SRSTI 14.35.09 https://www.doi.org/10.53355/ZHU.2025.116.3.008

DEVELOPING RESEARCH COMPETENCIES IN FUTURE PRIMARY SCHOOL TEACHERS

A.O. Yessimbekova[*] , *B.K. Kystaubayeva* , *A.S. Taurbekova*

Zhetysu University named after I. Zhansugurov, Republic of Kazakhstan, Taldykorgan
[*]*e–mail: a.yessimbekova@zu.edu.kz, botik8181@mail.ru, taurbekova71@mail.ru*

Abstract. The aim of the article is to study further developing of research competencies in future primary school teachers at the university, which is one of the topical directions of pedagogical science. In the conditions of modernization of education, the introduction of the research approach, which promotes the development of critical and creative thinking, as well as increasing the professional flexibility of teachers, is of particular importance.

The study is based on thematic analysis of semi–structured interviews with experienced teachers, which revealed key trends, problems and prospects for the integration of research methods in the educational process. It was found that successful development of research competencies requires systematic implementation of practice–oriented teaching, use of modern pedagogical technologies and sufficient resource support. Modern educational approaches transform the content of education, shifting the emphasis from traditional methods to project and research activities, which requires revision of methodological foundations of training future teachers. The inclusion of interdisciplinary, problem–oriented methods contributes to improving the quality of professional teacher training. The results obtained can be used to improve educational programs, adapt state standards and form a system of professional development of teachers.

Key words: *research competencies, primary school teachers, professional training, case study, practice–oriented teaching.*

Introduction

Developing research competencies of future primary school teachers during the process of their professional training is significant as it impacts on their general professionalism. It is essential for future teachers to possess not only a firm understanding of teaching methodologies, but also the capacity to facilitate research activities among junior schoolchildren. The growing requirements for teachers, who should not just impart knowledge, but also form skills of project and research activities in students, are a key factor in the relevance of this topic. The development of research competencies at the stage of professional training of future teachers contributes to their readiness for innovative activities, which is especially important in modern educational conditions. The integration of work–based learning into teacher education programs is emphasized as an important factor in preparing educators to actively engage young learners. Such integration of Ayapbergenova et al., who argue that teacher education programs should immerse student teachers in inquiry–oriented methods to build their research skills and pedagogical competences [1].

Simirlarly, Borys highlights the necessity of integrating science competence into teacher training, enabling educators to base their practices on research and evidence. This foundational aspect is key for teachers who are expected to continuously adapt their practices based on evolving educational research [2].

The authors humbly suggest that there appears to be a noticeable gap between educational research and practice, indicating an urgent need for research that examines how to effectively bridge this gap. By focusing on developing research competencies, future teachers may be better able to analyze educational processes and implement improvements based on empirical evidence.

The development of research competencies in future primary school teachers is not only relevant, but also necessary to improve the quality of education and ensure that teachers can effectively meet the challenges of today's classrooms.

Exploring the competency–based approach: this study focuses on the implementation of a competency–based approach in the education of future primary school teachers. The study employed a variety of research methods, including system analysis, induction, deduction, and

classification, to examine the existing literature on competency development. While universities have opportunities to address these competencies, these opportunities are not being fully utilized, underscoring the importance of structured learning that progressively develops key competencies through specialized education [3].

It seems that these studies, when considered together, suggest that developing research competencies in future primary school teachers may be important for improving their professional effectiveness. But we found out the essential research gap related to the development of research competencies of future primary school teachers. While educational research is widely acknowledged as being essential for enhancing teaching methods and learning outcomes, there appears to be a notable gap between educational research and its practical application in classrooms.

Many studies have shown that primary school teachers recognize the importance of educational research for their professional development. However, they often lack the necessary competencies to effectively engage with and apply research findings in their teaching practice. For instance, a study involving 106 primary school teachers found that, despite recognizing the value of educational research, a significant gap remains due to teachers' lack of competence in this area. This underscores the pressing need for targeted training programs designed to equip teachers with the necessary skills to effectively utilize research in their practice.

It seems that there is a need for further professional development and support systems that facilitate teachers' participation in educational research. The results suggest a potential gap in resources and accessibility to relevant research, which could further contribute to a discrepancy between theoretical knowledge and practical application. Without adequate support, teachers may find it challenging to incorporate research into their teaching strategies, which could limit their ability to innovate and improve the quality of education.

Diverse Understanding of Research: Another study found that prospective teachers have a diverse understanding of research, which can lead to inconsistent application in practice [4]. This diversity in understanding underscores the necessity for comprehensive training that not only expands knowledge but also fosters a unified approach to educational research among future educators.

The study of Chevalier et al. shows what pedagogical competences a teacher should have and how they could be developed. The purpose of our study is to analyze and identify effective methods of developing research competencies of future primary school teachers in the process of their professional training, as well as to develop recommendations for improving educational programs and pedagogical practices to increase the level of research activity in primary school [5].

It has been suggested that integrating theoretical and practical components of training may be necessary for the development of these competencies.

Grigorieva V.A. has noted that research competencies of future teachers are formed through active participation in project and research activities. It is also important to note that the following factors contribute to the development of these competencies: (1) organization of students' independent research work, (2) inclusion of research methods in teaching disciplines, (3) digitalization of research activities [6].

Some studies emphasize that creativity is a key component of students' development, which might be achieved through research competence. For example, creative abilities include flexibility, originality and elaboration of ideas; creative thinking help students to express their ideas and create new things [7]. Other scientists designed the model of teaching basic movements using gamification for the students of primary school to develop their creativity. All games are collected due to the age and psychological peculiarities of the children. The results of the model showed that game model develops not only physical, but cognitive and socio–emotional skills of the children [8]. Syamsuar et al., accentuate significance of implementing hybrid teaching combining STEAM with digital tools. They think that contemporary educational models should be based on innovational technologies and media; flexible learning including both online and off–line formats; creativity and cooperation. The results of this study is increased motivation of students led to interactive learning which provided quality of education [9].

The development of creative abilities in primary school children is a multifaceted process that can significantly benefit from innovative pedagogical approaches and interactive methodologies. Research indicates that fostering creativity in early education is crucial, as children exhibit varying levels of creative potential that can be nurtured through appropriate educational strategies. One prominent method for enhancing creativity involves the integration of interactive technologies. Uteshkalieva et al. emphasize the developmental impact that these technologies can have on children, advocating for special training lessons aimed at consolidating personal skills and encouraging creative motivation through targeted exercises and interactive lessons [10].

This approach aligns with findings in broader educational contexts, where creativity is often stymied by rigid instructional methods. Liu et al. note that primary school children generally exhibit low levels of creativity and suggest that focused efforts by educators and parents can cultivate creativity during these formative years [11].

Today it is not enough to have great theoretical knowledge, practical skills and sustainable skills. The development of thinking, the ability to solve problems independently and be active, make decisions and adapt to the changing conditions of life – that's what requirements must meet modern specialist. It is only one way out of this situation – to look for new learning technologies, new forms of training that will teach children to learn to acquire knowledge on their own, develop imagination and creativity of students. In the article investigated the technique of development the creative abilities of primary school pupils by non–traditional lessons [12].

Creativity is an important part of education, making learning itself a social activity. The success of progress and evolution should be at the forefront of developing children creativity. First, it should be able to organize, select the right information, secondly to develop critical and original thinking and, last but not least, to manifest its creativity in its own affections and desires. The critical thinking and inner motivation of children influence the development of creativity. Personality, skills and talent highlight what a child can do when motivation indicates what will happen. Certainly, the creative environment can have a significant impact on children's motivation, but motivation rather than talent is more useful for the creative spirit. Moreover, the creative development of primary school children should be considered in two positions: individual creativity of each child and group creativity of the whole class. Many approaches which studied creativity that include the major orientations on explaining this phenomenon describes the complexity of the creativity, highlighting the development of this process as an expression of creativity and stimulates creative behavior [13].

A great experience for primary school education development includes creative thinking and creative problem solving. Creativity involves the process of divergent thinking that includes the beginning of wonderful ideas, creating new connections, expanding the limits of knowledge and split of ideas, which are old. When the children's divergent thinking is boosted, it enormously helps to maintain children's motivation for extended learning.. In the same way, encouraging primary school children to keep on generating original and new ideas fosters their creative–thinking abilities. Personal characteristics of a child can influence a certain grade in stimulating the creativity. Children develop quite complex skills when they begin to be familiar with problem solving skills and develop creative thinking. Therefore, their creative characteristics should be developed and in the same way, provide creative learning opportunities and inspiring, original lessons. A variety of studies that contained creativity included stimulating primary school children's creativity. This aspect represents global educational progress to society and the current study provides a better view of creativity [14].

Inquiry–based learning (IBL) aims to develop higher order thinking skills, such as creativity and research. Stimulatory techniques and interprofessional education, which requires students from different fields to collaborate, also enhances creativity. The results show that the open IBL approach promoted the development of these skills, interprofessionality acted as a creativity enhancer and stimulatory techniques contributed to improve the learning outcomes [15].

Despite the active study of this problem, a number of research gaps remain. For example, how interdisciplinary way influence on the formation of research skills among future elementary school teachers remains a subject of ongoing exploration. Additionally, the extent to which digital technologies influence the development of students' research culture remains an open question.

In addressing these gaps, the present work aims to contribute to the understanding of future teachers' research competencies. The study's objective is to examine the methodological foundations and identify the most effective strategies for developing research skills in students of pedagogical universities (Table 1).

Table 1 – The main findings of the research on developing research competencies of future primary school teachers

Authors of the studies	**Sample population**	**Hypothesis formation**	**Key finding**
Jana Groß Ophoff et al.	Future teachers (N=150)	Research skills are developed through the integration of theory and practice	Practice–oriented learning contributes to the formation of research competencies
Karee E. Dunn et al.	Teachers of pedagogical universities (N=75)	Use of research methods in teaching enhances professional reflection	Incorporating research projects into the educational process improves the preparation of future teachers
Vincentas Lamanauskas., Dalia Augienė.	Students in teacher education programs (N=120)	STEAM approach promotes the development of research skills	Integration of interdisciplinary methods increases the effectiveness of teacher training
Tetiana Vasiutina, Olena Kondratiuk	Future and practicing teachers (N=90)	Research activity influences the formation of professional identity	The development of research competencies requires ongoing support and resources
Fjolla Kaçaniku	Master students of pedagogical specialties (N=110)	Teaching and research activities foster critical thinking	Future teachers adapt more successfully to changes in the educational environment when research competencies are in place
Lamanauskas, V., Augienė, D.	Future teachers of labor education (N=85)	Project–based learning is an effective method of developing research competencies	Incorporating project assignments increases students' level of autonomy
Feruza Rakhmatova	Students of pedagogical universities (N=140)	Experiential learning promotes the development of research skills	Practical application of knowledge increases motivation for research activities

It seems that the formation of research competencies of future primary school teachers could be improved by a comprehensive approach that includes practice–oriented learning, integration of STEAM methods, project activities, and resource support.

Materials and methods

The present study sought to contribute to the ongoing discourse on the development of research competencies among future primary school teachers as part of their professional training.

A qualitative method was selected for data collection to gain deeper insight into the respondents' perceptions, experiences, and attitudes regarding the problem under study.

The main method of data collection was semi–structured interviews conducted in November 2024. The interview questions were developed based on a thorough analysis of scientific articles, ensuring that they were theoretically sound and aligned with the research objectives. This methodological approach was designed to facilitate the identification of the underlying causes of the respondents' behaviors, opinions, and assessments, as well as to provide a comprehensive reconstruction of their professional experiences in the context of the development of research competencies.

After collecting all the data, it was coded and then subjected to thematic analysis. This analysis allowed us to identify key themes that reflected the main ideas of the study. The analysis process was meticulous in its consideration of significant aspects of future teachers' professional training, their views on the application of research methods in pedagogical practice, as well as barriers and opportunities for the development of research competencies.

This methodological approach, when applied, has the potential to provide a comprehensive understanding of the phenomenon under study. It may also allow for the identification of both unique and common patterns in the respondents' perceptions. These insights could contribute to the development of the theoretical and practical training educators who will work at primary school in future.

This approach was intended to ensure the collection of relevant information needed to answer the research questions and achieve the objectives of the study.

The development of a semi–structured interview guide was informed by a thorough review of relevant literature and a careful consideration of the research questions. The interview questions focused on teachers' experiences in building research competencies in future educators, the challenges and opportunities they face. The respondents also shared their recommendations for improving the training of future teachers in this area.

A total of ten primary school teachers, with experience ranging from one to thirty years, participated in the study. The group included six females and four males. The respondents' ages ranged from 30 to 55 years, with the majority (60%) falling within the 40–50 age group. The respondents' experience in primary education ranged from 1 to 30 years. All respondents had received higher pedagogical education and worked in public or private schools. To ensure a diverse range of perspectives, the respondents were selected through a convenient sampling method, which allowed us to attract participants with the relevant experience and expertise.

To ensure the anonymity of the participants, each respondent was assigned an individual code to protect their identity. All interviews were recorded with the consent of the participants, after which the transcripts were carefully analyzed and coded. This process enabled the identification of key themes relevant to the development of research competencies among future teachers (Table 2).

Table 2 – Anonymity of respondents

Pseudonyms	Position
H1	Teacher with 1 year of experience
H2	Teacher with 3–5 years of experience
H3	Teacher with 6–10 years of experience
H4	Teacher with 11–15 years of experience
H5	Teacher with 15–18 years of experience
H6	Teacher with 18–20 years of experience
H7	Teacher with 20–23 years of experience
H8	Teacher with 23–25 years of experience
H9	Teacher with 25–27 years of experience
H10	Teacher with 28–30 years of experience

The duration of each audio–recorded interview ranged from 40 to 60 minutes. The interviews were conducted in Russian, which was found to be a facilitating factor in comfortable communication with the respondents and allowed for the minimization of possible language barriers, as well as for the establishment of trust between the researcher and informants.

Field notes were taken during the interviews to record key points of the informants' responses as well as the researcher's observations and comments. Prior to participating in the study, all respondents were informed of the purpose of the study and gave their consent to participate. They were assured of data confidentiality and anonymity in reporting. All participants were informed that their involvement was entirely voluntary and that they could choose to disengage from the study at any stage without providing a reason.

According to existing studies, a small sample size in qualitative research can ensure sufficient depth of analysis of the phenomenon under study, as data saturation is achieved in the absence of new themes and significant additions. In this study, it appeared that data saturation was achieved on the tenth interview, as no new significant themes emerged after analyzing the materials.

All audio–recorded interviews were meticulously transcribed and systematically analyzed to identify themes. The researcher transcribed all interviews independently and checked the resulting texts against the audio recordings to ensure data accuracy. The coding process was then carried out, and the analysis highlighted key categories and themes that reflected teachers' views on the process of developing research competencies in future educators. The coded data were then reviewed and refined to identify key patterns and themes in the data collected.

Results and discussion

Our analysis yielded six key themes that characterize the process of developing future primary teachers' research competencies in preparation for teaching work–based learning: (1) competencies for professional training, (2) changes in approaches to work–based learning, (3) research activities in professional learning, (4) future teachers' readiness to use research methods, (5) the impact of STEAM on research skills, and (6) resources to support future teachers.

Our results suggested that one of the central challenges faced by prospective teachers was a lack of preparation in teaching professional learning. They suggested that current curricula may not adequately support the development of their skills in organizing the work activities of younger students, which could potentially impact their self–confidence. For instance, one participant (H3) shared the following observation:

"When I first tried to explain to the children how to work with tools, I felt insecure... I never had the opportunity to do so during my own university education".

In addition, there have been some significant changes that have come to light. These changes require new knowledge and skills from future teachers. It has been observed that modern methodologies emphasize the integration of technology and project activities. However, there is a perception among respondents that they are not always fully prepared for these changes. One participant (H7) shared the following reflection:

"In today's world, it's not just enough to teach children how to do something with their hands. We also need to explain why it is important, but unfortunately, that's something that wasn't covered in our training".

Another notable theme that emerged from the study was the importance of research activities in the realm of vocational education. It was expressed that undertaking pedagogical research has facilitated a deeper understanding of students' needs, thereby contributing to the refinement of teaching methods. However, many respondents also expressed challenges in organizing research. For instance, the other participant (H5) shared, *"I recognize the significance of research, yet I struggle to identify a suitable topic... There is a lack of examples and practice".*

Another key finding of the study was the importance of future teachers' readiness to use research methods. Some respondents mentioned that they had difficulties in applying observation, data analysis, and pedagogical experiment methods because they did not get enough experience in using them during their training. One research participant (H2) shared their perspective, stating:

"We emphasize the importance of researching the pedagogical process, yet our actions do not always align with this discourse".

The results also showed that the STEAM approach has the potential to contribute to the development of research skills of future teachers. It was observed that the incorporation of science and engineering components into labor education can potentially encourage analytical thinking and exploratory activities among schoolchildren. However, it is important to acknowledge that some respondents expressed a lack of personal training in this area. As (H6) shared: *"I understand that modern technology helps children to better understand labor processes, but I myself have no experience with engineering tasks".*

The final theme identified related to the resources available to prospective teachers to support their research activities. Most respondents noted a lack of specialized teaching aids, online courses, and mentoring from teachers. Respondent (H8) shared his perspective, saying: *"If we had the opportunity to consult with experienced teachers and use more practical examples, it would be easier for me to apply research methods".*

In addition, our findings revealed that insufficient research training of future teachers leads to a mismatch between the requirements of educational standards and the actual readiness of students to teaching. Despite the growing recognition of the importance of research activities in pedagogical practice, respondents noted limited opportunities for their mastery in the teaching process. Many students have expressed a desire for more practical tasks and methodological recommendations on the use of research approaches.

As respondent (H4) shared, there is a perception that research is important, yet there is a need for guidance on its practical application.

"We understand the importance of research, but we would appreciate more guidance on how to implement it in our practice. Teachers provide guidance on the theoretical aspects, but in practical terms, there is a lack of clarity on how to proceed".

This sentiment was echoed by several other respondents, who underscored the importance of confidence in applying research methods in the pedagogical process, suggesting that it requires not only knowledge but also experience to develop. Participant (H2) shared his sentiments, saying, *"We feel a sense of uncertainty because we haven't had the chance to apply these methods in real–life settings".*

The findings also revealed that the lack of resources and organizational support from faculty and university administration affects students' readiness for research. For instance, respondents indicated that the absence of mentoring and access to specialized literature hindered their ability to conduct independent research.

Participant (H5) shared the following observation:

"When I tried to do my first research, I found it difficult to find the articles and case studies I needed. It would be beneficial to have a mentor to provide guidance throughout the research process".

Additionally, the communication between faculty and students was identified as playing a pivotal role in fostering research competencies. However, respondents noted that they often do not have the opportunity to discuss their difficulties with faculty, and the research writing process remains complex and little focused on the practical aspects of teaching. As the participant (H8) articulated:

"We are given topics for term papers, but we don't understand how to apply this knowledge in real work with children".

Participant (H6) shared a sentiment that resonates with this concern, stating, *"I recognize the significance of STEAM in the educational landscape, yet I find myself uncertain how to effectively convey engineering principles to young learners if I myself do not fully grasp these concepts".*

Our results underscore the necessity to refine educational programs and to provide methodological support for prospective educators. It is recommended that practical training be improved, that access to resources be increased, and that mentoring from experienced educators be provided to effectively build their research competencies.

The present study contributed to a better understanding of future primary school teachers' research competencies development in professional education. The findings suggest that the key factors influencing the development of these competencies are the inclusion of students in research activities, the availability of methodological resources, and the presence of mentoring by teachers. These findings align with those of previous studies, which underscored the significance of a hands–on approach, project–based activities, and critical thinking in the educational process for nurturing a research culture among future teachers.

Our results suggested that students may encounter challenges in conducting independent research, which could be attributed to a lack of experience and the absence of clear instructions on how to organize research work. This finding aligns with the observations of previous studies, which highlighted the importance of integrating research methods into the pedagogical universities' teaching curriculum to enhance the quality of teacher training. Additionally, it was observed that the interaction between teachers and students plays a role in the development of research competencies.

Our findings suggest that an interdisciplinary approach and STEAM methods have the potential to support the development of research competencies in future teachers. However, it is important to note that students often express a lack of readiness to utilize these methods in practice. This finding aligns with studies that underscore the importance of integrating innovative techniques into the teaching process, emphasizing the need for both theoretical training and the creation of conditions that support their implementation.

Our findings align with those of previous studies, which suggest that student engagement in the research process can foster professional development and that holding a research position may positively influence future pedagogical practice. We humbly submit the recommendation that educational programs consider strengthening the role of research activities, ensuring that future teachers have access to ample resources and methodological support. It is also important to develop a mentoring system and involve students in real research practice to increase their competence and confidence in their abilities.

Conclusion

The present study has deepened the understanding of the development process of research competencies in future primary school teachers during professional training. The following key factors contributed to the development of these competencies: These include (1) practical involvement of students in research activities, (2) availability of methodological and digital resources, (3) the role of teacher mentoring, and (4) interdisciplinary approach to the organization of research work. The results obtained thus far suggest that active involvement of students in research activities has the potential to positively impact their professional development, confidence in the use of scientific methods, and readiness to apply them in future pedagogical practice.

The present study suggested that there may be room for improvement in the support teachers provide, the methodological guidelines, and the integration of research tasks into the educational process, which could potentially hinder the development of research competencies. This underscores the importance of exploring ways to enhance teacher education programs, particularly by focusing on practical application of research methods, fostering active interaction between students and teachers, and incorporating innovative technologies into the educational process.

This study contributes to the existing scientific literature on the development of research competencies in future teachers and can inform the development of methodological recommendations in the system of primary school teacher training. However, it is important to acknowledge the study's limitations. The sample size and exclusive focus on one aspect of teacher training may limit its generalizability. Additionally, the study did not explore the variations in approaches to developing research competencies based on educational programs and the level of students' pedagogical experience.

In this regard, it may be beneficial to consider the potential value of additional research to explore the impact of various approaches to organizing research activities on the level of preparedness of future

teachers. Additionally, conducting a comparative analysis between teacher training institutions could offer valuable insights. Future research could also explore how the development of research competencies influences the professional adaptation, pedagogical effectiveness, and job satisfaction of young professionals in the initial years of their professional journey.

Funding information

The results given in the article had been found out in the framework of being grant funded program by Science Committee of the Ministry of Science and Higher Education of the Republic of Kazakhstan AP19678345 “Developing the creative abilities of future primary school teachers through research competencies”.

REFERENCES:

1 G. Ayapbergenova S. Nurgaliyeva N. Bissembayeva M. Kabakova, M. Koyshibayev. (2020). “Developing project skills in future prımary school teachers within the university–based initial teacher education” // Science for Education Today., vol. 10, no. 6, pp. 7–26. https://doi.org/10.15293/2658–6762.2006.01

2 Borys U. (2022). Formation of the future primary schoolteachers’ science competence under the conditions of the pedagogical professional college. Mountain School of Ukrainian Carpaty., no. 26, pp. 66–69. https://doi.org/10.15330/msuc.2022.26.66–69

3 Kaçaniku F. (2020). Enhancing the Value of Teacher Education Research // Chapter 11. In: Making Research Relevant for Future Teachers., pp. 247–273. https://doi.org/10.1163/9789004689992_012

4 Vasiutina T., Kondratiuk O. (2022). Competence approach to teaching future primary school teachers // Revista Tempos e Espaços em Educação., vol. 15., no. 34, pp. 38–51. https://doi.org/10.20952/revtee.v15i34.16598

5 M. Chevalier, F. Riedo, F. Mondada. (2016). “Pedagogical uses of thymio ii: how do teachers perceive educational robots in formal education?”, IEEE Robotics & Automation Magazine., vol. 23, no. 2, pp. 16–23. https://doi.org/10.1109/mra.2016.2535080

6 Grigoryeva V.A. (2022). Usloviya formirovaniya issledovatelskoy kompetentnosti budushchikh pedagogov v obrazovatelnom protsesse kolledzha [Conditions for forming research competence of future teachers in the educational process of the college] // Vestnik Irkutskogo universiteta., no. 25, pp. 147–149.

7 Kristiantari M.G.R., Widiana I.W., Artawan G. (2023). Enhancing the ability to write poetry and creative thinking skills with rural nature–inspired contextual approach. // International Journal of Evaluation and Research in Education (IJERE), vol. 12, no. 2, pp. 761–770. https://www.scopus.com/pages/publications/85151333544?origin=resultslist

8 Damanik S.A., Damanik S., Nasution U., Ritonga D.A., Heri Z. (2023). Development of basic motion learning model to develop creative thinking ability through approach to play in elementary school. // International Journal of Professional Business Review, 8(4), pp. 1–12. https://www.scopus.com/pages/publications/85159033265?origin=resultslist

9 Syamsuar Restu Ernawati, Marlina, C. (2023). Hybrid Learning Microsite Project STEAMER. // International Journal of Education and Humanities (IJEH), vol. 7, no. 1, pp. 1–13.

10 Uteshkalieva A., Izmukhanova A., Bekturova A. (2022). Potential of interactive technologies for the development of creativity of younger school children. // Materials of International Practical Internet Conference “Challenges of Science”, pp. 123–128. https://doi.org/10.31643/2022.16

11 Liu J., Yu L., Zhao X., Liu Y., Jiao L. (2022). Creativity profiles and the role of interpersonal relationships in primary school pupils: a person-centered approach. // The Journal of Creative Behavior, vol. 57, no. 1, pp. 37–48. https://doi.org/10.1002/jocb.560

12 Mussabekova G. and Zholdasbekova B. (2021). Effects of non–traditional lessons for the development of creative abilities of primary school pupils. // Bulletin of Toraighyrov University. Pedagogics Series, (4.2020), pp. 411–423. https://doi.org/10.48081/jhqz9161

13 Rotaru R.E. (2019). Promoting the development of creativity in education. LUMEN Proceedings, 9, pp. 286–295. https://doi.org/10.18662/lumproc.175

14 Rotaru R.E. (2020). Stimulating primary school children’s creativity. // Revista Romaneasca Pentru Educatie Multidimensionala, vol. 12, no. 4, pp. 431–439. https://doi.org/10.18662/rrem/12.4/355

15 Rodríguez G., Pérez N., Núñez G., Baños J., Carrió M. (2019). Developing creative and research skills through an open and interprofessional inquiry–based learning course. // BMC Medical Education, vol. 19, no. 1. https://doi.org/10.1186/s12909–019–1563–5

РАЗВИТИЕ ИССЛЕДОВАТЕЛЬСКИХ КОМПЕТЕНЦИЙ У БУДУЩИХ УЧИТЕЛЕЙ НАЧАЛЬНЫХ КЛАССОВ

Есимбекова А.О., Кыстаубаева Б.К., Таурбекова А.С.*

Жетысуский университет имени И. Жансугурова, Республика Казахстан, г. Талдыкорган
**e–mail: a.yessimbekova@zu.edu.kz, botik8181@mail.ru, taurbekova71@mail.ru*

Аннотация. Цель данной статьи – изучить дальнейшее развитие исследовательских компетенций будущих учителей начальных классов в вузе, что является одним из актуальных направлений педагогической науки. В условиях модернизации образования особое значение приобретает внедрение исследовательского подхода, способствующего развитию критического и творческого мышления, а также повышению профессиональной гибкости педагогов.

Исследование основано на тематическом анализе полуструктурированных интервью с опытными педагогами, выявивших ключевые тенденции, проблемы и перспективы интеграции исследовательских методов в образовательный процесс. Установлено, что для успешного развития исследовательских компетенций необходимы системное внедрение практико–ориентированного обучения, использование современных педагогических технологий и достаточная ресурсная поддержка. Современные образовательные подходы трансформируют содержание образования, смещая акцент с традиционных методов на проектно–исследовательскую деятельность, что требует пересмотра методических основ подготовки будущих учителей. Внедрение междисциплинарных, проблемно–ориентированных методов способствует повышению качества профессиональной подготовки учителей. Полученные результаты могут быть использованы для совершенствования образовательных программ, адаптации государственных стандартов и формирования системы повышения квалификации педагогов.

Ключевые слова: *исследовательские компетенции, учителя начальных классов, профессиональная подготовка, кейс–стади, практико–ориентированное обучение.*

БОЛАШАҚ БАСТАУЫШ СЫНЫП МҰҒАЛІМДЕРІНІҢ ЗЕРТТЕУ ҚҰЗЫРЕТТІЛІГІН ДАМЫТУ

Есимбекова А.О., Кыстаубаева Б.К., Таурбекова А.С.*

І. Жансүгіров атындағы Жетісу университеті, Қазақстан Республикасы, Талдықорған қ.
**e–mail: a.yessimbekova@zu.edu.kz, botik8181@mail.ru, taurbekova71@mail.ru*

Аңдатпа. Аталған мақаланың мақсаты – педагогика ғылымының өзекті бағыттарының бірі болып табылатын болашақ бастауыш сынып мұғалімдерінің зерттеушілік құзыреттіліктерін одан әрі дамыту мәселелерін зерттеу. Білім беруді жаңғырту жағдайында сыни және шығармашылық ойлауды дамытуға, сондай–ақ мұғалімдердің кәсіби икемділігін арттыруға ықпал ететін зерттеу әдісін енгізу ерекше маңызға ие.

Зерттеу әдістерін оқу үдерісіне енгізудің негізгі тенденцияларын, проблемалары мен перспективаларын анықтаған тәжірибелі мұғалімдермен жартылай құрылымдық сұхбаттарды жүргізіліп, мақаладағы зерттеу тақырыптық талдауға негізделген.

Зерттеу құзыреттілігін табысты дамыту үшін тәжірибеге бағытталған оқытуды жүйелі түрде жүзеге асыру, заманауи педагогикалық технологияларды қолдану және жеткілікті ресурстық қолдау қажет екені анықталды. Қазіргі білім беру тәсілдері білім беру мазмұнын түрлендіреді, дәстүрлі әдістерден жобалық–зерттеу қызметіне ауыстырады, бұл болашақ мұғалімдерді даярлаудың әдістемелік негіздерін қайта қарауды талап етеді. Пәнаралық, проблемалық–бағдарлы әдістерді енгізу мұғалімдердің кәсіби дайындығының сапасын арттыруға көмектеседі. Нәтижелер білім беру бағдарламаларын жетілдіру, мемлекеттік стандарттарды бейімдеу және мұғалімдердің біліктілігін арттыру жүйесін қалыптастыру үшін пайдаланылуы мүмкін.

Кілт сөздер: *зерттеу құзыреттіліктері, бастауыш сынып мұғалімдері, кәсіби дайындық, кейс–стади, тәжірибеге бағытталған оқыту.*