the professional competencies of future specialists (V.I. Baidenko, N.M. Borytko, A.A. Verbitsky, E.F. Zeer, I.A. Zimnyaya, N.V. Kuzmina, J. Raven, Yu.G. Tatur, A.V. Khutorskoy, et al.);

-tenets of the contextual approach, which entails modeling future professional activity during the student learning process (A.A. Verbitsky, O.G. Larionova, et al.);

-principles of the meta-subject and task-based approaches, which facilitate the integration of knowledge and the development of the ability to solve professionally significant pedagogical tasks (Yu.A. Samarin, A.V. Khutorskoy, G.A. Ball, A.M. Matyushkin, I.S. Yakimanskaya, et al.).

At the specific scientific level, the research is based on:

-theories regarding the development and functioning of higher education (S.I. Arkhangelsky, V.P. Bespalko, A.A. Verbitsky, N.F. Talyzina, et al.) [60];

-the theory of pedagogical activity (V.V. Kraevsky, V.A. Slastenin, N.F. Talyzina, et al.); – theoretical principles of the professional-pedagogical training and professional development of the future teacher's personality within the higher education system (O.A. Abdullina, N.M. Borytko, S.G. Vershlovsky, A.R. Rymkhanova, B.S. Gershunsky, N.V. Kuzmina, L.M. Mitina, N.K. Sergeev, et al.).

To achieve the research objective and address the set tasks, a complex of complementary research methods was employed.

Theoretical methods included the analysis of regulatory documents and scientific literature relevant to the research problem; socio-historical, conceptual-terminological, structural-functional, and subject-functional analyses; SWOT analysis; and pedagogical modeling and design.

The empirical group of methods comprised pedagogical observation, questionnaires, written surveys, analysis of student work products, and analysis of results from solving pedagogical tasks and professionally oriented scenarios.

The primary research method was a pedagogical experiment aimed at verifying the effectiveness of the developed model for preparing pre-service foreign language teachers to work with children with special educational needs. Conducting the pedagogical experiment made it possible to evaluate the model's effectiveness within the actual educational process and to track changes in the level of professional readiness among pre-service foreign language teachers. During the experimental work, particular attention was paid to assessing the development of professional readiness components and the competencies required for pre-service teachers to perform their professional duties in an inclusive education setting.

The empirical data obtained made it possible to establish the effectiveness of the developed model and its associated scientific-methodological support, as well as to determine the feasibility of implementing them in the professional training process for pre-service foreign language teachers.

A set of mathematical statistical methods was used for the quantitative processing, comparative analysis, and statistical interpretation of the experimental results. Student's t-test for independent samples was used to identify statistically significant differences between the indicators of the experimental and control groups. Student's paired t-test and the non-parametric Wilcoxon signed-rank test were applied to assess changes in indicators within groups and to compare results before and after the formative stage of the experiment. Correlation analysis, involving the calculation of Pearson's correlation coefficient, was used to determine the nature and strength of the relationships between the components of professional readiness among pre-service foreign language teachers. The application of the specified mathematical-statistical methods ensured an objective assessment of the experimental data obtained, made it possible to establish the statistical significance of the observed trends and determine the interrelationships between the indicators under study, and confirmed the effectiveness of the

developed model for preparing pre-service foreign language teachers to work with children with special educational needs.

Research Setting

The experimental study was conducted at the Academician E.A. Buketov Karaganda National Research University. The study involved 129 students enrolled in the "Foreign Language: Two Foreign Languages" educational program, all of whom were prospective foreign language teachers.

To evaluate the effectiveness of the developed structural-functional model, experimental and control groups were formed. The experimental group consisted of 65 students, while the control group comprised 64 students. The sampling process ensured the comparability of the groups based on key characteristics, allowing for an objective assessment of the pedagogical experiment's results.

Research Stages

The study was conducted between 2021 and 2025 and comprised three interconnected stages.

The first stage (2021–2022) involved theoretical and analytical work. This included a review of philosophical, psycho-pedagogical, and methodological literature relevant to the research problem, as well as an analysis of regulatory documents and both domestic and international experience regarding teacher training for inclusive education settings. During this stage, key research concepts were refined, methodological foundations were established, the research concept was formulated, and the scientific framework was developed.

The second stage (2022–2023) involved the organization and implementation of a formative experiment. During this phase, pedagogical conditions, methods, formats, and technologies for preparing prospective foreign language teachers for professional work with children with special educational needs were developed, theoretically substantiated, and piloted. Concurrently, the organizational and methodological support for the developed model was tested.

The third stage (2023–2025) focused on the systematization, analysis, and interpretation of the results obtained from the experimental work. The obtained data underwent statistical analysis; the effectiveness of the developed model for preparing pre-service foreign language teachers to work with children with special educational needs was determined; key conclusions and recommendations were formulated; and the text of the dissertation research was prepared.

Key propositions submitted for defense

1. The professional readiness of a prospective foreign language teacher to work with children with special educational needs constitutes an integrative professional-personal construct formed during professional training; it enables the teacher to carry out professional activities within an inclusive education setting. Its structure comprises three interconnected components: personal-meaning, cognitive, and technological. The personal-meaning component reflects the motivational-value orientation and the prospective teacher's acceptance of inclusive education values; the cognitive component encompasses a system of

psychological-pedagogical, subject-specific (linguistic), methodological, and specialized knowledge; and the technological component covers professional abilities and the resulting skills for designing, organizing, and adapting the foreign language educational process to meet students' special educational needs. While these components reveal the internal structure of professional readiness, professional competencies characterize the prospective teacher’s ability to integratively apply acquired knowledge, abilities, modes of action, and personal resources when addressing professional pedagogical tasks.

2. The developed structural-functional model for preparing prospective foreign language teachers to work with children with special educational needs is based on the principles of systematicity, integrity, continuity, and practical orientation. The model entails the simultaneous development of the personal-meaning, cognitive, and technological components of readiness through the implementation of a modular teaching approach. The model's structure consists of interconnected blocks: motivational-goal-oriented, content-related, procedural-technological, and result-evaluative. A distinctive feature of this structural-functional model is the use of a competence-based contextual training approach, implemented—among other ways—through a specialized HUB platform for foreign language teachers working in inclusive education settings. However, the HUB platform does not constitute a standalone technology, nor does it encompass the entirety of the competence-based contextual approach. It serves as one of the means of its implementation, alongside elective courses, study modules, methodological guidelines, case studies, professionally oriented tasks, the simulation of pedagogical situations, micro-teaching, the design of adapted materials, and students' reflective-evaluative activities.

3. The implementation of the structural-functional model for preparing pre-service foreign language teachers to work with children with special educational needs relies on a competence-based contextual approach. This approach ensures a sequential transition from educational-cognitive activity to quasi-professional and educational-professional activity. When combined with specific pedagogical conditions, this model integrates the theoretical and practical training of pre-service foreign language teachers and fosters the personal-meaning, cognitive, and technological components of professional readiness. The model's effectiveness is confirmed by the positive trends observed in the professional readiness indicators of students in the experimental group and by the statistical analysis of the experimental data.

4. Experimental testing confirmed the effectiveness of the developed model. The results demonstrate the success of the proposed approaches to preparing pre-service foreign language teachers for work within inclusive education settings.

Experimental testing established the model's effectiveness, evidenced by positive trends in the personal-meaning, cognitive, and technological components of the pre-service foreign language teachers' professional readiness to work with children with special educational needs. Data obtained during the experimental

study indicate an expansion and systematization of specialized psychological-pedagogical and methodological knowledge, as well as the development of professional abilities and the practical skills derived from them for inclusive education settings.

Positive changes were also observed in the development of a set of professional competencies among pre-service foreign language teachers: pedagogical, subject-linguistic, methodological, inclusive, communicative, diagnostic-evaluative, digital, and reflective. Pre-service teachers demonstrated a higher level of proficiency in designing and organizing foreign language instruction that addresses students' special educational needs; adapting learning materials and tasks; selecting appropriate teaching methods and technologies; engaging in pedagogical interaction; utilizing digital educational resources; assessing learning outcomes; and analyzing and adjusting their own professional practice. The observed positive trend in the structural components of professional readiness and associated professional competencies—confirmed by the statistical analysis of experimental data—supports the conclusion that the developed model for preparing pre-service foreign language teachers to work with children with special educational needs is effective.

The study’s scientific novelty lies in the theoretical substantiation of preparing pre-service foreign language teachers to work with children with special educational needs within an inclusive education framework. This substantiation integrates the competence-based, activity-based, learner-centered, and inclusive approaches with the principles of Universal Design for Learning, the communicative-activity approach to foreign language teaching, and positive behavioral support. The comprehensive nature of this substantiation stems from examining the process through the interconnection of its goal-oriented, content-related, procedural-technological, and evaluative aspects, as well as from integrating the general pedagogical, subject-methodological, and inclusive components of the pre-service foreign language teacher's professional training.

The content of the concept "readiness of a pre-service foreign language teacher to work with children with special educational needs" has been clarified. Unlike interpretations that view readiness primarily as a set of knowledge, skills, and professionally significant qualities, this study treats the concept as an integrative characteristic of the pre-service teacher's personality. It combines a motivational-value orientation toward accepting inclusive education principles; a system of psychological-pedagogical, subject-specific (linguistic), methodological, and specialized knowledge; and professional skills—along with the practical abilities derived from them—to organize foreign language instruction that accounts for students' special educational needs. The content of this readiness is specified through the interrelationship of three structural components: the personal-meaning, cognitive, and technological components.

The content of training pre-service foreign language teachers to work with children with special educational needs (SEN) has been specified, using students

with Attention Deficit Hyperactivity Disorder (ADHD) as a case study. The specific nature of ADHD is addressed not only through the theoretical study of the psychological and pedagogical characteristics of this group of students but also within the content of the teachers' methodological training. This training is implemented by teaching strategies such as structuring foreign language lessons; breaking learning tasks down into sequential, manageable steps; varying activity types; using concise, clear instructions; employing visual aids; adapting task volume and pacing; managing attention shifts; using multiple channels to present learning material; applying positive reinforcement; preventing unwanted behavior; and individualizing feedback and assessment. These strategies are incorporated into practice-oriented tasks, pedagogical case studies, the design of adapted materials, and the simulation of professional scenarios.

Modern scientific approaches have been systematized, and the theoretical-methodological foundations for training pre-service foreign language teachers for professional practice within inclusive education settings have been defined. The novelty lies not merely in listing existing approaches, but in defining their functional roles within the context of this study and integrating them into a unified methodological framework for the training model. The competence-based approach orients training toward professional outcomes and competencies; the activity-based approach involves students in solving professionally oriented tasks; the person-centered approach takes into account the individual characteristics and active agency of educational process participants; the inclusive approach embraces diverse educational needs and ensures learning accessibility; Universal Design for Learning offers flexibility in how content is presented, activities are organized, and results are demonstrated; the communicative-activity approach defines the specifics of foreign language instruction; and the principles of positive behavioral support ensure a preventive and supportive focus in pedagogical interactions with learners, including those with ADHD.

Based on this, the theoretical foundations for organizing the training process for pre-service teachers have been defined: the integration of subject-specific language, psycho-pedagogical, methodological, and inclusive training components; a professional-contextual orientation of the curriculum; a combination of theoretical and practice-oriented training; the simulation of future professional activity scenarios; the use of varied and adaptable teaching methods and tools; a reflective approach to professional training; and a focus on evidence-based, preventive, ethical, and partnership-oriented pedagogical interaction.

A structural-functional model has been developed for training pre-service foreign language teachers to work with children with special educational needs (SEN). This model reflects the interrelationship between objectives, methodological approaches and principles, training content, competence-contextual technology (along with the methods and tools for its implementation), assessment criteria and indicators, and the intended outcome: the development of

the pre-service foreign language teacher's professional readiness to work in an inclusive educational environment.

The pedagogical conditions ensuring the implementation of the developed model have been identified and substantiated:

- incorporating specialized knowledge into the professional training curriculum regarding inclusive education, the characteristics of children with SEN, and methods of pedagogical support—including support for students with ADHD;
- integrating the subject-specific language, psycho-pedagogical, methodological, and inclusive components of the training;
- implementing competence-contextual technology through a sequential transition from academic learning activities to quasi-professional and educational-professional activities;
- engaging students in solving professionally oriented tasks, analyzing pedagogical case studies, simulating inclusive lesson scenarios, developing and adapting instructional materials, and designing segments of foreign language lessons; - utilization of developed scientific and methodological resources: the elective course "Methodology of Teaching Foreign Languages to Children with Special Educational Needs," a module for the course "Practicum on Foreign Language Teaching Methodology," the "Methodological guidelines for pre-service foreign language teachers working in inclusive field," and the "Inclusive Teacher Hub" digital resources;
- facilitation of students' reflective and evaluative activities, involving self-analysis, self-assessment, and the adjustment of their own professional pedagogical practices.

Organizational and methodological support for the model has been developed and experimentally tested; this support integrates the theoretical, practical, and independent components of student training and aims to foster the personal-meaning, cognitive, and technological components of professional readiness. The experimental data obtained demonstrated positive trends in the indicators for these components and confirmed the effectiveness of the developed model for preparing pre-service foreign language teachers to work with children with special educational needs.

The study systematized and synthesized contemporary scientific approaches to developing the professional readiness of pre-service foreign language teachers for work within inclusive education settings. This enabled the identification of the theoretical foundations for organizing the teacher training process.

A model for preparing pre-service foreign language teachers to work with children with special educational needs was developed. The model is grounded in systems, competence-based, personal-activity, and contextual approaches. It delineates the content, structure, and mechanisms involved in developing the future teacher's professional readiness.

The study identified and substantiated the pedagogical conditions ensuring the effectiveness of training pre-service foreign language teachers to work with

children with special educational needs. These conditions include: enriching the professional training curriculum with inclusive and specialized methodological content—specifically, acquiring knowledge about the characteristics of children with special educational needs (including ADHD) and methods for adapting foreign language instruction to their needs; and implementing a competence-contextual technology that facilitates a sequential transition from mastering theoretical knowledge to solving educational-professional tasks through the analysis of pedagogical situations, the case method, the modeling of inclusive lessons, the development of adapted learning materials, and the resolution of professionally oriented problems. the creation of comprehensive organizational, methodological, and digital support for the training of pre-service foreign language teachers—comprising an elective course, a study module, methodological guidelines, practice-oriented tasks, and Inclusive Teacher Hub resources—that integrates students' theoretical, practical, independent, and reflective-evaluative activities.

A significant outcome of the study is the development of an organizational and methodological framework for preparing pre-service foreign language teachers to work with children with special educational needs. Pilot implementation confirmed the feasibility of its practical application within the higher pedagogical education system.

Theoretical significance of the study.

The theoretical significance of the study lies in the fact that the results expand scientific understanding regarding the professional preparation of pre-service foreign language teachers for working with children with special educational needs in inclusive educational settings. The study clarifies the content of a pre-service foreign language teacher's professional readiness for this activity and specifies its structure, characterized by the interrelationship of personal-meaning, cognitive, and technological components. It defines the theoretical-methodological and organizational-methodological foundations for developing this readiness, incorporating competence-based, activity-based, person-centered, and inclusive approaches, as well as principles of Universal Design for Learning, the communicative-activity approach to foreign language teaching, and positive behavioral support.

The findings contribute to the theory of teacher training by providing a theoretical rationale for preparing pre-service foreign language teachers for professional practice in an inclusive educational environment. The study specifies the interrelationship between the content of professional training, the competence-contextual technology of its implementation, and the development of the personal-meaning, cognitive, and technological components of professional readiness.

The research results also broaden scientific understanding in the field of inclusive foreign language education by detailing the content and methodological specifics of preparing pre-service foreign language teachers to instruct children with special educational needs, including students with ADHD. The developed

theoretical propositions can serve as a scientific and methodological basis for further research into teacher training for inclusive education settings.

Practical significance of the study. The practical significance of the study lies in the development and implementation of a set of educational and methodological resources aimed at improving the training of pre-service foreign language teachers for working with children with special educational needs.

The practical value of the work lies in the following:

- an elective course titled "Methodology of Teaching Foreign Languages to Children with Special Educational Needs," designed for students in the accelerated study track of the "Foreign Language: Two Foreign Languages" educational program;
- a module for the course "Workshop on Foreign Language Teaching Methodology," developed for students in the standard study track;
- methodological guidelines titled "Methodological guidelines for pre-service foreign language teachers working in inclusive field," containing evidence-based approaches and practical recommendations for organizing inclusive foreign language instruction;
- a specialized online resource (HUB platform) aimed at providing professional support to foreign language teachers working in inclusive education settings.

The developed HUB platform provides access to teaching and learning materials, adapted tasks, sample educational documentation, practical recommendations, digital resources, and successful pedagogical practices. Furthermore, the platform facilitates professional interaction among teachers, the exchange of experience, and the dissemination of effective methods for teaching children with special educational needs.

The research findings can be utilized within the higher pedagogical education system, in the development of educational programs for training pre-service foreign language teachers, in professional development systems for teachers, and in the operations of educational institutions that implement the principles of inclusive education.

Testing and implementation of research results.

The key premises, results, and conclusions of the dissertation research have undergone comprehensive validation and practical implementation within the framework of research and educational activities. The study's findings have been subject to extensive scholarly discussion. The work's main arguments and conclusions were presented at international scientific and practical conferences, enabling expert evaluation by the academic community and helping to identify prospects for the further development of the research topic.

The research findings are reflected in various scholarly publications, including those indexed in international scientometric databases. Some results appear in journals recommended by the Committee for Quality Assurance in

Science and Higher Education of the Ministry of Science and Higher Education of the Republic of Kazakhstan.

The practical significance of the research is confirmed by the implementation of its findings in the educational process. Educational-methodological materials and electronic educational resources were developed based on the data obtained. These resources are designed to enhance the training of pre-service foreign language teachers for work in inclusive educational settings.

The key scientific findings of the research are presented in an article published in a journal indexed in the Scopus international database:

– Pre-Service English Language Teachers' Training to Work in Inclusive Educational Environment // World Journal of English Language. – 2024. – Vol. 14. – No. 6. – DOI: 10.5430/wjel.v14n6p616.

The research results are also reflected in scholarly articles published in journals recommended by the Committee for Quality Assurance in Science and Higher Education of the Republic of Kazakhstan. These publications present the theoretical premises of the study, the results of the experimental work, and the main conclusions drawn from the research.

- Children with Special Educational Needs in Education Field of Kazakhstan: Problems and Needs // Bulletin of Karaganda University. "Pedagogy" Series. – 2023. – No. 2 (110). – pp. 7–13. DOI: 10.31489/2023Ped2/7-13;

- Issues of a Foreign Language Teacher Readiness to Work with Children with Special Educational Needs in the Conditions of Formal and Non-Formal Education // Bulletin of Karaganda University. "Pedagogy" Series. – 2023. – No. 3 (111). – P. 199–205. DOI: 10.31489/2023Ped3/199-205;

- On the Issue of Preparing Pre-service foreign language Teachers to Work with Children with Special Educational Needs // Bulletin of Ablai Khan KazUIR&WL. "Pedagogical Sciences" Series. – 2023. – Vol. 70. – No. 3. – P. 163–172. DOI: 10.48371/PEDS.2023.70.3.011.

Selected findings of the study were presented and discussed at international scientific and practical conferences, enabling the receipt of expert feedback from the academic community and the refinement of specific aspects of the research:

- Problems of Foreign Language Teaching to Children of Repatriates in Bilingual Society // Modern Scientific Technology. – Stockholm, Sweden, 2022. – P. 77–82;

- The Importance of Linguistic and Psychological Support for Students with Special Educational Needs // Scientific Research and Experimental Development. – London, England, 2022. – P. 73–78;

- Preparing Pre-service foreign language Teachers to Work with Children with Attention Deficit Hyperactivity Disorder // International Scientific and Practical Conference "Prospects and New Trends in the Development of Foreign Language Education." – Karaganda, 2023. – P. 408–412.

The practical implementation of the research results was carried out through the development and piloting of educational and methodological resources

designed to prepare pre-service foreign language teachers for work in inclusive education settings. As part of the study, a manual titled “Methodological Guidelines for Pre-Service Foreign Language Teachers Working in Inclusive Field” (Karaganda: Arko Printing House LLP, 2025, 70 pp.) was developed and implemented; it was recommended for use by the Council of the Faculty of Foreign Languages at the Academician E.A. Buketov Karaganda University (Minutes No. 7 dated April 2, 2025).

One of the significant outcomes of the research was the development of a specialized digital educational resource—a HUB platform for foreign language teachers working in inclusive education settings (Inclusive Teacher Hub).

The platform is designed to support the professional activities of teachers. It provides access to modern educational and methodological materials essential for organizing inclusive foreign language instruction. The resource also contains practical recommendations for working with students who have special educational needs.

Adapted learning tasks and methodological materials constitute an important component of the platform. Their use makes it possible to take into account the individual educational capabilities and needs of learners. Furthermore, the resource helps enhance the professional competence of teachers in the field of inclusive education.

The platform also fosters professional interaction and the exchange of experience among teachers. Users can access up-to-date information, methodological materials, and practical tools designed to enhance the educational process. The developed "Inclusive Teacher Hub" resource serves as an effective means of organizational and methodological support for foreign language teachers and contributes to improving the quality of instruction for children with special educational needs within inclusive education settings.

Certificates of state registration of intellectual property rights have been obtained for the research findings:

- Methodological Guidelines for Pre-Service Foreign Language Teachers Working in the Inclusive Field* (Certificate of Entry into the State Register of Copyright-Protected Works No. 59048, dated June 2, 2025);
- The "Inclusive Teacher Hub" online resource (Certificate of Entry into the State Register of Copyright-Protected Works No. 59033, dated June 2, 2025).

The research findings have undergone extensive scientific validation. They are reflected in the author's scholarly publications and have been presented to the professional academic community. A high level of publication activity confirms the scientific significance and relevance of the study.

The results obtained have been implemented in the educational practice of training pre-service foreign language teachers. The developed materials and methodological solutions are currently utilized in the educational process. They are applicable within the higher pedagogical education system as well as in professional development programs for teachers in the field of inclusive education.

The structure and scope of the dissertation are determined by the logic of the research. They are dictated by the aim, objectives, and the sequence of addressing the identified scientific problem. The dissertation comprises an introduction, two main sections, a conclusion, a list of references, and appendices.

The introduction substantiates the relevance of the research problem and examines the extent to which it has been previously studied. It outlines the aim, object, subject, hypothesis, and objectives of the research. This section also details the methodological and theoretical foundations of the study. The research methods employed, the setting of the study, and the stages of the experimental work are described. Particular attention is paid to the scientific novelty and the theoretical and practical significance of the findings. The introduction outlines the key propositions submitted for defense. The section concludes with information regarding the validation and implementation of the research results in educational practice.

The first section, "Inclusive education as a pedagogical phenomenon: essence, content and historical dynamics of development" examines the conceptual and methodological bases for training pre-service foreign language teachers for professional practice within an inclusive education framework. It analyzes domestic and international research on inclusive education, elucidates the essence, content, and structure of the professional readiness of pre-service foreign language teachers to work with children with special educational needs, substantiates theoretical approaches to fostering this readiness, and develops a model for training pre-service teachers for professional activity in an inclusive educational environment.

The second section, "Pilot Study on implementing a model for training pre service foreign language teachers to work with children with special education needs" presents the organizational and methodological framework for the training process. This section outlines the goals, objectives, stages, content, forms, and methods of the experimental work; describes the implementation process of the developed training model; analyzes the results of the pedagogical experiment; and evaluates the model's effectiveness.

The conclusion summarizes the study's key findings, formulates theoretical conclusions and practical recommendations for improving the training system for pre-service foreign language teachers working with children with special educational needs in inclusive settings, and identifies promising avenues for future research on this topic.