

## ABSTRACT

of the dissertation work submitted for the degree of Doctor of Philosophy (PhD)  
under the educational program 8D01301 - “Pedagogy and Methods of Primary  
Education”

by Anara Urkunova on the topic:

“Global Competence in Primary Education: Knowledge and Skills of Kazakhstani  
Pre-service Teachers”

**Relevance of the Research.** Over the past decade, the demands placed on teachers have changed significantly, focusing on preparing students for an increasingly complex, globalized, and interconnected world. On one hand, learning within a classroom may seem to be a purely local process: apart from rare occasions such as field trips or visits from guest speakers, students seldom interact with people and cultures beyond their school walls. On the other hand, teachers face growing pressure to equip their students for participation in today's world of knowledge and the global economy. Moreover, they are expected to effectively educate an increasingly diverse student population that faces real-life challenges affecting their physical, mental, and socio-emotional well-being. Teachers encounter numerous difficulties in striving to ensure equal educational opportunities for all, while their responsibility for preparing students for a globalized world remains insufficiently defined.

Students today live in a world that military and business leaders have described as VUCA - Volatility, Uncertainty, Complexity, Ambiguity. On a macro level, this is manifested in unpredictable election results, the rise of new political movements, shifts in international alliances, the rapid spread of technologies, and other transformations. On a micro level, students face volatility and uncertainty in their own lives: public health crises such as epidemics and environmental pollution; growing hate crimes based on religion, race, or sexual orientation; and even recurrent incidents of school shootings. Students cannot simply "leave these problems at the door." Research in learning and development demonstrates that physical and psychological stress, as well as trauma, negatively affect students' cognitive development. Unless society addresses the underlying issues undermining students' physical and mental health, these barriers to learning will persist.

Education in today's world must therefore provide support to both teachers and learners. According to numerous international studies, a comprehensive approach encompassing the cognitive, socio-emotional, and behavioral development of students is necessary. Such an approach should not only equip students with knowledge and skills enabling them to adapt successfully to a constantly changing, interconnected world but also help them to thrive within it.

The modern world offers learners new opportunities to realize their aspirations and discover horizons they may never have imagined. Education must take into account the unique life experiences of each student and overcome institutional barriers they may face due to racial, ethnic, cultural, or linguistic background.

Teaching global competence is one of the key ways through which educators can implement this holistic vision of education. Global competence represents a set of

knowledge, skills, attitudes, and values necessary for successful participation in a diverse and globalized society. It helps students develop not only academic knowledge but also critical thinking, intercultural interaction, and understanding of global issues. Such education aims to prepare students to live in a world where they can effectively communicate across cultures, address global challenges, and contribute to a sustainable future.

In 2018, the Organisation for Economic Co-operation and Development (OECD) introduced the assessment of global competence within the framework of the Programme for International Student Assessment (PISA), conducted every three years to evaluate educational systems worldwide through testing the skills and knowledge of 15-year-old students. The PISA 2018 assessment of global competence provided data on how well students are prepared to live and work successfully in a modern, globalized, and multicultural society. These data enabled educational systems to identify successful practices and determine areas requiring more targeted and systematic approaches to developing global competence among all students.

Many countries have since sought to integrate global competence learning into primary and secondary education. However, without a clear understanding of what global competence is, how it can be taught and assessed, education systems and teachers are unable to ensure its comprehensive development among all learners. This also makes it difficult to evaluate how effectively students are being prepared for life in today's interconnected world.

Kazakhstan's performance in PISA 2018 was considerably lower than that of OECD countries and below its own results from previous cycles. In response, Kazakhstan's educational policy began actively promoting and adapting high-quality standards and practices of leading nations, aimed at preparing students for successful careers in an unstable global economy.

In the 2021-2022 academic year, the Ministry of Education of the Republic of Kazakhstan introduced an elective course titled "Global Competences", designed to develop key 21st-century skills among students. Teaching global competence represents an accessible and practical approach that is within the reach of most teachers. As shown by numerous international studies, this method is effectively applied across age groups and subject areas in different countries.

The terms global competence, global skills, global awareness, global citizenship, global literacy, intercultural competence, international education, and global education are often used interchangeably. However, many researchers note that there are distinctions and even conceptual ambiguities among them.

D. Bourn proposed a theoretical framework of "global skills" encompassing the ability to connect local and global events, recognize the significance of living in a global society, understand the impact of world processes on one's life, critically use ICT, engage in self-reflection and dialogue, work with people holding different perspectives, and strive for a fair and sustainable world. This concept builds on previous research in global skills, emphasizing the need to understand interconnections between local and global communities, to appreciate cultural diversity, and to be aware of how global factors influence individual and collective identities. The key skills include critical evaluation of information (especially in the digital age), willingness for

self-reflection and personal growth, as well as the development of empathetic and cooperative approaches to interacting with others. Collectively, these competencies enable individuals to participate effectively and responsibly in global processes, contributing to the creation of a fairer, more sustainable, and participatory society.

Global competence has a multidimensional nature encompassing cognitive, socio-emotional, and behavioral aspects of learning.

The cognitive domain includes the knowledge and thinking skills required for a deeper understanding of the world and its complexities.

The socio-emotional domain emphasizes values, attitudes, and social skills that allow individuals to live peacefully and respectfully with others.

The behavioral domain involves the practical application of knowledge, productivity, and civic engagement.

International organizations such as Asia Society, World Savvy, OECD, and UNESCO have developed frameworks that identify specific characteristics comprising global competence. Despite differences in terminology, these frameworks agree that global competence and global skills encompass three main areas: cognitive, socio-emotional, and behavioral.

Cognitive domain: knowledge of global issues, trends, and processes of globalization, as well as the use of analytical and critical thinking to understand and address them.

Socio-emotional domain: development of empathy, appreciation of diverse perspectives, recognition of the value of diversity, and a sense of responsibility toward humanity.

Behavioral domain: skills in intercultural communication and collaboration, including multilingualism and active engagement in addressing global challenges.

Together, these interrelated domains provide a holistic approach to preparing students for life in a globalized world.

Asia Society identified four key dimensions of global competence: investigating the world, recognizing perspectives, communicating ideas, and taking action.

Within the OECD's PISA assessment, global competence is defined through dimensions such as examining global and intercultural issues, understanding and appreciating different perspectives, engaging in open and appropriate interactions across cultures, and taking collective action for sustainable development. These dimensions encompass knowledge, attitudes, skills, and values, including information analysis, appreciation of diversity, and awareness of the consequences of actions.

UNESCO, within its program Education for Global Citizenship, emphasized key learning outcomes such as knowledge of global issues and interconnections among countries, critical thinking skills, a sense of belonging to humanity, empathy and respect for diversity, and the commitment to act responsibly and effectively for a peaceful and sustainable world.

World Savvy developed a matrix of global competence including core concepts (understanding world events and one's own culture), values and attitudes (openness, self-awareness, respect for differences, empathy), and skills (investigating the world, analyzing perspectives, effective communication, and critical thinking).

The United Nations, through its Sustainable Development Goals (SDGs) framework, also actively promotes the concept of global competence, emphasizing its importance in achieving sustainable development. The SDGs are globally agreed-upon goals aimed at eradicating poverty, combating inequality and injustice, protecting the planet, and ensuring peace and prosperity for all. Kazakhstan, along with other countries, has endorsed 17 key targets whose implementation by 2030 aims to ensure sustainable progress across all spheres of life and address global challenges affecting everyone on the planet.

Global competence plays an essential role in achieving these goals by fostering skills necessary for creating a more inclusive, just, and sustainable society. Students equipped with global competence are better able to appreciate cultural diversity, engage in international processes, and take action to address issues such as climate change, poverty, and inequality. The United Nations emphasizes that cultivating global competence among learners is a crucial step toward forming responsible citizens capable of contributing to sustainable development at local, national, and global levels.

Higher education institutions play a pivotal role in preparing pre-service teachers by developing their global competence - essential for successful adaptation in the rapidly changing international environment. Many universities worldwide recognize the importance of cultivating global competence among prospective teachers. Accordingly, institutions employ various approaches, including offering international courses, promoting cross-border mobility, and engaging faculty with international experience. In higher education, there has been a noticeable shift from focusing solely on knowledge and skills toward developing values and attitudes, signaling a transition from capability-based to relationship-based learning. Nevertheless, some scholars argue that realizing this shift requires a more robust epistemological foundation and effective teaching system.

Global competence and global skills have attracted increasing attention in academic research, especially since the OECD's 2018 global competence assessment. A growing body of literature explores the conceptual understanding and definition of global competence and its components, focusing on its development, assessment, and the pedagogical methods that foster it among university students.

Teachers, in turn, play a central role in educating the next generation, and it has been established that their understanding of global competence is a key factor in cultivating it among students. Teachers across the world may interpret global competence differently depending on their experiences and the influence of particular values and beliefs. These variations in understanding can significantly affect the ways they teach. Therefore, it is essential to examine how teachers conceptualize global competence in their specific contexts, as this directly shapes their pedagogical practices.

One of the aims of this study was to identify how primary school pre-service teachers understand the concept of global competence and to assess their readiness to integrate it into teaching practice. Primary education is viewed as a strategically important stage for shaping key cognitive, socio-emotional, and value-based foundations of personality, which determine a child's worldview and attitude toward cultural diversity. Insufficient attention to developing critical thinking, respect for

differences, and readiness for global engagement at an early age creates significant challenges for later compensatory efforts. In this regard, the targeted preparation of primary school pre-service teachers for developing students' global competence is recognized as one of the priority objectives of Kazakhstan's modern teacher education system.

**Research Aim:** to identify the specific features of the knowledge, skills, and readiness of primary school pre-service teachers in Kazakhstan to foster students' global competence, as well as the factors that facilitate or hinder this process.

**Object of the Research:** the process of initial teacher education of primary school pre-service teachers in Kazakhstan.

**Subject of the Research:** the knowledge, skills, and readiness of prospective teachers to develop global competence among school students.

**Research Hypothesis.** If initial teacher education for primary school pre-service teachers is aligned with international frameworks of global competence and pedagogical conditions adapted to the Kazakhstani context, their knowledge, skills, and readiness to foster global competence among students will substantially improve.

**Research Tasks.** In accordance with the aim and hypothesis of the study, and with the defined subject and object, the following research tasks are set:

1. Identify primary pre-service teachers' conceptions of the essence of global competence and determine their levels of knowledge, skills, and attitudes in this domain.
2. Assess the degree of readiness of prospective primary teachers to integrate global competence into the teaching–learning process and reveal existing gaps between the theory and practice of their preparation.
3. Analyze the social and cultural factors shaping perceptions of - and resistance to - the implementation of global competence in Kazakhstan's educational system, including the positions of parents and teachers.
4. Examine the content of pedagogical disciplines within the Primary Education Pedagogy and Methodology program and the perspectives of in-service primary teachers to determine which strategies and conditions facilitate or impede the development of global skills in schoolchildren.
5. Propose recommendations for improving the preparation of primary pre-service teachers in the context of global competence development, taking into account both international standards and Kazakhstan's national specificities.
6. Develop an educational module "Global Competence" within the course "Introduction to the Teaching Profession" for students enrolled in the educational program Pedagogy and Methodology of Primary Education (PMPE), and to justify its role in preparing pre-service teachers.

**Leading Idea of the Research.** The development of primary school pre-service teachers' global competence becomes feasible when international standards (OECD, UNESCO) are integrated with Kazakhstan's national and cultural context and embedded within practice-oriented teacher education. Primary schooling holds particular significance as the stage at which the foundations of children's cognitive, socio-emotional, and value development are established. Consequently, prospective primary teachers must not only be able to cultivate global competence in their students

but also graduate with a sufficient level of mastery of the corresponding knowledge and skills themselves.

The leading idea of the study is operationalized through the renewal of teacher-education curricula, specifically by integrating the module “Global Competence.” This approach is intended to prepare educators who can foster in schoolchildren the dispositions and abilities necessary for successful socialization in a globalizing world while maintaining and strengthening national identity.

**Methodological and Theoretical Basis of the Research.** The theoretical foundation of the study included:

- Conceptualizations of global competence developed by international organizations (OECD, UNESCO, Asia Society, World Savvy, and the UN within the framework of the SDGs), which define it as a set of cognitive, socio-emotional, and behavioral components;
- The systemic–holistic approach, which enables the formation of global competence to be viewed as a multidimensional and integrative process;
- Philosophical principles of education concerning the interrelationship between the individual and society, social responsibility, and global citizenship;
- Pedagogical ideas on the formation of a harmoniously developed personality and the central role of primary schooling in shaping a child's worldview;
- Psychological research on the development of critical thinking, empathy, attitudes, and values during school age.

The methodological foundation of the study was based on the following approaches:

- The activity-based approach (L.S. Vygotsky, P.Ya. Galperin, S.L. Rubinstein, D.B. Elkonin, and others), which considers the development of global competence as occurring through students’ active engagement;
- The systems approach (K.L. von Bertalanffy, Yu.K. Babansky, N.D. Khmel), which ensures a holistic analysis of educational processes;
- The learner-centered approach (I.A. Zimnyaya, E.V. Bondarevskaya, V.B. Shadrikov), emphasizing the development of learners’ individual potential;
- The axiological approach (M.S. Kagan, V.A. Slastenin, D.S. Likhachyov), which affirms the value of the human being as a bearer of culture and worldview;
- The competence-based approach, recognized in international practice (OECD, UNESCO) as a foundational principle of contemporary education;
- The comparative-pedagogical approach, which made it possible to align Kazakhstan’s experience with international standards and to identify its unique national features.

**Sources of the research:** works in philosophy, psychology, and pedagogy devoted to the formation of personal competences and teacher training; publications of international organizations such as OECD, UNESCO, the United Nations, Asia Society, and World Savvy on global competence; studies by Kazakhstani and international scholars on the modernization of teacher education and the internationalization of learning; as well as regulatory and legal documents of the Republic of Kazakhstan, including the 2007 Law “On Education” (with amendments), the State Program for the Development of Education and Science for 2020–2025, the

National Project “Technological Breakthrough through Digitalization, Science and Innovation” (2021), the Concept for the Development of Preschool, Secondary, Technical and Vocational Education for 2023–2029, the State Educational Standards (2022), and the Presidential Addresses of 2020, 2022, and 2023. The study also relied on curricula and programs of pedagogical universities, materials of the “Global Competences” course developed by the Altynsarin National Academy of Education, advanced pedagogical practices described in domestic and international research, and the author’s own pedagogical and research experience.

**Research Methods.** To address the set objectives, a complex of mutually complementary research methods was used.

Theoretical methods include:

- Analysis and synthesis of philosophical, psychological-pedagogical, and sociological literature on the problem of global competence;
- Study of international and national regulatory and programmatic documents (OECD, UNESCO, Asia Society, World Savvy, Ministry of Education of the Republic of Kazakhstan);
- Documentary and content analysis of curricula and educational reforms.

Empirical methods include:

- Survey of students from pedagogical universities (n=335) and practicing primary school teachers (n=1200);
- Online questionnaire for students and teachers aimed at identifying knowledge, attitudes, and self-assessment of readiness for global competence implementation;
- Interviews and focus groups with students of pedagogical specialties for an in-depth understanding of their perceptions and experiences;
- Survey of parents and analysis of their feedback on the implementation of the “Global Competences” course;
- Comparative analysis of two samples (pre-service and in-service teachers) in order to identify differences in self-assessed readiness and barriers to implementing global competence;
- Analysis of pedagogical experience and educational practices aimed at the development of global skills.

Data processing methods include:

- Quantitative processing of results (calculation of frequencies, mean values, correlation analysis);
- Qualitative analysis of interviews and content analysis;
- Methodological, intermethod, and source triangulation to ensure the validity of results.

**Research base:** pedagogical universities of Western Kazakhstan (Zhubanov Aktobe Regional University, Dosmukhamedov Atyrau University, Utemisov West Kazakhstan University, Baishev University, Yesenov Caspian University of Technology and Engineering), as well as primary school in-service teachers of Aktobe city and Aktobe region.

**Stages and procedure of the research:** the study was conducted between 2021 and 2024 and included three stages:

1. Stating stage (2021–2022) – analysis of philosophical, pedagogical, and psychological-pedagogical literature; study of regulatory documents and international sources (OECD, UNESCO, etc.); formulation of research objectives, tasks, hypothesis, and determination of methodological foundations; conducting surveys and initial interviews with students of pedagogical universities.
2. Formative stage (2022–2023) – main empirical research: survey of 335 pedagogical university students, conducting interviews and focus groups, collection and analysis of data from practicing teachers (n=1200); comparative analysis; clarification and systematization of research tasks.
3. Final stage (2023–2024) – generalization of obtained data, comparison of quantitative and qualitative results (triangulation); preparation of publications in Scopus and WoS journals; development of the module “Global Competence”; implementation of results through the working group of the Altynsarin National Academy of Education and teacher workshops; formulation of conclusions and recommendations.

**Novelty of the research** lies in the fact that, in the Kazakhstani context, a comprehensive empirical analysis (surveys, interviews, documentary analysis) was conducted to undertake an in-depth examination of the formation of global competence among primary school pre-service teachers. In particular:

- the level of knowledge, perceptions, and self-assessed readiness of prospective teachers to integrate global competence into the learning process has been identified;
- the influence of Soviet educational legacies, as well as national-cultural and social factors, on the perception and implementation of global approaches in teacher training has been revealed;
- the barriers and conditions that hinder or facilitate the development of global competence among learners in both school and university practice have been analyzed;
- the need to integrate global themes into teacher-education programs has been substantiated, including through the development and implementation of the “Global Competence” module;
- a system of recommendations has been proposed that aligns international standards (OECD, UNESCO) with the national context in the modernization of primary school pre-service teacher preparation;
- the doctoral candidate’s scientific results have been incorporated into national education policy through participation in the working group responsible for developing the secondary-school subject “Global Competences.”

**Theoretical significance** lies in the development of scientific understanding of global competence formation among primary school pre-service teachers in the conditions of the post-Soviet educational system. The study clarifies the content of the concepts “global competence” and “global skills” in relation to teacher training, identifies social and cultural factors influencing the perception and implementation of global competence in Kazakhstan. It also contributes to the theory of teacher education

by demonstrating the necessity of integrating global themes into the content of academic disciplines and pedagogical practices.

**Practical significance** of the study lies in the proposals formulated on the basis of obtained data for improving the training of primary school pre-service teachers and their implementation into educational practice.

The research results are reflected in the following areas:

- in published scientific articles (Scopus, WoS), which propose ways to integrate global themes into teacher education and teaching practice;
- in the development and implementation of the educational module “*Global Competence*”;
- in the work of the national working group under the Altynsarin National Academy of Education on the development of the curriculum of the subject “*Global Competences*” for grades 5–9, confirmed by an act of implementation (2025);
- in the organization of a workshop on global competence for teachers of Aktobe city and region, conducted on the basis of a memorandum between K. Zhubanov ARU and JSC “*Orleu*”;
- in practical recommendations for educational policy and university programs, concerning the improvement of the quality of pedagogical practices, the expansion of global-theme courses, and the consideration of socio-cultural factors in teacher preparation.

**Reliability and validity of the results** are ensured by the methodological and theoretical orientation of the study, the correspondence of its content to the research apparatus, the use of a complex of complementary methods and methodological triangulation, the representativeness of the student sample, comparison with international studies (OECD), as well as the testing and implementation of results into educational practice.

**Provisions submitted for defense:**

1. Global competence of primary school pre-service teachers is a key condition for Kazakhstan’s successful integration into the global educational space, and its formation requires a systematic approach that takes into account international standards (OECD, UNESCO) and national specificities.
2. Primary school pre-service teachers in Kazakhstan demonstrate a basic understanding of global competence; however, their knowledge and skills are limited mainly to certain topics (ecology, digital literacy), which indicates a gap between theoretical preparation and practical readiness to implement global themes.
3. Social and cultural factors, including the Soviet educational legacy and societal resistance (parents, some educators), significantly influence the perception and implementation of global competence, which necessitates the development of contextually grounded educational strategies.
4. Barriers and contradictions have been identified in teacher training: weak integration of global perspectives into academic disciplines, insufficient practice-oriented tasks, and limited opportunities for professional development of teachers in this field.

5. The educational module “*Global Competence*”, developed on the basis of the study results, is an effective tool for the targeted preparation of pedagogical students and can be integrated into university educational programs.
6. The scientific results of the study have been implemented into practice through the author’s participation in the national working group on the development of the curriculum of the subject “*Global Competences*”(implementation act, Altynsarin National Academy of Education, 2025).
7. The research results have also been introduced into professional teacher development practice through the organization of a workshop on global competence for teachers of Aktobe city and region (based on a memorandum between K. Zhubanov ARU and JSC “Orleu”), which confirms the demand and applied value of the outcomes.

#### **Approbation and implementation of research results:**

The content of the dissertation has been tested through participation in international and national scientific-practical conferences and published in leading scientific journals indexed in Scopus and Web of Science (WoS).

Publications related to the dissertation topic:

1. *Preparing educators for global challenges: insights from pre-service teacher education // Cogent Education*. – 2025. (Scopus, Q2; WoS).
2. *Stop corrupting our children!: the backlash against global competence // Globalisation, Societies and Education*. – 2025. (Scopus, Q1; WoS).
3. *Developing Students’ Global Skills: A Comparison of Primary School Teachers’ Perceptions of Their Self-Preparedness and Competence // European Journal of Education*. – 2025. (Scopus, Q1; WoS).

Conference presentations:

1. International Scientific and Practical Conference *The Asian Conference on Education (ACE2023)*, Tokyo (Japan), November 22–25, 2023. Presentation: “*Developing Global Skills Through Teaching Methods and Strategies: Primary School Teachers’ Preparedness and Practice in Kazakhstan*”.
2. International Scientific and Practical Conference *The European Conference on Education (ECE2024)*, London (UK), July 11–15, 2024. Presentation: “*Kazakhstani Primary School Teachers’ Perceptions and Practices of Functional Literacy*”.

Practical implementation of results:

- Developed and introduced the educational module “*Global Competence*” into the curricula of pedagogical universities;
- Research results were used in the activities of the national working group under the Altynsarin National Academy of Education for the development of the “*Global Competences*” curriculum for grades 5–9 (confirmed by implementation act, 2025);
- Conducted a workshop for teachers of Aktobe city and region on the basis of a cooperation memorandum between K. Zhubanov ARU and JSC “Orleu”.

**The structure of the dissertation** is based on three interrelated publications, each of which reflects a separate aspect of the formation and implementation of global competence in the system of teacher education in Kazakhstan. Together they provide a holistic understanding of the problem, from the perceptions of future teachers to the analysis of institutional barriers and a comparative assessment of the readiness of practicing and prospective teachers.

The first publication (*Cogent Education, 2025. Preparing educators for global challenges: insights from pre-service teacher education*) is devoted to the study of the knowledge, attitudes, and self-assessment of readiness of primary school pre-service teachers in Western Kazakhstan (n=335). The study used questionnaires and semi-structured interviews, which made it possible to combine quantitative and qualitative analysis.

- The results showed that students recognize the importance of global competence but interpret it within a narrow spectrum, mostly through ecological issues and digital literacy.
  - Self-assessment of readiness for the practical implementation of global competence approaches was low, indicating a deficit in methodological preparation.
  - A significant gap was found between theoretical knowledge and practice, which casts doubt on the effectiveness of teacher training.
  - The article emphasizes that the integration of global competence requires not only the inclusion of new topics in the curriculum but also a revision of pedagogical practices.
- The reliability of the findings was ensured through methodological triangulation: quantitative survey data were supported by qualitative materials from interviews and focus groups.

The second publication (*European Journal of Education, 2025. Developing Students' Global Skills: A Comparison of Primary School Teachers' Perceptions of Their Self-Preparedness and Competence*) presents a comparative analysis of 340 students of pedagogical universities and 1,200 practicing primary school teachers. The methods included online surveys and document analysis.

- Future teachers rated their readiness to teach global skills higher than practicing teachers, but this reflected more academic awareness than actual practical preparation.
- Practicing teachers reported an acute lack of resources, time, and methodological support, which hindered the implementation of global competence in everyday teaching.
- Both groups recognized the high importance of global competence for modern schools but pointed to institutional and systemic barriers (misalignment of curricula, limited opportunities for professional development).
- The article stresses that without strategic support from the state and universities, the development of global competence will remain at a declarative level. The reliability of the results was ensured by comparative and cross-method triangulation: the comparison of data from different samples and document analysis confirmed the conclusions.

The third publication (*Globalisation, Societies and Education*, 2025. “*Stop corrupting our children!*”: *the backlash against global competence*) examines the socio-cultural and institutional context of introducing the subject “*Global Competences*” in Kazakhstani schools. The study used curriculum analysis, teacher surveys, and parental feedback.

- Teachers generally have a positive attitude toward global competence, noting its importance for modern education, but they experience a lack of preparation, methodological materials, and professional support.
- Some parents expressed resistance, perceiving the course as a threat to national identity and as an additional burden for students.
- The resistance was largely driven by the Soviet educational legacy and the dominance of national-patriotic discourses in public consciousness.
- The article demonstrates that without taking these factors into account, the introduction of global approaches may provoke social tension. Triangulation of sources (comparison of official documents, teacher positions, and parental opinions) ensured a comprehensive understanding of barriers and cultural contradictions.

The combined results of the three studies make it possible to comprehensively characterize the state and prospects of global competence formation in the system of training primary school pre-service teachers in Kazakhstan.

- First, the analysis of the perceptions of pedagogical university students revealed an interest and understanding of the importance of global competence, but a limited interpretation (ecology, digital literacy) and a low self-assessment of readiness indicate a significant gap between theory and practice.
- Second, the comparative study of students and practicing teachers revealed systemic barriers: prospective teachers overestimate their readiness, whereas practicing teachers recognize a real lack of time, resources, and methodological support. This confirms the need for systematic efforts to strengthen the practice-oriented component of teacher education.
- Third, the study of the socio-cultural and institutional context identified resistance factors from parents and society, rooted in the Soviet legacy and national-patriotic discourses. even with positive teacher attitudes toward global competence, the absence of institutional support and parental trust limits the implementation of global approaches.

Thus, the three publications collectively reveal three levels of analysis:

- Individual (knowledge, attitudes, and self-assessment of students);
- Professional (comparison of prospective and practicing teachers, their readiness and barriers);
- Socio-institutional (public perception of reforms, cultural contradictions).

Combining these levels within a single research framework (OECD, PISA-2018) made it possible to identify:

- Key deficits in the preparation of primary school pre-service teachers for global competence formation;
- Institutional and cultural factors impeding its implementation;

- Directions for the development of teacher education, including the need for the educational module “*Global Competence*”.

The research results confirm that the successful development of global competence is impossible without a systematic approach that combines the training of future teachers, the support of practicing teachers, and consideration of the socio-cultural context. This provides not only a scientific contribution to understanding the specifics of global competence in the post-Soviet educational system but also a practical foundation for modernizing teacher education programs in Kazakhstan.

Based on the three studies, the following recommendations were developed:

- For pedagogical universities: strengthen the practice-oriented component of training, integrate courses on global topics, and develop skills for applying global competence in real classroom situations.
- For the professional development system: expand teachers’ access to methodological support, resources, and time to introduce global competence elements.
- For educational policy: take into account cultural and value contexts when introducing global competence courses, engage with parents and society to reduce resistance and build trust.

These recommendations have been reflected in practical initiatives, including the development and implementation of the educational module “*Global Competence*”, participation in the national working group of the Altynsarin National Academy of Education to create the “*Global Competences*” curriculum for grades 5–9, and conducting a workshop for teachers of Aktobe city and region in cooperation with JSC “*Orleu*”.