Journal
"Pedagogy and Psychology"

CONTENT

Innovative Approaches and Practices in Modern Education

Psychological and Pedagogical Problems of Professional Development of Education Specialists

General information

The journal **"Pedagogy and Psychology"** of Abai Kazakh National Pedagogical University is a republican scientific and methodological edition. The journal was founded in 2009.

The main thematic focus of the journal "Pedagogy and Psychology" is the problems of the current state of all education levels.

Research, analytical, scientific and methodological articles reflecting the results of fundamental and applied research corresponding to the subject of the journal, as well as review articles with a clear indication of the conceptual position of the author(s) are accepted for publication.

Thematic directions of the journal:

- Innovative Approaches and Practices in Modern Education
- Psychological and Pedagogical Problems of Professional Development of Education Specialists

The mission of the journal is to attract scientists and educators to an open discussion of current problems of education, science; to support creative initiatives in the field of educational policy, theory and practice, to promote the integration of the activities of domestic and foreign scientists and teachers to improve the system of higher, secondary, general, additional and vocational education.

The target audience of the journal: the teaching staff of universities; academic staff and experts in the field of preschool, secondary, vocational and higher, postgraduate education; doctoral students, postgraduates, applicants, undergraduates and students of Kazakhstani and foreign universities and scientific and educational institutions, school teachers, teachers of additional education, etc.

The journal is included in the List of leading peer-reviewed scientific journals recommended for publishing the main scientific results of dissertations for getting degree and academic title by The Committee for Quality Assurance in the Field of Science and Higher Education.

The journal is included in the republican system of the Scientific citation index – the Kazakhstan Citation Database (KazCD). The journal "Pedagogy and Psychology" was established by the Abai Kazakh National Pedagogical University and registered with the Ministry of Culture and Information of the Republic of Kazakhstan.

Date and number of initial registration: 06/24/2009 No. 10219-Ж.

The certificate of re-registration of the periodical No KZ22VPY00084314 was issued on 22.12.2023 by the Information Committee of the Ministry of Culture and Information of the Republic of Kazakhstan.

ID: ISSN 2077-6861 (online 2960-1649) Terms of consideration of the received materials: 1-6 months. The journal release schedule:#1 – March;#2 – June;#3 – September;#4 – December.

SH.ZH. ALIMOVA¹, B.T. KUANYSHEVA²*, A.B. AKHMETOVA¹, G.S. AYAPBERGENOVA¹

¹ Alkey Margulan Pavlodar Pedagogical University (Pavlodar, Kazakhstan)
²Toraighyrov University (Pavlodar, Kazakhstan)
*e-mail: danaslyamova@mail.ru

ORGANIZATION OF NON-FORMAL EDUCATION FOR STUDENTS AND ITS EFFECT ON THEIR ACADEMIC PERFORMANCE

Abstract

The use of massive open online courses as one of the main resources for non-formal education in the Republic of Kazakhstan is discussed in the article. The purpose of the article is to describe the organization of non-formal education for the students of the educational program "Pedagogy and psychology" and determine its effect on students' academic performance. To demonstrate the data collected throughout the research process, a number of pedagogical methods as theoretical and comparative analysis, testing, content analysis and pedagogical experiment were utilized. The description of organization of non-formal education at the university aims at providing a comprehensive overview for readers the ways to understand and compare the key concepts and organization stages in the field of non-formal education. 4 massive open online courses on the Coursera platform were included into the educational process as non-formal education. Moreover, the courses content, strategies and assessment effected on students' learning outcomes and their academic performance in general. The results of empirical study illustrated that massive open online courses offered by Coursera improved students' academic performance by 15.6% and gave them the opportunity to pursue their goals outside the classroom, moreover, fostered the development of their metacognitive skills.

Keywords: non-formal education, professional development, personal development, Coursera, academic performance, university students.

Introduction. The significance of non-formal education is currently growing and making a consideration of Kazakhstani higher education policy. Non-formal education is discussed as an addition to formal official system of education. Non-formal education is not limited by time, venue, or style of instruction and it is carried and organized outside of the formal education. The use of non-formal education in higher educational institutions has gained approval by the administration and learners. Many ways to get additional materials from non-formal education courses and monitor students' progress after these courses have been appearing nowadays.

Numerous national and international research and studies demonstrate that non-formal education is demanded as an integral part of domestic educational strategy. The development of personal potential, which is provided by non-formal education, is reflected in learners' willingness to set objectives and look for some strategies and tactics for achieving them through ongoing self-education (Ivanishcheva, 2022). The aim of non-formal education is to offer students practical ways to ensure personal growth in addition to academic acquisition and performance. The organization of non-formal education also leads to individualization of the learning, which means the focus on the particular goals of each student. Yakushina (2020) has demonstrated in the study that a student's personal experience, individual and systematic learning, ability to select necessary courses and learning outcomes should all be the basics of non-formal education.

Apart from the need of an individualized approach to learning, non-formal education has a positive impact on the interaction between students' abilities and opportunities to acquire knowledge in a particular field (Holland, 2019). The significance of massive open online courses

(MOOCs) as a non-formal educational resource is rising gradually. Learners are allowed to choose the location, speed of leaning or pace, time of their study in massive open online courses and students are better able to regulate their own learning process (Jansen et al., 2020; Essomba et al., 2022). Regular online courses are different from MOOCs in that the latter are free to enroll in, they contain materials that are accessible to the general public and do not require a payment for registration until official certification (Lee et al., 2019; Al-Rahmi et al., 2018). MOOCs offer the opportunity of studying a multitude number of students simultaneously and everyone can register using software with open-source access. The main strategy of learning is independent study, success in autonomy involves and reinforces the use a self-regulation method (Maldonado-Mahauad et al., 2018; Souto-Otero, 2021). MOOCs support participants' academic ability to increase and foster the development and advancement of professional skills in the field of education. MOOCs are utilized by leaners as an additional resource for enhancing self-education, professional and personal development, and academic performance (Alimova et al., 2022; Cheng, 2022; Irwanto et al., 2023).

Materials and methods. The Ministry of Science and Higher Education started collaborating with Coursera, a MOOC platform, in order to spread non-formal education at universities and computerize some spheres of education in the Republic of Kazakhstan. Open access is the key component of these online courses. Several typological models of MOOCs have emerged since their creation:

- cMOOCs give learners a platform to engage in self-organized learning where students can set their own goals, express their own opinions and work together to produce and share information with each other. The main aim of the participants is to collaboratively study the course topic through the development of relevant knowledge by searching for and providing subject-related information and social connections. Additionally, assignments and tests are graded by peers using rubrics with all requirements for learning results that help students better understand the material.

Therefore, students are considered as the main subjects of studying process and network learning environment. This model of massive open online courses defines learning as the process where a learner grows and develops at the same time. The primary benefits of this type of online courses are equality, transparency and easy access for all students. The drawbacks of this type of MOOC include a teacher's loss of control upon the learning process and also some participants can misuse educational resources. Moreover, cMOOCs are quite promising in terms of setting up professional development classes in special communities (Amado et al., 2022);

- in xMOOCs teachers define learning objectives and provide brief video lectures to share their knowledge and information about the course. These lectures are frequently followed by easy online course assessment. Peer assessment is rare among xMOOCs. They prove that teaching technologies meet international standards and the fact that methodological and instructional content from prestigious universities is freely accessible to the public. Furthermore, they give course participants a limited platform to communicate with each other, only discussion boards. Behaviorism and cognitivism theories serve as the foundation for this type of MOOCs, which also include elements of social constructivism and emphasize learning by doing through experiments, project-based or task-based activities. The main advantages are highly professional certified teachers, a well-defined curriculum that is broken down into modules, an automated system that registers how well students learn the subject. This model offers learners a forum for open discussions, technical support, and access to any required information (Mahajan et al., 2019);

- task-based MOOCs courses are organized with the tasks that can be used in a variety of ways and forms including the development of group projects, audio and video presentations, written assignments, and collaborative problem-solving cases. These techniques are open resources that anyone can utilize with different technologies including interaction. Assignments can be completed by students themselves or in groups with other learners. In

order to demonstrate that the abilities have been acquired, it is crucial for this type of MOOC to complete a particular number of assignments. The course model includes scaffolding that is added to the content of the course. To complete this task-based MOOC, the learners should apply and synthesize the principles that they have studied during the course in a final project or a milestone project. The essential components of xMOOC and cMOOC are combined in these task-based MOOCs. Participants in the course have the option of completing free task activities and choose their projects (Amado et al., 2022).

According to the description of the mentioned typical models of massive open online courses, the Coursera platform can be classified an a xMOOC type.

The purpose of the study is to describe the organization process of non-formal education at university and determine its effect on students' academic performance.

This section shows the study of data collection by applying the scientific research methods which included, firstly, content analysis in the field of non-formal education and its key concepts. Secondly, the method as pedagogical experiment involved 64 students of 2nd and 3rd year of the educational program "Pedagogy and Psychology" and demonstrated diagnostics of academic performance at ascertaining and final stages. Participants were divided into control and experimental groups, 32 students in each group. Thirdly, the empirical component of the research was based on testing at mid-term period and learning outcomes at the end of massive open online courses. The counting was carried out with non-parametric statistical criterion Mann-Whitney U-test (Saegusa, 2020) and the SPSS Statistics program 27.0.

Students received a proposal to complete massive open online courses on the Coursera platform. The most chosen courses occurred "Leading teams: Building Effective Team Cultures", "Effective Problem Solving and Decision Making", "Project Management: The Basics for Success" and "Successful Negotiation: Essential Strategies and Skills". After completing the courses, the instructors indicated their mid-term test results, Coursera grades and students' academic performance in general. These are research questions related to support the usage of mentioned research methods: "What differences in academic performance between the experimental and control groups were noted before to the pedagogical experiment?", "In what ways does the pedagogical experiment impact on academic performance in the experimental and control groups?", "What effect does the organization of non-formal education have on academic performance of students of the educational program "Pedagogy and Psychology"?". Answers to these questions help to follow the process of organization of non-formal education and its effect on their academic performance.

Results. The Ministry of Science and Higher Education of the Republic of Kazakhstan distribute grants to regional educational institutions every year for completing online courses through the Coursera platform. The educational program "Pedagogy and Psychology" of the university organized non-formal education for students with the help of Coursera platform. 32 grants were given to the third cohort of learners of this educational program. Thus, 64 2nd and 3rd year students of the educational program "Pedagogy and Psychology" took part in the ascertaining stage of the pedagogical experiment. Participants in the experiment were split up into groups of 32 students each for the control and experimental groups. To determine their academic performance, both groups took an exam and rated mid-terms from the disciplines they have studied. For the second-year students the disciplines as "Developmental educational psychology", "Psychological personality diagnostics" and "Differential psychology" were considered. For the third-year students the following disciplines as: "Practicum on experimental psychology", "Social-psychological training" and "Psychology of management" were taken into consideration.

The ascertaining stage results of the pedagogical experiment illustrated an average academic performance of both groups: 9 (28,1%) respondents in the control group and 7 (21,9%) students in the experimental group showed high academic performance, while 19 (59,4%) students in the control group and 20

students (62,5%) of the experimental group illustrated the average academic performance, the control group students demonstrated a low level – 4 students (12,5%), and 5 students or 15,6% from the EG.

Table 1 demonstrates the findings of the diagnostic stage of the pedagogical experiment, which involved the assessment of the academic performance of the control group.

Table 1. *Findings of diagnosing academic performance of the control group (n=32)*

Stage	Academic performance of the control group					
	high		average		low	
	number of students	%	n u m b e r of students	%	number of students	%
Ascertaining	9	28,1%	19	59,4%	4	12,5%

At the ascertaining stage of pedagogical experiment, the indicators show that learners of the control group gain academic performance in a high level – 28,1% (9 students), in an average level – 59,4% (19 students) and in a low level – 12,5% (4 students).

Table 2 demonstrates the findings of the ascertaining stage of the pedagogical experiment, which involved the assessment of the academic performance of the experimental group.

Table 2. *Findings of diagnosing academic performance of the experimental group (n=32)*

Stage	Academic performance of the experimental group					
	high		average		low	
	number of students	%	number of students	%	number of students	%
Ascertaining	7	21,9%	20	62,5%	5	15,6%

Students achieve academic excellence, according to the findings of the diagnostic stage of the experimental group's academic performance, in a high level – 21.9% (7 students), in an average level – 62,5% (20 students) and in a low level – 15,6% (5 students).

The statistical significance between the control and experimental groups' results was determined through the usage of the non-parametric Mann-Whitney U-test method in mathematical statistics. This criterion demonstrates that at the ascertaining stage, there were no differences between the experimental and control groups' levels.

The following formula presents the statistics criterion:

$$U = n_1 \cdot n_2 + \frac{n_x \cdot (n_x + 1)}{2} - P_x$$

The sum of ranks for the experimental group is 1027, for the control group – 1052. Let us denote the largest sum by P_x=1052.

The statistics criterion allows to formulate two hypotheses:

H_0: the experimental group does not exceed the control group in terms of academic performance level.

H_1: The experimental group exceeds the control group in academic performance level.

Determining the value U_{emp} using the proposed formula we get:

$$U_{emp} = 499$$

Thus, U_{crit} = p≤0.01 – 338, p≤0.05 – 389, therefore, the samples have statistically insignificant differences and the H0 (null hypothesis) that the experimental group and the control group are homogeneous is accepted. Hence, at the ascertaining stage, the EG does not exceed the CG in terms of academic performance level.

The students of experimental group studied 4 massive open online courses on the Coursera platform: "Leading teams: Building Effective Team Cultures", "Effective Problem Solving and Decision Making", "Project Management: The Basics for Success" and "Successful Negotiation: Essential Strategies and Skills" during the forming stage of pedagogical experiment. The courses chosen by students of the experimental group were held in the English, Kazakh, Russian languages on the Coursera platform and they are presented in Table 3:

Table 3. *Courses chosen by students of the experimental group (n=32)*

#	Course title	Number of enrolled students
1	"Leading teams: Building Effective Team Cultures"	12
2	"Effective Problem Solving and Decision Making"	9
3	Project Management: The Basics for Succes	6
4	"Successful Negotiation: Essential Strategies and Skills"	5

The courses on the Coursera platform include several modules depending on their content. The first place takes the course "Leading teams: Building Effective Team Cultures" from the University of Illinois, it consists of 5 modules. 12 students or 37,5% chose this course, which gives advice on creating a productive team culture. Students in this course acquire the skills necessary to create culture that values inclusiveness, safety, growth in order to produce the best possible team work. The course "Effective Problem-Solving and Decision Making" from the University of California was selected by 9 students (28,1%) and takes the second place. The course offers 4 modules on the platform. The course teaches students how to produce, analyze and evaluate potential solutions as well as utilize decision-making strategies. The learning objectives of "Effective Problem-Solving and Decision Making" are building subject matter knowledge, gaining basic understanding of a topic and tools, and getting experience to improve employability. In third place among students' choice is the course "Project Management: The Basics for Success" from the University of California, consisting of 4 modules. 6 students or 18,8% applied to this online course. In this course, students learn the roles of high-performance teams in project management, tools and methods for developing and strengthening teams, stages of the project cycle, planning and control of projects. The last course in the list is "Successful Negotiation: Essential Strategies and Skills" presented by University of Michigan, which contains 7 modules. 5 students (15,6%) completed the named online course. All modules describe the role of negotiation with friends, family, neighbors, colleagues, employers and others. The course reveals negotiation strategies, key tactics for success, and the ways to become an effective negotiator. It also focuses on some psychological tools to use during meetings. The last module gives the learners chance to practice their negotiation skills in the discussion board section.

The courses on the list included an interview, reading materials, videos, assignments graded by other students. Computer examinations and written assignments are required for the assessment. 32 students of the experimental group received certificates of successful completion after completing their courses.

The students of the experimental group finished their courses in the organized non-formal education through MOOCs on the Coursera platform. The students of control group studied only in traditional way of the learning process. The research data show some differences in their academic performance. Positive changes were also observed in the control group, mostly on an average level. The experimental group passed through quantitative changes in the level of academic achievement as demonstrated by the non-parametric Mann-Whitney U test.

Table 4 is a comparative table for diagnosing academic performance at the end of the pedagogical experiment between the control and experimental groups.

Table 4. Comparative table for diagnosing academic performance of the CG and EG at the ascertaining and final stages of the experiment

Stage	Control group			Experimental group		
	levels in %					
	high	average	low	high	average	low
Ascertaining	28,1%	59,4%	12,5%	21,9%	62,5%	15,6%
Final	34,4%	56,2%	9,4%	37,5%	56,2%	6,3%
Comparison	+6,3%	- 3,2%	- 3.1%	+15.6%	- 6,3%	- 9,3%

Using this statistical procedure, the control group didn't show statistically significant changes in academic performance by the experiment conclusion. On the contrary, the experimental group demonstrated an increase in high-level academic performance. The data are illustrated in Figure 1.
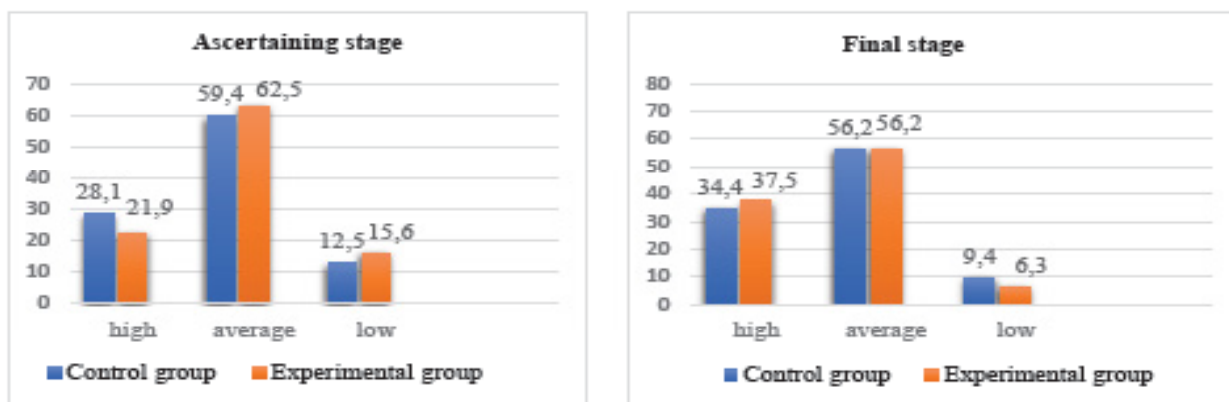
Figure 1: Comparison of diagnostics of academic performance level of the CG and EG at the ascertaining and final stages of the experiment

In response to the first research question: "What differences in academic performance between the experimental and control groups were noted before to the pedagogical experiment?", the results show that there is no difference in academic performance between the experimental and control groups, for this reason the non-parametric Mann-Whitney U-test and method of mathematical statistics were used to test the hypothesis H0 and at the ascertaining stage of the experiment. The control and experimental groups were homogeneous at the beginning of the pedagogical experiment. Answering the second research question: "In what ways does the pedagogical experiment impact on academic performance in the experimental and control groups?", the control's group's high level of academic performance went from 28,1% up to 34,4% 06 +6,3%, after taking massive open online courses on the official Coursera platform. The level of high level of academic performance of the experimental group increased by 15,6%, from 21,9% to 37,5%. So, we observe that the usage of non-formal education in the pedagogical experiment had impact on students' academic performance. The third research question was "What effect does the organization of non-formal education have on academic performance of students of the educational program "Pedagogy and Psychology"?". We concluded that enrolling in massive open online courses benefits the growth of metacognitive skills in addition successful academic performance. The students of experimental group demonstrated greater independence, ability to recognize secondary and tertiary information in addition to current one, confirmed perseverance and

finishing challenging assignments in class, and started providing more feedback. The results of the study illustrate that students' academic performance is positively impacted by MOOCs offered on the Coursera platform.

Discussion. After completing 4 courses, students gain the skills necessary to find, process and analyze data from a variety of sources. The learners can evaluate the consistency and accuracy of the data; plan, organize and set the goals independently; work with databases and information systems; master scientific research methods and techniques; create, design and implement the application of research findings in the field of psychology and pedagogy. One of the main advantages of non-formal educations is the development of students' metacognitive skills, critical thinking, creativity, self-regulation. Students of the educational program "Pedagogy and psychology" found the content of the courses relevant and their motivation increased, which positively affected on students' academic performance in formal learning. Students of the experimental group, who participated in massive open online courses on the Coursera platform, showed greater independence that help them to improve their academic achievements. Self-regulation in online courses make learners more successful (Wang et al. 2013). However, some students from the experimental group could not boost their mid-term results after completing online courses. Some learners struggle to engage success in metacognitive abilities in a short period of time (Bol & Garner, 2011).

We agree that MOOCs on the Coursera platform are tailored to student individuality, personalized learning experiences and a supportive learning environment that develop self-awareness and self-regulation (Jansen et al., 2020). The benefits of non-formal education are obvious, but there are some challenges that learners, teaching staff and university administration can face. First of all, the variety of online courses can lead to different learning results. Second of all, the organization of non-formal education requires an effective coordination and collaboration of all participants. Finally, it is crucial to develop transparent evaluation mechanisms to assess the course results (Souto-Otero, 2021).

Conclusion. According to our research, the organization of non-formal education through massive open online courses on the Coursera platform have a great impact on improving students' academic achievement. The students of experimental group received certificates of accomplishment after completing 4 MOOCs: "Leading teams: Building Effective Team Cultures", "Effective Problem Solving and Decision Making", "Project Management: The Basics for Success" and "Successful Negotiation: Essential Strategies and Skills". After pedagogical experiment the level of academic performance of the control group increased by 6,3%, and the experimental group grew by 15,6%. As a result, a regional pedagogical university's educational policy includes non-formal education as well. A review of literature on the problem of the demonstrates that the organization of non-formal education is still actively developing in practice. Thus, massive open online courses are utilized as alternative and independent sources of information, they can be useful instruments for fostering non-formal education. The flexibility of non-formal education allows students to choose their own learning routes and build professional strategies according to their interests and needs.

To optimize the usage of massive open online courses on the Coursera platform and to develop certain skills and abilities the authors of this research recommend the following:

1) the advisers of the educational programs should organize non-formal education so that students could select online courses on the Coursera platform thoroughly according to their interests and professional strategies, covering educational psychology, teaching technologies and other related subjects;

2) the number of courses from well-known and reputable universities should be expanded for future teachers;

3) it is recommended to collaborate with other course learners through forums and discussion boards to build a professional network and share perspectives;

4) it is crucial to recognize and validate the results and competencies of non-formal education by the universities.

The outcomes of the study verify the

effectiveness of the organization of non-formal education for students of the educational program "Pedagogy and Psychology" and including massive open online courses on the Coursera platform into the educational process of a regional university.

References

Alimova, Sh.Zh., Nygmetova, B.D., & Kairbayeva, A.K. (2022). Massive open online course development: experience of a regional university. Bulletin of Ablai khan KazUIR and WL. Series "Pedagogical Sciences", 4(67), 57-68. https://doi.org/10.48371/PEDS.2022.67.4.005

Al-Rahmi, W.M, Aldraiweesh, A., Yahaya, N., Kamin, Y.B., & Zeki A.M. (2018). Massive Open Online Courses (MOOCs): Data on higher education. Data in Brief, 22, 118-125. https://doi.org/10.1016/j.dib.2018.11.139

Amado, C., Dorotea, N., Pedro, A., & Piedade, J. (2022). MOOCs Design: A Conceptual Framework for Continuous Teacher Training in Portugal. Education Sciences, 12(5), 1-21. https://doi.org/10.3390/educsci12050308

Bol, L., Garner, J.K. (2011). Challenges in supporting self-regulation in distance education environment. Journal of Computing in Higher Education, 23(1), 104-123. https://doi.org/10.1007/s12528-011-9046-7

Cheng, Y.-M. (2023) How different categories of gamified stimuli affect massive open online courses continuance intention and learning performance? Mediating roles of internal experiences. Social Science Computer Review, 41(2), 495-527. https://doi.org/10.1177/08944393221111928

Essomba, M.A., Leonart, P., Alfonso, L., & Bin, H. (2022). Education for sustainable development in educating cities: Towards a transformative approach from informal and non-formal education. Sustainability, 14(7), 1-14. https://doi.org/10.3390/su14074005

Holland, A.A. (2019). Effective principles of informal online learning design: A theory-building metasynthesis of qualitative research. Computer & Education, 128, 214-226. https://doi.org/10.1016/j.compedu.2018.09.026

Irwanto, I., Wahyudaiti, D., Saputro, A.D., & Lukman, I.R. (2023). Massive open online courses (MOOCs) in higher education: A bibliometric analysis (2012-2022). International Journal of Information and Education Technology, 13(2), 223-231. http://www.ijiet.org/show-185-2391-1.html

Иванищева Н.А. (2022). Неформальное образование студентов педагогических университетов. Непрерывное образование: XXI век, 4(40), 1-10. https://doi.org/10.15393/j5.art.2022.8008

Jansen, R.S., Leeuwen, A., Janssen, J., Conijn, R., & Kester, L. (2020). Supporting leaners' self-regulated leaning in Massive Open Online Courses. Computer & Education, *146,* 1-17. https://doi.org/10.1016/j.compedu.2019.103771

Lee, D., Lee, S.L., & Watson, W.R. (2019). Systematic literature review on self-regulated learning in massive open online courses. Australasian Journal of Educational Technology, 1(35), 28-41. https://doi.org/10.14742/ajet.3749

Mahajan, R., Gupta, P., & Singh, T. (2019). Massive Open Online Courses: Concept and Implications. Indian Pediatrics, 56, 489-495. https://doi.org/10.1007/s13312-019-1575-6

Maldonado-Mahauad, J., Perez-Sanagustin, M., Kizilcec, R.F., Morales, N., & Munoz-Gama, J. (2018). Mining theory-based patterns from big data: Identifying self-regulated learning strategies in Massive Open Online Courses. Computers in Human Behavior, 80, 179-196. https://doi.org/10.1016/j.chb.2017.11.011

Saegusa, T. (2020). Mann-Whitney test for two-phase stratified sampling. Stat, 1(10), 1-12. https://doi.org/10.1002/sta4.321

Souto-Otero, M. (2021). Validation of non-formal and informal learning in formal education: Convert and overt. European Journal of Education, 3(56), 365-379. https://doi.org/10.1111/ejed.12464

Wang, C.H., Shannon, D.M., Ross, M.E. (2013). Students' characteristics, self -regulated learning, technology self-efficacy, and course outcomes in online learning. Distance Education, 34, 302-323. https://doi.org/10.1080/01587919.2013.835779

Якушина М.С. (2020). Неформальные образовательные практики в пространстве непрерывного образования педагогов. Человек и образование, 1(62), 9-15.

References

Alimova, Sh.Zh., Nygmetova, B.D., & Kairbayeva, A.K. (2022). Massive open online course development: experience of a regional university. Bulletin of Ablai khan KazUIR and WL. Series "Pedagogical Sciences", 4(67), 57-68. https://doi.org/10.48371/PEDS.2022.67.4.005

Al-Rahmi, W.M, Aldraiweesh, A., Yahaya, N., Kamin, Y.B., & Zeki A.M. (2018). Massive Open Online Courses (MOOCs): Data on higher education. Data in Brief, 22, 118-125. https://doi.org/10.1016/j.dib.2018.11.139

Amado, C., Dorotea, N., Pedro, A., & Piedade, J. (2022). MOOCs Design: A Conceptual Framework for Continuous Teacher Training in Portugal. Education Sciences, 12(5), 1-21. https://doi.org/10.3390/educsci12050308

Bol, L., Garner, J.K. (2011). Challenges in supporting self-regulation in distance education environment. Journal of Computing in Higher Education, 23(1), 104-123. https://doi.org/10.1007/s12528-011-9046-7

Cheng, Y.-M. (2023) How different categories of gamified stimuli affect massive open online courses continuance intention and learning performance? Mediating roles of internal experiences. Social Science Computer Review, 41(2), 495-527. https://doi.org/10.1177/08944393221111928

Essomba, M.A., Leonart, P., Alfonso, L., & Bin, H. (2022). Education for sustainable development in educating cities: Towards a transformative approach from informal and non-formal education. Sustainability, 14(7), 1-14. https://doi.org/10.3390/su14074005

Holland, A.A. (2019). Effective principles of informal online learning design: A theory-building metasynthesis of qualitative research. Computer & Education, 128, 214-226. https://doi.org/10.1016/j.compedu.2018.09.026

Irwanto, I., Wahyudaiti, D., Saputro, A.D., & Lukman, I.R. (2023). Massive open online courses (MOOCs) in higher education: A bibliometric analysis (2012-2022). International Journal of Information and Education Technology, 13(2), 223-231. http://www.ijiet.org/show-185-2391-1.html

Иванищева Н.А. (2022). Неформальное образование студентов педагогических университетов. Непрерывное образование: XXI век, 4(40), 1-10. https://doi.org/10.15393/j5.art.2022.8008

Jansen, R.S., Leeuwen, A., Janssen, J., Conijn, R., & Kester, L. (2020). Supporting leaners' self-regulated leaning in Massive Open Online Courses. Computer & Education, *146*, 1-17. https://doi.org/10.1016/j.compedu.2019.103771

Lee, D., Lee, S.L., & Watson, W.R. (2019). Systematic literature review on self-regulated learning in massive open online courses. Australasian Journal of Educational Technology, 1(35), 28-41. https://doi.org/10.14742/ajet.3749

Mahajan, R., Gupta, P., & Singh, T. (2019). Massive Open Online Courses: Concept and Implications. Indian Pediatrics, 56, 489-495. https://doi.org/10.1007/s13312-019-1575-6

Maldonado-Mahauad, J., Perez-Sanagustin, M., Kizilcec, R.F., Morales, N., & Munoz-Gama, J. (2018). Mining theory-based patterns from big data: Identifying self-regulated learning strategies in Massive Open Online Courses. Computers in Human Behavior, 80, 179-196. https://doi.org/10.1016/j.chb.2017.11.011

Saegusa, T. (2020). Mann-Whitney test for two-phase stratified sampling. Stat, 1(10), 1-12. https://doi.org/10.1002/sta4.321

Souto-Otero, M. (2021). Validation of non-formal and informal learning in formal education: Convert and overt. European Journal of Education, 3(56), 365-379. https://doi.org/10.1111/ejed.12464

Wang, C.H., Shannon, D.M., Ross, M.E. (2013). Students' characteristics, self -regulated learning, technology self-efficacy, and course outcomes in online learning. Distance Education, 34, 302-323. https://doi.org/10.1080/01587919.2013.835779

Yakushina, M.S. (2020). Neformal'nyye obrazovatel'nyye praktiki v prostranstve nepreryvnogo obrazovaniya pedagogov [Informal educational practices in the space of continuous education of teachers]. Chelovek i obrazovaniye - Man and Education, 1(62), 9-15. [in Russian]

K. ŠMIGELSKAS[1], S. ISMAGULOVA[2,3], L. BUTABAYEVA[4], L. KOZHAGELDIYEVA[2],
A. KAUKENOVA[2]*

[1]Lithuanian University of Health Sciences (Kaunas, Lithuania)
[2]SDU University (Kaskelen, Kazakhstan)
[3]I. Altynsarin National Academy of Education (Astana, Kazakhstan)
[4]Abai Kazakh National Pedagogical University (Almaty, Kazakhstan)
*e-mail: assem.kaukenova@sdu.edu.kz

ACCOMPANYING A STUDENT WITH AUTISM SPECTRUM DISORDER IN SCHOOLS IN KAZAKHSTAN: THE ROLE OF A TEACHER ASSISTANT

Abstract

Worldwide, the development of inclusive education is aimed to achieve the goal of creating safe, non-violent, inclusive and effective learning environment for all children. The goal of our work is to study the current situation of teaching assistants in supporting children with autism spectrum disorder in secondary schools. A questionnaire was developed by the team of experts and is based on the legal acts. It is designed in two main

areas that focused on the experience and needs of teacher assistant and children with autism as well. The results obtained are based on the collection and analysis of data, the study of scientific and methodological literature, normative legal documents on the topic. The research enabled to implement the task of clarifying the role of the teacher assistant in accompanying a student with autism, identifying positive practices, difficulties, satisfaction with their work, as well as to identify factors that impede the effectiveness of psychological and pedagogical support for children with autism at school. It is clear that comprehensive continuous capacity-building trainings are needed in the country to support the work of the teacher assistants and systemic solutions regarding the improvement of professional competencies of teaching assistants in Kazakhstan.

Keywords: autism, teacher assistant, inclusive education, educational needs.

Introduction. According to the agenda of the UN World Summit on Sustainable Development in 2015, 17 goals were envisaged, one of which is aimed at the field of education. So, goal 4a. reads: "Build and improve educational facilities that are child-, disability- and gender-sensitive and provide safe, non-violent, inclusive and effective learning environments for all" (United Nations Goal 4 of Sustainable development "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all").

The task of ensuring equal access to quality education is a priority of the state educational policy of Kazakhstan as well and is included in such main program documents of the country as the National Development Plan of the Republic of Kazakhstan until 2025 (National Development Plan of the Republic of Kazakhstan until 2025 and invalidation of some decrees of the President of the Republic of Kazakhstan, 2018) and others. Improving the quality of an inclusive educational environment is the most important area of activity for secondary schools. Consequently, the current tenet of the modern school is the statement "the new school is a school for everyone".

Thus, in the National Project "Quality Education "Educated Nation", much attention is paid to the issues of inclusive education, where the most important tasks for the next five years are identified as: "Ensuring the accessibility and quality of preschool education and training", "Providing schools with a comfortable, safe and modern educational environment"" (The national project "Quality Education "Educated Nation", Resolution of the Government of the Republic of Kazakhstan, 2021).

Currently, in accordance with regulatory legal documents, in order to ensure the right of every child to quality education, psychological and pedagogical support services are being created as a separate structural unit of a comprehensive school. At the same time, important attention must be paid to the formation of an inclusive culture of educational organization, the preparedness of teachers to include and involve all children in the educational environment, taking into account, their special needs and different capabilities. It should be emphasized that the greatest difficulties in creating an inclusive educational environment arise for teachers when including children with behavioral and emotional difficulties into the educational environment, most of whom are children with ASD.

Children with ASD are a polymorphic group with significant differences among themselves in the severity of autistic disorder, level and characteristics of mental development (Morozov S.A. et al., 2016). Accordingly, experts and specialists of the world community in the field of special education have came to the conclusion that there is no single or specific effective technology or methodology for the psychological and pedagogical rehabilitation of children with ASD (Dovbnya S. et al., 2018).

At the same time, the Law of the Republic of Kazakhstan "On Education" defines special conditions for obtaining education as "conditions including educational, as well as special, individually developing and correctional-developmental programs and teaching methods, technical, educational and other means, living environment, psychological - pedagogical support, medical, social and other services, without which it is impossible for people (children) with special educational needs, as well as children with disabilities, to master educational programs" (Law of the Republic of Kazakhstan "On Education", 2007). According to the order of the Minister of Education of the

Republic of Kazakhstan dated as August 31, 2022 No. 385 "On approval of the Standard Rules for the activities of organizations of preschool, secondary, technical and professional, post-secondary education, additional education of relevant types and types", psychological - medical and pedagogical consultations (PMPC) are carried out assessment of SEN based on the individual needs of the child (the Standard Rules for the activities of organizations of preschool, secondary, technical and vocational, post-secondary education, additional education of relevant types and types, 2022).

Based on an assessment of special educational needs, PMPC specialists recommend for implementation not only such special conditions as changes to the curriculum and training programs, methods of assessing learning outcomes (student achievements), the use of variable, special and alternative teaching methods, but also the help of a teacher assistant.

In Kazakhstan, for the first time, the position and the functionalities of a teacher assistant of a secondary education organization were approved by order of the Minister of Education and Science of the Republic of Kazakhstan dated April 30, 2020 No. 169 by introducing amendments and additions to the order of the Minister of Education and Science of the Republic of Kazakhstan dated July 13, 2009 No. 338 "On approval of the standard qualification characteristics of positions of teaching staff and persons equivalent to them" (the Standard qualification characteristics of teacher positions, 2009).

Among the main functional responsibilities of a teacher assistant in a secondary education organization, the following are identified: psychological and pedagogical support for a child with SEN based on the recommendation of the PMPC, participation in a team assessment by specialists and teachers of children's SEN, as well as in the preparation of individual educational and developmental programs, observation and collection of data about a child with special needs in the process of training, education and developmental work, recording the results of mastering the curriculum, the dynamics of the formation of educational, social-adaptive (behavioral) skills and providing information to educators and specialists for monitoring the process of learning and socialization of the child and others.

This order defines the requirements for the qualifications of a teaching assistant: higher pedagogical education and (or) technical and professional, post-secondary (pedagogical) education or a document confirming pedagogical retraining without presenting requirements for work experience (On approval of the standard qualification characteristics of teacher positions, 2009).

In accordance with the order of the Ministry of Education and Science of the Republic of Kazakhstan No. 6 dated as of January 12, 2022 "On approval of the Rules of psychological and pedagogical support in educational organizations," the services of a teacher assistant are provided to learners with disorders of psychophysical development and behavior based on the recommendations of the PMPC, and to learners with mild behavioral problems and difficulties of adaptation in the classroom - based on the decision of the meeting of the psychological and pedagogical support service for the 1st quarter (further need is determined by the PMPC) (the Rules of psychological and pedagogical support in educational organizations, 2022).

Thus, from the Government side, the position of teacher assistant in educational organizations of the country is provided by the legislation. However, at present, among the current issues of organizing psychological and pedagogical support for learners are still the lack of qualified specialists for its full-time involved activities, including teacher assistants, and also the insufficiency of their professional competencies.

The purpose of the study was to study of teaching assistants experience and challenges they face in working with children with ASD.

Materials and methods. As part of the implementation of the above-mentioned project "Integration of children with autism spectrum disorder into the socio-educational environment based on comprehensive support: challenges and advantages", with the support of the SDU University, a survey was conducted to study the existing experience of teacher assistants

in supporting learners with ASD. The authors of the article were interested in the following research questions as: how do teacher assistants currently working at schools across the country cope with their responsibilities? How does he/she comply with the requirements set in regulatory documents? What difficulties do teacher assistants experience in their work? What decisions are necessary to ensure the productive functioning of the psychological and pedagogical support service in the country's schools and to organize the work of the teacher assistant?

In order to implement the objectives and ensure the validity of the data during the survey, the authors used a method of triangulation of methods, in the form of a complex of qualitative and quantitative methods, including both theoretical and empirical methods. Among the quantitative methods, a questionnaire was used, among the qualitative ones, interviews and analysis of scientific and methodological literature, regulatory legal documents on the research topic were used. To obtain an expert opinion or assess a situation during a joint discussion of problems, the method of individual and group expert assessments was used. In the course of a critical, comprehensive analysis of problems and the development of a collective opinion, the methods of "project method", "brainstorming", and "round table" were used. The above methods were used in the context of the dialectics of the development of educational systems, personality theory, and activity theory.

The questionnaire included 13 open-ended questions and based on the legal act as rules of the Special Pedagogical Psychological Accompaniment in educational institutions dated as of 01/12/2022 No. 6. The questionnaire focused on two parts: the analysis of the experience, methods and techniques uses, satisfaction, needs pf the teacher assistants and the questions on identification of the number of the children with ASD in class, their needs, the involvement of the parents of children with ASD were the focus of the second part of the questionnaire.

The survey of teacher assistants was conducted on the basis of the developed tools, both online and offline. 56 teaching assistants from seven regions of the country took part in the survey-interview: Akmola, East Kazakhstan, Aktobe regions, as well as the cities of Astana, Pavlodar, Semey, Shymkent. When sampling teaching assistants, those who work with children with ASD were selected. 56 teacher assistants were undergone the survey and filled the questionnaire though Google form online. The study was conducted within the framework of the legislation of the Republic of Kazakhstan. Documents that were only in the public domain were studied. Received results were studied by the group of Project team members: specialists in education, public health, psychologists and biostatics. During the study, the authors followed the principles of ethics in social science research, and the anonymity and confidentiality of participants was maintained. (The research has been approved by the Local Ethical Committee of Institution "SDU University" #6 Minutes dated as of 7 March 2023).

Results. Currently, inclusive processes in education and society are defining new directions in the development of fundamental and applied pedagogical research. Representatives of the scientific community are increasingly paying attention to the issues of organizing an inclusive educational process, including the activities of psychological and pedagogical support services, training of teaching staff, the formation of an inclusive culture, designing a comfortable educational space and other problems.

Along with this, an important component of scientific research in the problem area of pedagogy of inclusive education are aspects related to the organization of psychological and pedagogical support for students with special needs, including the activities of a teacher assistant in educational organizations. Since the review of the regulatory framework showed a predominant focus on the secondary education system, teaching assistants working in secondary schools in the country were involved in this study.

56 teaching assistants from seven regions of the country took part in the survey-interview: Akmola, East Kazakhstan, Aktobe regions, as well as the cities of Astana, Pavlodar, Semey, Shymkent. When sampling teaching assistants,

those who work with children with ASD were selected. 56 teacher assistants were undergone the survey and filled the questionnaire though Google form online. The study was conducted within the framework of the legislation of the Republic of Kazakhstan.

When surveyed, about 90% of them responded that in order to provide quality education, timely identification and assessment of special educational needs in children, especially those with ASD, is very important. Speaking positively on this issue in interviews, there were such opinions as "it has an impact on the learning ability of children with ASD", "to understand how to work with each child", "I think yes, the sooner the better", "no need to lose time, all children are teachable", "it is very important to work with the child in the future" (hereinafter in the text the vocabulary of the respondents is preserved).

At the same time, there were also such opinions that showed the doubts and uncertainty of respondents, although their share was 10% of the total: "the diagnosis is not always made on time", "schools do not always understand our work with children with ASD", "not all parents are ready to accept the diagnosis", child", "no specialists". When analyzing these answers, it can be judged that the overwhelming majority of teaching assistants are competent in organizing psychological and pedagogical support for students with special education needs, including the important aspect of assessing the special needs and individual capabilities of children and subsequent support from specialists.

When asked what helps them in the process of practice for the development of the child and improving the condition of children with ASD, 43% of the surveyed teacher assistants answered "methods", expressing their opinion in the following phrases: "difficulties with behavior, techniques for the development of thinking help" , "working with speech therapists and psychologists", "the latest techniques", "sensory integration improves their internal state", "I use outdoor and didactic games in classes", "game methods", "educational games, modeling, board games, singing, creative

workshop (crafts)", "reward system". The rest of the respondents answered that adaptation (10.7%), techniques and tools (7.2%) help, and 39% of them found it difficult to answer. It can be assumed that, despite the fact that almost all teacher assistants know the organizational issues of accompanying a child with ASD, only a small part of them know and use special techniques, an individual approach, and technologies for working with children with ASD. This suggests the need for professional training and advanced training for teacher assistants in the country. On the other hand, the reason for this is the lack of systematically organized courses for teacher assistants, as well as university training in this specialty.

This conclusion is confirmed by the answers to another question about what topics related to the learning and development of children with ASD do respondents feel a lack of information and a need for it. According to the overwhelming majority of the surveyed teacher assistants, their share is 71%, "there is no information", 11% of the total believe that there is information, but there is little practical material, the rest of the respondents, their share is 18%, named the topic "preparing for school", "the role of the family" and only 1 person out of all respondents answered that "everything is enough" (refer to Figure 1).

Analysis of the answers to these questions makes us think about the level of professional preparedness of current teacher assistants in the country's schools, the need to develop educational programs in universities and retraining and advanced training programs for teacher assistants, taking into account the growing need for them. In addition, it should also be taken into account that 50% of respondents indicated a lack of teaching materials and information on the state (Kazakh) language.

It should also be emphasized that when asked how satisfied they are with their work supporting children with ASD, 50% of respondents found it difficult to answer, only 44.6% of them showed sufficient satisfaction with their work and 5.4% average satisfaction (refer to Table 1).
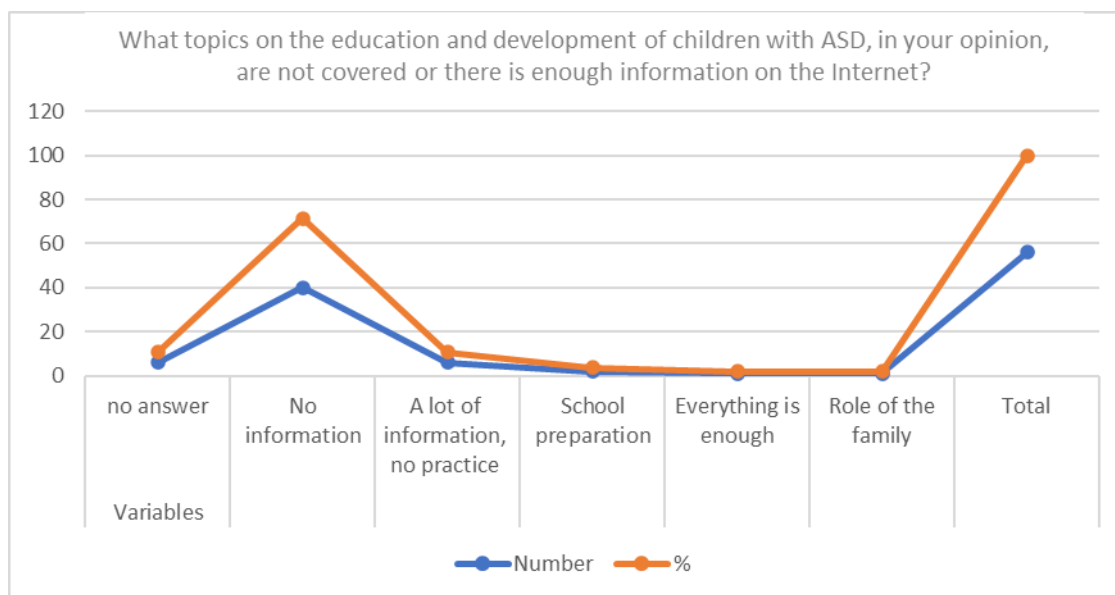
Figure 1: Topics related to the learning and development of children with ASD respondents feel a lack of information and a need for it

Table 1. *Satisfaction in supporting children with ASD*

Answer options	N(%)
Difficult to answer	28 (50.0%)
Highly satisfied	25 (44,6%)
Mild satisfaction	3 (5,4%)
Total	56 (100%)

These answers did not become new discovery for the authors of the article, since the answers to the previous questions showed not entirely attractive situation with the training and methodological support of teaching assistants in our schools. At the same time, a positive aspect that causes optimism is the positive opinions of some of the respondents, for example, such as "I am satisfied with my work, despite the difficulties", "I am satisfied, I love my work, I know how to work with students with ASD", "Overall satisfied, I would like more results" and others.

Interaction with the parents of a child with ASD is of utmost importance in the work of a teacher assistant; in this regard, a question was asked about the level of interest of parents in their child's involvement in the learning process. To this question, 71.4% of teacher assistants reported a very high level of parental involvement (refer to Figure 2), 12.5% about an average level, the rest of the respondents expressed an opinion about insufficient parental involvement in the following terms: "not all parents understand and accept their own children with ASD", "are not always passionate about the process," "some parents do not do much with their children, but require more work from the teacher assistant," "parents consider the tutor to be a magician, completely shifting the responsibility for mastering the material and learning skills to the tutors".

These answers did not go unnoticed by the authors of the article, since in order to ensure the child's right to quality education, it is necessary to create a comfortable educational environment, including favorable relationships between all participants of the educational process. At the same time, it is difficult to overestimate the role of parents of children with special needs. Analyzing the opinions of respondents, one can also argue about the need for educational work among the parent community, both parents with children with special needs and without special needs.
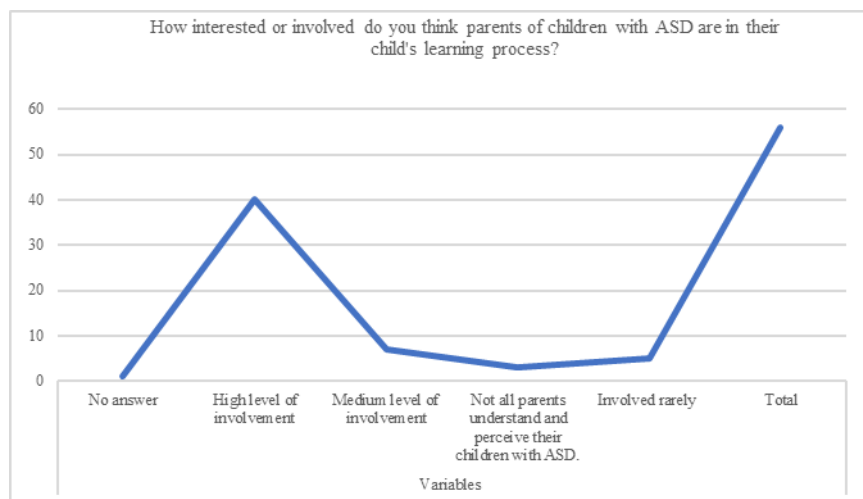
Figure 2: Level of the involvement of parents in ASD child's learning process

Discussion. Any school must ensure the successful socialization of all children, including children with special educational needs (SEN). In this regard, to implement the inclusive policy of the state, the traditional education system requires significant transformations to meet new civilizational challenges. Thus, the results obtained based on the collection and analysis of data, the study of scientific and methodological literature, normative legal documents on the topic of research, made it possible to implement the task of clarifying the role of the teacher assistant in accompanying a learner with ASD, identifying positive practices, difficulties, satisfaction with their work, as well as identifying factors that impede the effectiveness of psychological and pedagogical support for children with ASD at school.

In general, it can be seen that the country is progressively implementing an inclusive policy in accordance with the adopted legislative documents. Processes aimed at developing inclusive practices in the country's schools meet the objectives set in the National Education Project "Comfortable School", approved in November 2022: "Every Kazakh schoolchild should have decent conditions for learning and comprehensive development created by the state and the administration schools, teaching staff with the participation of students and their parents" (On approval of the pilot national project in the field of education "Comfortable School", 2022).

Giangreco, M. F. and co-authors support the statement that effective collaboration with paraprofessionals is an important and growing aspect of providing special education services in inclusive schools (Giangreco M. F. et al, 2010). However, Wendy Symes and Neil Humphrey state that the presence of teaching assistants negatively influences to the effectiveness of children with ASD compared to other two groups of children with dyslexia and no Special Educational Needs. Particularly, children with ASD were showing less performance in self-study and social communication (Symes W. et al, 2012). In their research done in 2011 such factors as inclusive school culture and teacher training have beed overlooked, and the factors as access to expertise considered to be as one of the factors to facilitate or hinder the skills of the teacher-assistants to successfully adapt children with ASD into the school life (Symes W. et al, 2011). Consequently, further research could be arranged around the clarifying the management models in different settings in rural and urban areas, identifying the difference in workload of the teacher-assistants comparing the rural and urban areas.

The professional ASD management training is essential in order to equip teachers and teacher-assistants with the knowledge and skills necessary to address the individual needs of students and to create an effective learning environment. It also contributes to the overall development of students, enabling

them to reach their full potential. Mary Fisher and Stacia L. Pleasants state that most paraprofessionals lack training in evidence-based instructional strategies to support children with special educational needs, as well as children with ASD. In their research the use of the training packages (video modelling and coaching components) showed effectiveness and highlighted the importance of providing trainings to paraprofessionals that have become an increasingly integral part of special education services (Fisher M. et al, 2012). Following up the importance of the supporting group in educational process, Martin, T., & Alborz, A. undertook the qualitative studies among learning support assistants or teaching assistants and got into conclusion that without sufficient knowledge to underpin their practice, teaching assistants are impeded in the educational support they can give to pupils, who face significant learning challenges, with a resultant impact on their students' ability to learn and develop new skills (Martin T., 2014). These researches are in line with the results gained throughout the research done in Kazakhstan and the authors came to the conclusion that systemic long-term capacity-building trainings are needed to teacher-assistants in Kazakhstan.

To confirm the relevance of the conclusions of this article, we cite the words of the President of the country K. Tokayev from the last Address to the people of Kazakhstan dated as September 1, 2023: "The mental health of the younger generation is also important. It is necessary to institutionally strengthen the psychological support service in educational institutions... The inalienable right of every child is the right to receive a quality school education. And the word "quality" is key here. Therefore, it is necessary to consistently improve the quality of education and increase the competencies of teachers" (Message from the Head of State Kassym-Jomart Tokayev to the people of Kazakhstan "Economic course of a Fair Kazakhstan", 2023).

In this article, the authors reflect the main results of the project implementation stage, work is also underway to develop educational programs for advanced training of teachers and teacher assistants in psychological and pedagogical support for learners with ASD.

Conclusion. Conclusion. In this article, the authors concluded that there is a need for systemic solutions to the training and professional development of teacher assistants, especially those accompanying children with ASD. The results of the study highlight both positive shifts and existing gaps in the support provided by teacher assistants to students with SEN, including with ASD. Despite the growing recognition of the importance of early identification and individual support for these students, the data show significant shortcomings in the training and professional development of teacher assistants and a lack of educational resources, especially in the Kazakh language.

Although most teacher assistants are competent in managing the psychological and pedagogical support, only less than half of the participants felt confident in using specific methods, such as sensory integration or educational games. This highlights the need for improved professional development programs that equip teacher assistants with the tools to intervene effectively. Addressing these gaps through targeted educational programs will not only improve the competencies of teacher assistants, but also ensure that children with ASD receive the individual attention they need to make meaningful progress in their learning. Developing targeted educational programs for teacher assistants, as well as increasing collaboration between educators, professionals, and parents, will be critical to ensuring that children with ASD receive the quality education to which they are entitled. As Kazakhstan continues to advance its inclusive education policy, it is imperative to address these gaps to create equitable and supportive learning environments for all students. Considering the wide variety of learning difficulties associated with manifestations of autism spectrum disorders in children, it is logical to conclude that a serious approach to training, retraining and advanced training of teacher assistants is necessary.

References:

Fisher, M., & Pleasants, S. L. (2012). Roles, Responsibilities, and Concerns of Paraeducators: Findings From a Statewide Survey. Remedial and Special Education, 33(5), 287-297. https://doi.org/10.1177/0741932510397762

Giangreco, M. F., Suter, J. C., & Doyle, M. B. (2010). Paraprofessionals in inclusive schools: A review of recent research. Journal of educational and psychological consultation, 20(1), 41-57.

Martin, T., & Alborz, A. (2014). Supporting the education of pupils with profound intellectual and multiple disabilities: The views of teaching assistants regarding their own earning and development needs. British Journal of Special Education, 41(3), 309-327.

Symes, W. and Humphrey, N. (2011), School factors that facilitate or hinder the ability of teaching assistants to effectively support pupils with autism spectrum disorders (ASDs) in mainstream secondary schools. Journal of Research in Special Educational Needs, 11: 153-161. https://doi.org/10.1111/j.1471-3802.2011.01196.x

Symes, W., & Humphrey, N. (2012). Including pupils with autistic spectrum disorders in the classroom: the role of teaching assistants. European Journal of Special Needs Education, 27(4), 517–532. https://doi.org/10.1080/08856257.2012.726019

United Nations Goal 4 of Sustainable development "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" (2023). https://sdgs.un.org/goals/goal4

Довбня С., Морозова Т., Залогина А., Монова И. (2018). Дети с расстройствами аутистического спектра в детском саду и школе: практики с доказанной эффективностью. Санкт-Петербург, 207.

Закон Республики Казахстан «Об образовании» от 27 июля 2007 года. https://adilet.zan.kz/rus/docs/Z070000319

Морозов С.А., Морозова Т.И. (2016). Клинический полиморфизм и вариативность образования детей с аутизмом // Аутизм и нарушения развития, 4, 14.

О Национальном плане развития Республики Казахстан до 2025 года и признании утратившими силу некоторых указов Президента Республики Казахстан. Указ Президента Республики Казахстан от 15 февраля 2018 года. https://adilet.zan.kz/rus/docs/U1800000636

Об утверждении национального проекта "Качественное образование "Образованная нация"". Постановление Правительства Республики Казахстан от 12 октября 2021 года. https://adilet.zan.kz/rus/docs/P2100000726

Об утверждении пилотного национального проекта в области образования "Комфортная школа". Постановление Правительства Республики Казахстан от 30 ноября 2022 года. https://adilet.zan.kz/rus/docs/P2200000963/info

Об утверждении типовых квалификационных характеристик должностей педагогов. Приказ Министра образования и науки Республики Казахстан от 13 июля 2009 года. https://adilet.zan.kz/rus/docs/V090005750

Об утверждении Типовых правил деятельности организаций дошкольного, начального, основного среднего, общего среднего, технического и профессионального, послесреднего образования, дополнительного образования соответствующих видов и типов. Приказ Министра просвещения Республики Казахстан от 31 августа 2022 года. https://adilet.zan.kz/rus/docs/V2200029329

Послание Главы государства Касым-Жомарта Токаева народу Казахстана "Экономический курс Справедливого Казахстана" от 1 сентября 2023 года. https://akorda.kz/ru/poslanie-glavy-gosudarstva-kasym-zhomarta-tokaeva-narodu-kazahstana-ekonomicheskiy-kurs-spravedlivogo-kazahstana-18588

Приказ Министра образования и науки Республики Казахстан "Об утверждении Правил психолого-педагогического сопровождения в организациях образования" от 12 января 2022 года. https://adilet.zan.kz/rus/docs/V2200026513

References:

Fisher, M., & Pleasants, S. L. (2012). Roles, Responsibilities, and Concerns of Paraeducators: Findings From a Statewide Survey. Remedial and Special Education, 33(5), 287-297. https://doi.org/10.1177/0741932510397762

Giangreco, M. F., Suter, J. C., & Doyle, M. B. (2010). Paraprofessionals in inclusive schools: A review of recent research. Journal of educational and psychological consultation, 20(1), 41-57.

Martin, T., & Alborz, A. (2014). Supporting the education of pupils with profound intellectual and multiple disabilities: The views of teaching assistants regarding their own earning and development needs. British Journal of Special Education, 41(3), 309-327.

Symes, W. and Humphrey, N. (2011), School factors that facilitate or hinder the ability of teaching assistants

to effectively support pupils with autism spectrum disorders (ASDs) in mainstream secondary schools. Journal of Research in Special Educational Needs, 11: 153-161. https://doi.org/10.1111/j.1471-3802.2011.01196.x

Symes, W., & Humphrey, N. (2012). Including pupils with autistic spectrum disorders in the classroom: the role of teaching assistants. European Journal of Special Needs Education, 27(4), 517–532. https://doi.org/10.1080/08856257.2012.726019

United Nations Goal 4 of Sustainable development "Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" (2023). https://sdgs.un.org/goals/goal4

Dovbnya, S., Morozova, T., Zalogina, A., & Monova, I. (2018). Deti s rasstroystvami autisticheskogo spektra v detskom sadu i shkole: praktiki s dokazannoy effektivnost'yu [Children with autism spectrum disorders in kindergarten and school: practices with proven effectiveness]. Saint Petersburg. [in Russian]

Zakon Respubliki Kazakhstan "Ob obrazovanii" [Law of the Republic of Kazakhstan "On Education"]. (2007). https://adilet.zan.kz/rus/docs/Z070000319 [in Russian]

Morozov, S.A., & Morozova, T.I. (2016). Klinicheskiy polimorfizm i variativnost' obrazovaniya detey s autizmom [Clinical polymorphism and variability in the education of children with autism]. Autizm i narusheniya razvitiya - Autism and Developmental Disorders, 4, 14. [in Russian]

O Natsional'nom plane razvitiya Respubliki Kazakhstan do 2025 goda [On the National Development Plan of the Republic of Kazakhstan until 2025]. (2018). Decree of the President of the Republic of Kazakhstan. https://adilet.zan.kz/rus/docs/U1800000636 [in Russian]

Ob utverzhdenii natsional'nogo proyekta "Kachestvennoye obrazovaniye "Obrazovannaya natsiya"" [On approval of the national project "Quality Education "Educated Nation""]. (2021). Resolution of the Government of the Republic of Kazakhstan. https://adilet.zan.kz/rus/docs/P2100000726 [in Russian]

Ob utverzhdenii pilotnogo natsional'nogo proyekta v oblasti obrazovaniya "Komfortnaya shkola" [On approval of the pilot national project in the field of education "Comfortable School"]. (2022). Resolution of the Government of the Republic of Kazakhstan. https://adilet.zan.kz/rus/docs/P2200000963/info [in Russian]

Ob utverzhdenii tipovykh kvalifikatsionnykh kharakteristik dolzhnostey pedagogov [On approval of the standard qualification characteristics of teacher positions]. (2009). Order of the Minister of Education and Science of the Republic of Kazakhstan. https://adilet.zan.kz/rus/docs/V090005750 [in Russian]

Ob utverzhdenii Tipovykh pravil deyatel'nosti organizatsiy doshkol'nogo, nachal'nogo, osnovnogo srednego, obshchego srednego, tekhnicheskogo i professional'nogo, poslesrednego obrazovaniya, dopolnitel'nogo obrazovaniya sootvetstvuyushchikh vidov i tipov [On approval of the Standard Rules for the activities of organizations of preschool, primary, basic secondary, general secondary, technical and vocational, post-secondary education, additional education of relevant types]. (2022). Order of the Minister of Education of the Republic of Kazakhstan. https://adilet.zan.kz/rus/docs/V2200029329 [in Russian]

Poslaniye Glavy gosudarstva Kasym-Zhomarta Tokayeva narodu Kazakhstana "Ekonomicheskiy kurs Spravedlivogo Kazakhstana" [Message from the Head of State Kassym-Jomart Tokayev to the people of Kazakhstan "Economic course of a Fair Kazakhstan"]. (2023). https://akorda.kz/ru/poslanie-glavy-gosudarstva-kasym-zhomarta-tokaeva-narodu-kazahstana-ekonomicheskiy-kurs-spravedlivogo-kazahstana-18588 [in Russian]

Ob utverzhdenii Pravil psikhologo-pedagogicheskogo soprovozhdeniya v organizatsiyakh obrazovaniya [On approval of the Rules of psychological and pedagogical support in educational organizations]. (2022). Order of the Minister of Education and Science of the Republic of Kazakhstan. https://adilet.zan.kz/rus/docs/V2200026513 [in Russian]

A. KOSHERBAEVA[1], G. BEGIMBETOVA[2]*, L. ALPYSBAY[1],
R. KOSHERBAEV[1], A. ALIPBEK[3]

[1]*Abai Kazakh National Pedagogical University (Almaty, Kazakhstan)*
[2] *Yogyakarta State University (Yogyakarta, Indonesia)*
[3]*Ozbekali Zhanibekov South Kazakhstan Pedagogical University (Shymkent, Kazakhstan)*
*email: begimbetovaguldana227@gmail.com

ENHANCING SCHOOL-AGE CARE ENVIRONMENTS THROUGH POSITIVE INTERACTIONS

Abstract

This research is devoted to the implementation of the School Educational Environment Rating Scale (SACERS) in Almaty schools, a project approved as a state initiative of the Republic of Kazakhstan for 2023-2025. The research aims to describe the SACERS scale, which includes 48 indicators assessed on a 7-point scale and allows for evaluation of the educational environment that promotes the development of students. Research method: In this research work, a mixed method. The quantitative component included bibliometric analysis data operations using R Studio software (version 2023.3.1.446) and a Google Forms survey administered to 99 students aged 10-13. The qualitative component involved semi-structured interviews with staff, parents, and teachers, in observations, focused on the "Interactions" subscales (27-34) of the SACERS scale. Integrating the findings with broader educational research, this analysis allowed for a detailed assessment of Almaty's school environment. A comparison of Schools A and B revealed strong disciplinary norms, positive peer interactions, and effective communication between teachers and students. These results emphasize the importance of such elements in creating a positive school environment that promotes learners's holistic development and global achievement.

Keywords: SACERS, scale, PBIS, educational environment, positive interactions, collaboration.

Introduction. It is crucial to create effective school-age care environments to nurture children's well-being, motivation, and development. These environments provide a vital support system outside regular school hours, offering a safe and nurturing space for children to grow socially, emotionally, and academically (Robinson et al., 2016., Milton et al., 2023). The crucial role of parents in children's development was emphasized by the President of Kazakhstan, Kassym Zhomart Tokayev(akorda. kz. 2019). He quoted educator Vasily Sukhomlinsky, who compared a child to a mirror. A mirror reflects the moral purity of its parents. Kassym Zhomart Tokayev Kassym Jomart Tokayev noted that parents should realize that a child's character is formed at an early age in the family, rather than putting all the responsibility for education on schools and kindergartens.

Positive interactions between staff, pupils, parents, and teachers play a key role in shaping these environments. It helps to build trust, a sense of belonging, and community, in learner's development. The quality of interactions impact on learner's experiences and outcomes in school environment. It is important to understand and improve these interactions (Siddique, Khan, & Rauf, 2024). The impact of positive interactions between staff, students, parents and teachers on children's welfare, engagement and holistic development. These interactions are crucial in creating a nurturing environment that supports social-emotional growth and academic success(Bekmurzayeva, Yuqi, Begimbetova, Hebebci, & Khang, 2023). Staff-student interactions that promote trust and belonging, active engagement, and open communication are essential for enhancing social-emotional development (Healey & Healey, 2024). Similarly, regular parent-child communication and involvement in program decisions strengthen the care environment. The cooperation between teachers and parents, through workshops and exchanges, contributes to the creation of a holistic learning process

tailored to the needs of each student. According to Ashfaq, Sami, and Yousaf (2024), parent-teacher cooperation has a significant impact on student achievement at the preschool level. They highlight the importance of developing partnerships between teachers and parents to enhance vital behavioral development. Some papers reveal that fostering meaningful partnerships between teachers and parents enhances student outcomes by integrating diverse perspectives into educational practices. This collaborative approach not only supports academic progress but also promotes social-emotional growth and cultural responsiveness (Zhang & Jiang, 2024). Various research documents emphasize the pivotal role of open communication, mutual respect, and shared decision-making in bridging home-school relationships. Lance (2023) explores the re-imagining of parent-teacher relationships through human-centered design, while Sianturi, Lee, and Cumming (2023) Collaborative work in postcolonial schools explored changing perceptions from 'hard-to-access parents' to 'accessible parents'. It is important to maintain this positive interaction to improve the educational environment for school-aged children, which will ultimately contribute to their development and success (Begimbetova, Retnawati, Triyono, & Imangalieva, 2023). Positive interaction between all staff, students, teachers, and parents is important for all schools to save a convenient environment.

Materials and Methods. To improve the educational environment in Almaty schools, several key strategies need to be implemented. One effective approach is to focus on professional development for teachers. This can be achieved through regular workshops and training sessions that cover important areas like communication skills, conflict resolution, and cultural competence (Brigman, Villares, Mullis, Webb, & White, 2021). By mastering communication and conflict resolution, teachers can handle classroom disputes in a way that turns them into learning experiences. Additionally, cultural competence helps teachers understand and appreciate the diverse backgrounds of their students, creating a more inclusive and welcoming classroom environment (Markey,

O'Brien, Kouta, Okantey, & O'Donnell, 2021).

Additionally, research by Collier (2023) highlights the importance of developing effective student peer mentoring programs. According to the author, establishing such programs significantly strengthens student support systems by enabling older students to mentor and assist their younger peers. This method fosters a sense of community and belonging in the school environment. Peer mentoring through mechanisms such as academic tutoring, social support and leadership development creates a support network where students can learn from each other and build strong, positive relationships.

Skakova and Tukenova (2015) emphasize the critical role of parental involvement in fostering a successful educational environment. They argue that schools can enhance this partnership through regular parent-teacher meetings, workshops, and volunteer opportunities. Such initiatives help create a unified approach to student development, promoting both academic achievement and social-emotional growth. By strengthening the connection between home and school, these efforts build a supportive network that significantly benefits students.

Implementing regular feedback mechanisms, such as surveys and suggestion boxes, is essential for maintaining a school environment that is responsive to the needs of its community. Kutasi, R. (2023) highlights that such feedback systems play a crucial role in informing continuous improvement efforts. Collecting and analyzing feedback, schools can identify areas for enhancement and make informed decisions to better serve students, parents, and staff. A proactive approach aligns the evolving school environment with the community's needs and aspirations. Bradshaw, Waasdorp, and Leaf (2012) demonstrated that implementing school-wide Positive Behavioral Interventions and Supports (PBIS) significantly reduces child behavior problems, underscoring PBIS's effectiveness in managing and improving student behavior.

In the context of Kazakhstani schools, adopting PBIS can be particularly advantageous. This proactive framework focuses on reinforcing positive behaviors, setting clear

expectations, and supporting students to meet these expectations. According to the SACERS scale Integration domain PBIS, Kazakhstani schools can foster a more supportive and organized environment Focusing on this method tackles disruptive behavior while fostering a more positive learning environment, ultimately creating a better educational experience for students.

A mixed-methods approach was adopted for this research. This included both quantitative and qualitative methods. The quantitative strand used bibliometric analysis data analysis operations facilitated by the R Studio software, version 2023.3.1.446.While the qualitative strand observation and interview were used to explore in depth based on the SACERS scale "'Interactions" (including subscales 27-34: Greeting/Leaving, Staff-Child Interactions, Staff-Child Communication, Staff Supervision, Discipline, Peer Interactions, Staff-Parent Interactions, Staff Interactions).

The research focuses on these questions:

What is the annual growth rate of publications in the field of educational interactions between 2017 and 2023?

What are the perceptions of students, teachers, and parents regarding the interactions and communication within the school environment, and how do these interactions influence students' social and academic development?

How does the implementation of the School-Age Care Environment Rating Scale (SACERS) impact the quality of educational environments in Almaty schools?

What insights can be gained from interviews with teachers, students, and parents regarding the interactions and communication within the school environment?

Participants: Quantitative data was collected through a Google Forms survey administered to 99 students aged 10-13 years. Qualitative data was gathered through semi-structured interviews with staff, parents, and teacher

Results. A bibliometric analysis using RStudio and a Scopus CSV dataset explores teacher, student, and parent interactions in education. According to the data between 2017 and 2023, publications increased by 17.76% annually. This analysis is based on 146 documents including articles, book chapters, and conference proceedings. The average paper is relatively new (3.4 years) and receives a medium amount of citations (7.27 citations per paper). This analysis is based on a rich set of 886 keywords assigned by the Research Database (AIN) and 551 keywords suggested by the authors themselves. While 16% of papers have a single author, the average paper shows collaboration between 3.65 authors. It should be noted that more than 21% of these collaborations involve international co-authorship, which reflects the global nature of database research. The main information is shown in table 1.

Table 1. *Script of Scholarly Landscape (2017-2023)*

Description	Results
MAIN INFORMATION	
Timespan	2017:2023
Sources (Journals, Books, etc)	114
Documents	146
Annual Growth Rate %	17,76
Document Average Age	3,4
Average citations per doc	7,274
References	6803
DOCUMENT CONTENTS	
Keywords Plus (ID)	886
Author's Keywords (DE)	551
AUTHORS	
Authors	503
Authors of single-authored docs	16

AUTHORS COLLABORATION	
Single-authored docs	17
Co-Authors per Doc	3,65
International co-authorships %	21,92
DOCUMENT TYPES	
article	106
book	1
book chapter	3
conference paper	31
editorial	1
letter	1
review	3

Co-occurrence Network Reveals Underlying Structure: This collaborative nature extends beyond the authorship of papers. A co-occurrence network analysis of keywords can reveal deeper connections between research topics. Using this technique, we look at how often keywords occur in the same documents. By visualizing these relationships, we can identify clusters of highly interconnected terms, suggesting core areas of research focus and potential emerging subfields.

Figure 1: Co-occurrence Network

Keyword Analysis Reveals Research Focus: Analysis of keywords in the data highlights a focus on core educational and psychological themes. Terms like "students" and "teaching" demonstrate the central importance of these concepts, with "students" holding a particularly high significance score of 270.510. Other prominent keywords include "human," "male," "female," "student," and "teacher," further emphasizing the human element.

Secondary and Niche Areas: Keywords with medium frequency, such as "student" (lowercase "s"), "education," "school," and "psychology," suggest these areas are also relevant but to a slightly lesser extent. Additionally, lower frequency keywords like "e-learning," "engineering education," "bullying," and "longitudinal study" indicate the presence of educational and psychological context. The varied scores likely reflect different statistical measures, providing insight into the prevalence and significance of each keyword. By examining keyword frequency and significance, this analysis informs the direction of the article. This approach ensures comprehensive coverage of the major and minor themes within the educational and psychological landscape (Kosherbayeva, Issaliyeva, Kassymova, Kosherbayev, & Begimbetova, 2023).

Peer interaction during recess and collaborative projects plays an important role in creating a supportive learning environment that positively impacts student satisfaction and academic achievement. Table 2 shows that students' level of comfort with interaction in class.

Table 2. *Student Comfort Levels in Classroom Interactions*

Questions	Average	Standard deviation
1. During break or lunchtime, how often do you talk to your classmates?	5.62	0.91
2. Do you have trusted friends at school?	3.98	1.37
3. How often do you work together with other pupils on projects or homework?	3.75	1.30
4. If you disagree with someone in your class, how do you usually settle the matter?	3.92	1.37
5. How comfortable do you feel asking teachers questions in class?	3.68	1.17
6. Do you find it easy to get along with your teachers?	4.27	1.01

Teacher-Student Interactions and Supportive Learning Environments: The teacher-student relationships are a significant strength of the learning environment. A high average score of 4.27 for student-teacher rapport suggests a positive and supportive classroom climate. Moreover, students' comfort level with asking questions (average score of 3.68) further reinforces this conducive atmosphere. Such conditions are likely to foster increased student engagement and academic achievement.

The Course Perceptions and Areas for Improvement: The average quality of teaching is rated as good (5.62). However, variations in the clarity of course materials (3.98), assessments (3.75), TA support (3.92) and course structure (3.68) suggest that student experiences vary. These issues could be addressed by improving materials, exploring new assessment methods, and improving student support.

Variability in responses, particularly in the areas of cooperation and conflict resolution, indicates differences in students' social integration and skills. High levels of teacher-student interaction indicate a supportive environment in which students feel comfortable and engaged. Strengthening peer and teacher-student relationships is critical to improving student engagement and educational outcomes, as illustrated in Figures 2, 3, 4 and 5.
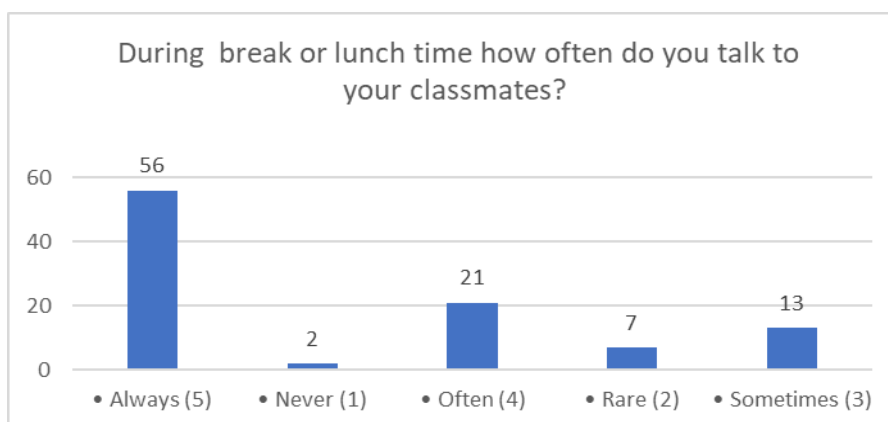
Figure 2: Interaction of students during break or lunch

The largest percentage of students, 56%, talk to their classmates "always" during breaks or lunch, and 21% talk "as often". 13% of students talk "Sometimes". 7% of students talk "rarely". Only 2 % of students said they never talk to their classmates during the break or lunch. Most students talk to their classmates at least once during their lunch break or lunch.

Figure 3 shows a survey of trusted friends at school. Most students said they had at least one trusted friend (41% said yes and 20% were sure).
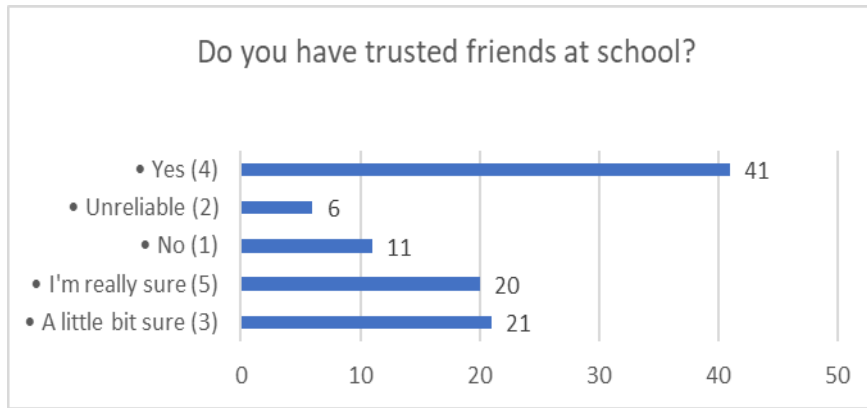
Figure 3: Trusted friends at school

Only a small number of students said they had no trusted friends (11% said no and 6% said their friends were unreliable).
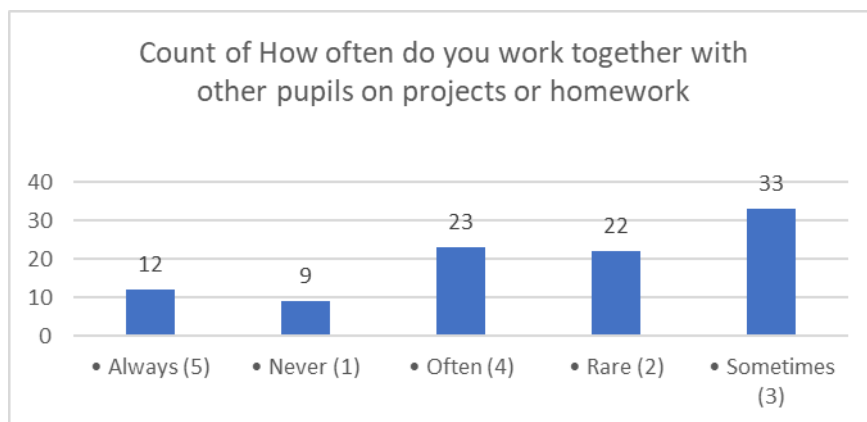
Figure 4: Work together with peers

Figure 4 shows how often students work together on projects or homework. "Always" is the most common answer (35 students), followed by "Sometimes" (23 students). The lower-income students said they worked together "frequently" (22 students) or "rarely" (12 students), and the least common answer was "never" (9 students). According to the response, collaboration is better, but some students prefer to work alone.
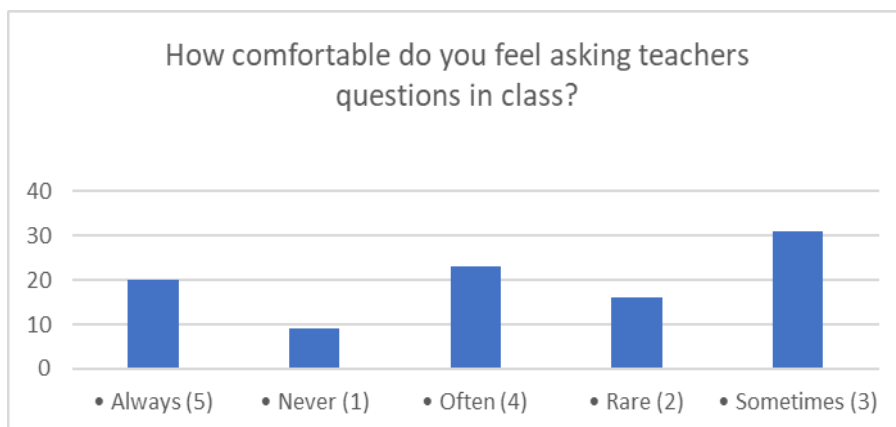
Figure 5: Interaction with teachers

The majority of students (35%) say they are always comfortable asking questions in class, while fewer students (22%), "Sometimes" (23%), "Rally" (12%), and "Never" (9%) say the same.

The results of the survey indicate the significance of peer interaction for students' well-being. The high average score (5.62) for students' conversations with classmates during breaks suggests the presence of a positive social climate. However, there is some variation in students' experiences in this regard, as evidenced by the standard deviations of 3.75 and 3.92 observed for questions related to collaborative activities and conflict resolution, respectively. Such discrepancies may indicate different levels of social integration or interpersonal skills among learners.

Based on interviews with teachers, students, parents, and staff, along with observational data from two schools, this analysis explores educational interactions. It combines qualitative insights, quantitative assessments, and observations to assess student-teacher interactions, peer relationships, and teacher-parent communication, aiming to identify strengths and areas for improvement in the educational environment.

Interaction between teachers and parents
Parents 1:

Q: How would you describe the way teachers and parents communicate at your child's school?

Ar: Communication is mainly formal, with scheduled meetings and occasional web updates. While these methods cover the basics, there is potential for improvement through more frequent and informal interactions.

Parent 2:

Q: In what ways do you think that communication with the teachers could be improved?

A: There could be more proactive communication, with regular updates on student progress and more opportunities for parents to be involved in classroom activities.

Parent 3:

Q: How effective do you think the current communication is between parents and teachers?

A: Communication is generally adequate but tends to be reactive. The introduction of regular newsletters or detailed progress reports could make the dialogue more proactive and engaging.

Parents' feedback highlights the need for more proactive and informal methods of communication between teachers and parents. The current formal mechanisms, while functional, are perceived as reactive. Schools should consider regular updates through newsletters and increased opportunities for parental involvement to strengthen the partnership between educators and families and support pupils' development.

Interaction between students
Student 1:

Q: How would you describe your interactions with your peers at school?

A: Peer interactions are mostly positive, involving teamwork and mutual support. However, there are occasional conflicts that are usually resolved with the help of school staff and teachers.

Student 2:

Q: How does the school deal with peer interactions?

A: The school encourages positive interactions through structured activities. Nevertheless, there could be better management to ensure inclusivity and reduce cliques.

Student 3:

Q: What changes would you suggest to improve interactions among students?

A: Introducing more activities that involve students from different classes could help reduce cliques and create a more positive environment.

Student 4:

Q: How does the school deal with conflicts between pupils?

A: Conflicts are usually handled by teachers or counselors who mediate and help students resolve issues respectfully.

Student 5:

Q: Do you feel well supported by the staff in resolving peer conflicts?

A: Yes, staff are supportive and help us to resolve conflicts fairly and ensure that issues are addressed constructively.

Student interactions are largely positive, with effective conflict resolution in place. To

further improve the integration and reduce the formation of cliques, the school should introduce more structured cross-class activities. Ongoing staff support for conflict management and mediation ensures that issues are dealt with fairly and constructively.

Interaction between students and teachers
Teacher 1:

Q: How could student-teacher interaction be improved?

A: To ensure that all students feel involved, we need to create more opportunities for engagement, especially for quieter students. This could include using different strategies to encourage participation from all students.

Teacher 2:

Q: How do you provide extra support for students who need it?

A: We provide individual help through one-to-one sessions and small group discussions. Various forms of encouragement and feedback are used to support students effectively.

Interaction between students and teachers is generally effective but could be improved. Although formal and informal methods are used, there is a need to improve communication with quiet students. Implementing strategies to engage all students and providing individual support can improve the quality of interactions.

The table 3 presents a concise summary of the thematic analysis conclusions on educational interactions. It details the current state, recommended improvements, and anticipated outcomes for teacher-parent, student, and student-teacher interactions. The goal is to foster enhanced engagement, inclusivity, and support within the educational environment, leading to greater overall effectiveness.

Table 3. *Summary of Thematic Analysis Conclusions*

Interactions	Current state	Suggested improvements	Expected Outcomes
Teacher-Parent Interaction	Formal and reactive (meetings, web updates)	Increase informal communication (newsletters, more classroom involvement)	Enhanced engagement and stronger school-family partnership
Student Interactions	Positive, but occasional conflicts arise; staff manage conflicts effectively	Promote inclusivity through cross-class activities	Reduced cliques, inclusive peer environment
Student-Teacher Interaction	Effective, but quieter students need more attention; manage behavioral issues constructively	Develop targeted engagement strategies; manage behavioral issues constructively	Improved learning outcomes, more supportive interactions

The SACERS scale subscale interaction was used to observe the school environment of two schools A, B in the areas of Meeting-Leaving, Learner-Teacher Interaction, Learner-Teacher Communication, Supervision of Students, Discipline, Peer Interaction, Interaction Between Teachers and Parents, and Communication Between Teachers and Subject Teachers. Figure 6 shows the result of the observation Series 1-School A, Series 2- school B.

Table 4 provides a comparative analysis of educational interaction scales between two schools, highlighting variations in student-teacher and peer interactions. It details mean scores and standard deviations across various categories, such as Learner-Teacher Interaction, Supervision, and Discipline, offering insights into the strengths and areas for improvement in each school's practices.

Student-Teacher and Peer Interactions. Meeting - Leaving: Mean: 6.5, Standard Deviation: 0.5. Both Schools show good greeting and farewelling systems but School A has a better performance. High scores in this section are an indication of established procedures that make the environment friendly and organized. Low standard deviation indicates similar practices across the schools that are important in setting positively critical everyday routines.
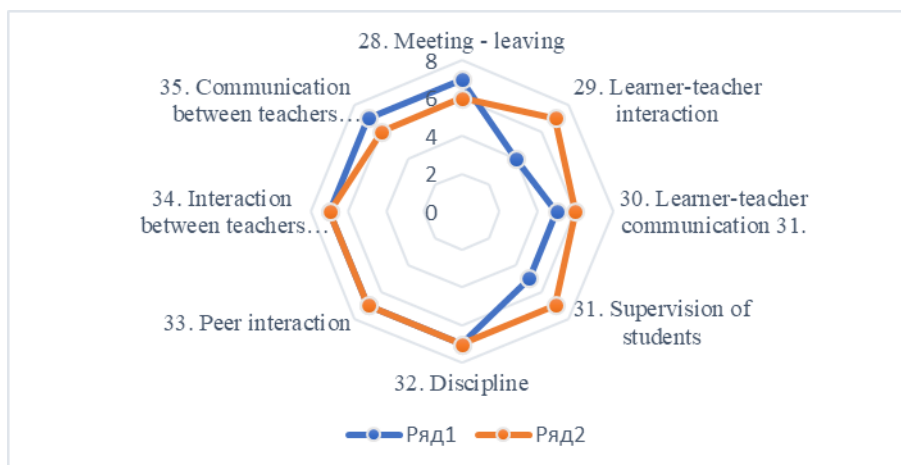
Figure 6: Interaction scale (SACERS)

Table 4. *Comparison of Scores on Educational Interaction Scales*

Scales	School A	School B	Mean A.B	Std Dev
Meeting - leaving	7	6	6.5	0.5
Learner-teacher interaction	4	7	5.5	1.5
Learner-teacher communication	5	6	5.5	0.5
Supervision of students	5	7	6.0	1.0
Discipline	7	7	7.0	0.0
Peer interaction	7	7	7.0	0.0
Interaction between teachers and parents	7	7	7.0	0.0
Communication between teachers and subject teachers	7	6	6.5	0.5

Learner-Teacher Interaction: Mean: 5.5, Standard Deviation: 1.5. There is a noticeable difference between the two schools with school B coming on top. The mean score of 1.5 shows how diverse interactions are from one place to another while the high standard deviation reflects inconsistency in the quality of the student-teacher relationship.

Learner-Teacher Communication: Mean: 5.5, Standard Deviation: 0.5. School B scores slightly ahead, so they are comparable. A mean score of 5.5 and a low standard deviation indicate relatively uniform communication practices in both schools. From a technological point of view, School A is experiencing dissatisfaction and poor learning conditions. However, School A has opportunities for improvement to ensure that students fully understand and interact with the curriculum.

Supervision and Discipline: Mean: 6.0. Standard Deviation: 1.0. School B received more points, it means better control of students. Differences in supervision quality correspond to a mean score of 6.0 (SD = 1.0). To keep the educational environment harmless and serene, strict supervision is necessary. A can enhance its practices by adopting effective strategies observed in School B.

Discipline: Mean: 7.0. Standard Deviation: 0.0. Two schools achieved a maximum score with no variability, demonstrating consistent discipline practices. These practices are critical to maintaining discipline and encouraging positive behavior. Perfect scores demonstrate that the two schools have strong disciplinary foundations that can serve as an example to others.

Peer Interaction: Mean: 7.0. Standard Deviation: 0.0. Two schools achieved the highest score, indicating an environment conducive to healthy peer relationships. These relationships are essential for social development. Maintaining high standards and sharing best practices within the educational community are encouraged.

Interaction Between Teachers and Parents: Mean: 7.0. Standard Deviation: 0.0. A high score

in these two schools indicates a strong parent-teacher relationship. Effective communication and collaboration between teachers and parents are essential for coordinating home and school efforts to support student development. To maintain these high standards, continuous interaction and open communication must be maintained.

Communication Between Teachers and Subject Teachers: Mean: 6.5. Standard Deviation: 0.5. the results suggest School A's teachers work together better, likely thanks to good communication. This is important for a strong learning experience. School B can improve by encouraging more collaboration among the teachers.

Discussion. Bibliometric analysis, implementation of the School-Age Care Environment Rating Scale (SACERS) in Almaty schools, and interviews with key stakeholders provide a comprehensive view of the quality of educational interactions and their impact on student development.

The bibliometric analysis shows a strong annual growth rate of 17.76% in publications on educational interactions, reflecting rising scholarly interest in how educational stakeholders engage. This growth highlights the field's growing importance in shaping educational outcomes and improving school environments. Additionally, 21.92% of international co-authorships indicate a global recognition of the field, bringing diverse insights and enhancing research quality.

Survey results indicate that interactions between students and teachers are generally positive, with students reporting high levels of comfort in asking questions and engaging with their teachers. The average score for interactions with teachers is 4.27, underscoring a supportive learning environment. However, variability exists, as reflected in the standard deviations for questions related to collaborative work and conflict resolution, suggesting differences in students' social integration and interpersonal skills.

The SACERS assessment indicates that educational environments in Almaty schools are characterized by positive outcomes, with high scores in the 'Peer Interaction' (7.0) and

'Discipline' (7.0) domains. These findings suggest the presence of a supportive social climate and effective disciplinary practices. Nevertheless, considerable variation is observed between schools, particularly in the domains of 'Learner-Teacher Interaction' and 'Supervision of Students'. For example, School A demonstrates excellence in social and disciplinary aspects but exhibits challenges in engaging students, whereas School B exhibits robust teacher-student relationships but necessitates enhancement in communication between teachers and subject teachers. These findings underscore the necessity for targeted enhancements to address discrepancies and augment the overall quality of education. Schools like A and B, with strong scores in 'Interaction between Teachers and Parents,' demonstrate the importance of bridging home and school environments. School A excels in discipline and peer relationships (Begimbetova et al., 2023), while School B faces challenges in learner-teacher interactions, highlighting areas needing improvement. Addressing these issues can boost student satisfaction and academic success (Healey & Healey, 2024). Using SACERS to assess and target specific areas for improvement, such as professional development for teachers, can foster better communication and interaction in schools.

Interviews with teachers, pupils, and parents revealed different perspectives on educational interactions. Teachers valued their close relationships with students but faced challenges in meeting diverse learning needs and maintaining consistent communication with parents. They expressed a need for additional training in behavior management and integration. Learners felt supported by their teachers but struggled with social dynamics and peer conflict, suggesting that structured activities could improve inclusivity. Parents emphasized the need for regular, informal updates from teachers and valued their involvement in school activities. They believe that increased communication and participation strengthen the partnership between home and school. Effective communication between teachers and parents enhances student support and achievement.

Conclusion. This research underscores how essential positive interactions between

pupils, teachers, and parents are for creating an effective school environment. The growing interest in educational interactions highlights the importance of nurturing supportive relationships within schools. Using the SACERS scale to assess these interactions has proven effective, offering valuable insights and guiding improvements. For Almaty's schools to progress, the focus should be on enhancing proactive communication between teachers and parents, better engaging quieter students, and addressing inconsistencies in learner-teacher interactions. Implementing professional development and structured peer mentoring can support these goals. The findings show that while there are strengths, targeted strategies and continuous improvements are vital for fostering a nurturing learning environment that supports students' social, emotional, and academic development.

References

Ashfaq, O., Sami, A., & Yousaf, H. (2024). Parent-Teacher Collaboration and its Effect on Student's Achievement at Pre-School Level. Pakistan Social Sciences Review, 8(2), 386–399. https://doi.org/10.35484/pssr.2024(8-II)32

Bakhtawar Siddique, Dr. Waleed Khan, and Dr Umara Rauf. 2024. "Understanding and Addressing Bullying Behavior in Children". Al Manhal Research Journal 4 (2). https://almanhal.org.pk/ojs3303/index.php/journal/article/view/131.

Begimbetova, G. A., Retnawati, H., Triyono, M. B., & Imangalieva, A. D. (2023). Perceived Value of Digital Literacy Skills: Case of Edcrunch Trainees. Journal of Technology and Humanities, 4(2), 24-31. https://doi.org/10.53797/jthkkss.v4i2.3.2023

Brigman, G., Villares, E., Mullis, F., Webb, L. D., & White, J. F. (2021). School counselor consultation: Skills for working effectively with parents, teachers, and other school personnel. John Wiley & Sons.

Collier, P. J. (2023). Developing effective student peer mentoring programs: A practitioner's guide to program design, delivery, evaluation, and training. Taylor & Francis.

Healey, M., & Healey, R. L. (2024). The role of academic developers in initiating, developing, and supporting student-staff partnerships in learning and teaching in higher education: A systematic narrative literature review and a new framework. International Journal for Academic Development, vol(issue), pages. https://doi.org/10.1080/1360144X.2024.2338487.

Kosherbayeva, A. N., Issaliyeva, S., Begimbetova, G. A., Kassymova, G. K., Kosherbayev, R., & Kalimoldayeva, A. K. (2024). An overview study on the educational psychological assessment by measuring students' stress levels. Cakrawala Pendidikan: Jurnal Ilmiah Pendidikan, 43(1), 1-18. DOI: https://doi.org/10.21831/cp.v43i1.66276

Kosherbayeva, A., Issaliyeva, S., Kassymova, G., Kosherbayev, R., & Begimbetova, G. (2023). ASSESSING EDUCATIONAL ENVIRONMENTS USING SACERS INTERNATIONAL SCALES: A BIBLIOMETRIC PERSPECTIVE. Pedagogy and Psychology, 56(3), 107-115. DOI: 10.51889/2960-649.2023.15.3.012

Kutasi, R. (2023). Feedback: Unveiling its impact and enhancing its effectiveness in education. Journal of Pedagogy - Revista de Pedagogie. https://doi.org/10.26755/revped/2023.2/7

Lance, A. L.(2023). Reimagining Parent-Teacher Relationships Through Human Centered Design. (Doctoral dissertation). Retrieved from https://scholarcommons.sc.edu/etd/7638

Markey, K., O'Brien, B., Kouta, C., Okantey, C., & O'Donnell, C. (2021). Embracing classroom cultural diversity: Innovations for nurturing inclusive intercultural learning and culturally responsive teaching. Teaching and Learning in Nursing, 16(3), 258-262. https://doi.org/10.1016/j.teln.2021.04.00

Milton, A. C., Mengesha, Z., Ballesteros, K., McClean, T., Hartog, S., Bray-Rudkin, L., ... & Hickie, I. (2023). Supporting children's social connection and well-being in school-age care: mixed methods evaluation of the connect, promote, and protect program. JMIR Pediatrics and Parenting, 6(1), e44928. https://preprints.jmir.org/preprint/44928

Montero, J.-M., Fernández Avilés, G., Skakova, A., & Tukenova, L. (2015). Parental role of children's education in Kazakhstan. International Journal of Humanities and Social Science, 5(2), 169-179.

Robinson, L.R., Leeb, R.T., Merrick, M.T. et al. Conceptualizing and Measuring Safe, Stable, Nurturing Relationships and Environments in Educational Settings. J Child Fam Stud 25, 1488–1504 (2016). https://doi.org/10.1007/s10826-015-0332-2

Sianturi, M., Lee, J. S., & Cumming, T. M. (2023). Shifting the belief of the "hard-to-reach parents" to "reachable parents": Parent-teacher collaboration within schools in a post-colonial country. International Journal of Intercultural Relations, 97, 101892.

Waasdorp, T. E., Bradshaw, C. P., & Leaf, P. J. (2012). The impact of schoolwide positive behavioral interventions and supports on bullying and peer rejection: a randomized controlled effectiveness trial. Archives of pediatrics & adolescent medicine, 166(2), 149–156. https://doi.org/10.1001/archpediatrics.2011.755

Zhang, X., & Jiang, L. (2024). Enhancing dual language learners' language learning through parent–teacher partnerships. Language Teaching Research, 0(0). https://doi.org/10.1177/13621688241236286

Мемлекет басшысы Қасым-Жомарт Тоқаевтың "Білім және ғылым" атты тамыз конференциясының пленарлық отырысында сөйлеген сөзі. https://www.akorda.kz/kz/speeches/internal_political_affairs/in_speeches_and_addresses/memleket-basshysy-kasym-zhomart-tokaevtyn-bilim-jne-ylym-atty-tamyz-konferenciyasynyn-plenarlyk-otyrysynda-soilegen-sozi

References

Ashfaq, O., Sami, A., & Yousaf, H. (2024). Parent-Teacher Collaboration and its Effect on Student's Achievement at Pre-School Level. Pakistan Social Sciences Review, 8(2), 386–399. https://doi.org/10.35484/pssr.2024(8-II)32

Bakhtawar Siddique, Dr. Waleed Khan, and Dr Umara Rauf. 2024. "Understanding and Addressing Bullying Behavior in Children". Al Manhal Research Journal 4 (2). https://almanhal.org.pk/ojs3303/index.php/journal/article/view/131.

Begimbetova, G. A., Retnawati, H., Triyono, M. B., & Imangalieva, A. D. (2023). Perceived Value of Digital Literacy Skills: Case of Edcrunch Trainees. Journal of Technology and Humanities, 4(2), 24-31. https://doi.org/10.53797/jthkkss.v4i2.3.2023

Brigman, G., Villares, E., Mullis, F., Webb, L. D., & White, J. F. (2021). School counselor consultation: Skills for working effectively with parents, teachers, and other school personnel. John Wiley & Sons.

Collier, P. J. (2023). Developing effective student peer mentoring programs: A practitioner's guide to program design, delivery, evaluation, and training. Taylor & Francis.

Healey, M., & Healey, R. L. (2024). The role of academic developers in initiating, developing, and supporting student-staff partnerships in learning and teaching in higher education: A systematic narrative literature review and a new framework. International Journal for Academic Development, vol(issue), pages. https://doi.org/10.1080/1360144X.2024.2338487.

Kosherbayeva, A. N., Issaliyeva, S., Begimbetova, G. A., Kassymova, G. K., Kosherbayev, R., & Kalimoldayeva, A. K. (2024). An overview study on the educational psychological assessment by measuring students' stress levels. Cakrawala Pendidikan: Jurnal Ilmiah Pendidikan, 43(1), 1-18. DOI: https://doi.org/10.21831/cp.v43i1.66276

Kosherbayeva, A., Issaliyeva, S., Kassymova, G., Kosherbayev, R., & Begimbetova, G. (2023). ASSESSING EDUCATIONAL ENVIRONMENTS USING SACERS INTERNATIONAL SCALES: A BIBLIOMETRIC PERSPECTIVE. Pedagogy and Psychology, 56(3), 107-115. DOI: 10.51889/2960-649.2023.15.3.012

Kutasi, R. (2023). Feedback: Unveiling its impact and enhancing its effectiveness in education. Journal of Pedagogy - Revista de Pedagogie. https://doi.org/10.26755/revped/2023.2/7

Lance, A. L. (2023). Reimagining Parent-Teacher Relationships Through Human Centered Design. (Doctoral dissertation). Retrieved from https://scholarcommons.sc.edu/etd/7638

Markey, K., O'Brien, B., Kouta, C., Okantey, C., & O'Donnell, C. (2021). Embracing classroom cultural diversity: Innovations for nurturing inclusive intercultural learning and culturally responsive teaching. Teaching and Learning in Nursing, 16(3), 258-262. https://doi.org/10.1016/j.teln.2021.04.00

Milton, A. C., Mengesha, Z., Ballesteros, K., McClean, T., Hartog, S., Bray-Rudkin, L., ... & Hickie, I. (2023). Supporting children's social connection and well-being in school-age care: mixed methods evaluation of the connect, promote, and protect program. JMIR Pediatrics and Parenting, 6(1), e44928. https://preprints.jmir.org/preprint/44928

Montero, J.-M., Fernández Avilés, G., Skakova, A., & Tukenova, L. (2015). Parental role of children's education in Kazakhstan. International Journal of Humanities and Social Science, 5(2), 169-179.

Robinson, L.R., Leeb, R.T., Merrick, M.T. et al. Conceptualizing and Measuring Safe, Stable, Nurturing Relationships and Environments in Educational Settings. J Child Fam Stud **25**, 1488–1504 (2016). https://doi.org/10.1007/s10826-015-0332-2

Sianturi, M., Lee, J. S., & Cumming, T. M. (2023). Shifting the belief of the "hard-to-reach parents" to "reachable parents": Parent-teacher collaboration within schools in a post-colonial country. International Journal of Intercultural Relations, 97, 101892.

Waasdorp, T. E., Bradshaw, C. P., & Leaf, P. J. (2012). The impact of schoolwide positive behavioral interventions and supports on bullying and peer rejection: a randomized controlled effectiveness trial. Archives of pediatrics & adolescent medicine, 166(2), 149–156. https://doi.org/10.1001/archpediatrics.2011.755

Zhang, X., & Jiang, L. (2024). Enhancing dual language learners' language learning through parent–teacher partnerships. Language Teaching Research, 0(0). https://doi.org/10.1177/13621688241236286

Memleket basshysy Қasym-Zhomart Toқaevtyң "Bilim zhәne ғylym" atty tamyz konferentsiyasynyң plenarlyk otyrysynda söilegen sөzi [Speech by the Head of State Kassym-Jomart Tokayev at the plenary session of the August conference "Education and Science"]. (n.d.). Retrieved from https://www.akorda.kz/kz/speeches/internal_political_affairs/in_speeches_and_addresses/memleket-basshysy-kasym-zhomart-tokaevtyn-bilim-jne-ylym-atty-tamyz-konferenciyasynyn-plenarlyk-otyrysynda-soilegen-sozi [in Kazakh]

YU.B. IMINOVA[1]*, R.K. BEKMAGAMBETOVA[1]

[1]*Abai Kazakh National Pedagogical University (Almaty, Kazakhstan)*
**e-mail: iminova.yulduza@mail.ru*

ACTUAL PROBLEMS OF DEVELOPING SAFE BEHAVIOR SKILLS IN CHILDREN OF THE SENIOR PRESCHOOL GROUP

Abstract

In the article, the authors consider the problems that hinder the development of safe behavior skills of children of the senior preschool group. A literary review of the works of foreign and Kazakhstani teachers and scientists on the safe behavior of older preschool children is made. The definitions of "safety" and "safe behavior" are analyzed. The current state of work on the development of safe behavior skills in a preschool organization, at home, on the street is studied; the characteristic of behavioral reactions of senior preschool children is given; the normative legal documents, the State mandatory standard of preschool education and training of the Republic of Kazakhstan and the Standard curriculum of preschool education and training of the Republic of Kazakhstan in the educational direction "Formation of socio-emotional skills" are analyzed. The purpose of the study is to identify current problems that hinder the development of safe behavior skills in children of the senior preschool group. The authors analyzed the types of child safety (social, physical and psychological, information, transport, educational, environmental, medical, legal and others), which are currently debatable. Based on the analysis of psychological and pedagogical literature, the current problems of ensuring and threatening the safety of children at home, on the street, in a preschool organization are identified. The ways of solving the problems reflected in foreign and Kazakhstani studies on ensuring the safety of older preschool children are considered. In the perspective of our research, determining the effectiveness of "playful learning" in the development of safe behavior skills and its implementation in the educational process of a preschool organization.

Keywords: preschool age; safe behavior; health; educational process; social safety; physical safety; psychological safety.

Introduction. Today there is a necessary amount of literature, methodological recommendations devoted to the problems of children's safety. This indicates that this direction is relevant for modern society, but at the same time there are certain difficulties in its solution.

Safe childhood and the creation of conditions for children to live life to the fullest are defined by the state as priority areas of national policy.

The Constitution of the Republic of Kazakhstan states that human rights and freedoms are recognized as the highest values in the country, marriage and family, motherhood and childhood are protected by the state, taking care of children and their upbringing is the right and duty of parents. It is these constitutional norms that underlie the ratification of the Convention on the Rights of the Child of November 20, 1989 by the Republic of Kazakhstan (O ratifikacii, 1994).

In accordance with the Constitution and the requirements of the Convention, a whole set of laws was adopted, the main scope of which was the rights and interests of children. These are the laws of the Republic of Kazakhstan "On the Rights of the Child in the Republic of Kazakhstan" (Zakon RK, 2002), "On Marriage and family", "On family-type children's villages and youth homes" (Zakon RK, 2000), "On Amendments and additions to some legislative acts of the Republic of Kazakhstan on ensuring rights women and Child Safety" (Zakon RK, 2024) and others. It is in them that the principle of the best protection of children's rights is enshrined, the need for its priority consideration in activities related to children.

Thus, the Law of the Republic of Kazakhstan "On Education" (Zakon RK, 2007) states that in educational institutions it is important to ensure the implementation of all necessary measures to prevent diseases, promote health, physical improvement, and the formation of a healthy lifestyle of pupils. In the State Mandatory Standard of Preschool Education and Training of the Republic of Kazakhstan (approved on August 3, 2022 No. 348) (Gosudarstvennyj obshcheobyazatel'nyj standart, 2022) and the Standard Curriculum of Preschool Education and Training of the Republic of Kazakhstan (approved October 14, 2022, No. 422) (O vnesenii, 2022) the content is aimed at educating a physically healthy child, forming an informed attitude to their health, the basics of a healthy lifestyle, and safe life skills. In the educational direction "Formation of socio-emotional skills", one of the tasks is "... to form elementary skills

for the safety of one's own life: to introduce the rules of safe behavior during games, the use of gaming equipment; with the rules of behavior with strangers. To consolidate children's knowledge of their first name, last name, age, parents' names, to form ideas about the rules of behavior in difficult situations (lost, hurt, hungry, etc.)." Based on the above regulatory documents and the approved Concept for the development of preschool education in the Republic of Kazakhstan for 2023-2029, it is relevant to create an infrastructure that ensures a comfortable and safe stay of the child (Koncepciya razvitiya, 2023).

At the same time, despite a fairly wide number of legal documents in this area, measures to protect children are not always implemented at the proper level. In this regard, there is a question in determining the actual problems that hinder the development of safe behavior skills of children of the senior preschool group.

Materials and methods. Our research is aimed at finding urgent problems that hinder the development of safe behavior skills in children of the senior preschool group. In this section, we have conducted a content analysis of the available research on the above problem. The research included work with the database of the National Library of the Republic of Kazakhstan (Almaty), the Scientific Electronic Library of Dissertations and Abstracts (dissercat), the Scopus database, Google Scholar and others.

During the research and the definition of content analysis, we analyzed regulatory and legal documents in the field of preschool education of the Republic of Kazakhstan, 5 dissertations of candidates of pedagogical sciences (on the topic of the study), foreign studies published in the Scopus database.

The main research methods were content analysis, synthesis, comparison, concretization, induction and deduction, generalization.

The purpose of our study is to identify current problems that hinder the formation of safe behavior skills in children of the senior preschool group.

Research objectives:

- analyze the definitions of "safety", "safe behavior";

- clarify the list of types of child safety and disclose their contents;

- identify problems of ensuring and threats to the safety of children at home, on the street, in a preschool organization.

To solve the first problem, we have analyzed the psychological and pedagogical literature on the research problem. The problem of forming a healthy personality is closely related to ensuring the safety of life. The concept of "Security" is interpreted as a calm situation as a result of the absence of danger in the material, political and economic spheres. This point of view corresponded to the trends in the creation of state systems and management bodies for the welfare of society.

Special attention is paid to the study of the basics of safe behavior in the works of foreign psychologists V.V. Davydov, L.V. Zankov, A.N. Leontiev, S.L. Rubinstein, D.B. Elkonin and others, who highlight the diversity of ideas and approaches to human security problems (Derkunskaya, 2005).

A significant contribution to the study of the human personality experience was made by the research of foreign teachers B.G. Ananyev, K.A. Abulkhanova-Slavskaya, L.I. Bozhovich, L.S. Vygotsky and others, where significant material on the organization and enrichment of both social and personal human experience was collected and accumulated (Abul'hanova-Slavaskaya, 1980).

In the research of foreign research teachers such as N.N. Avdeeva, O.L. Knyazeva, R.B. Sterkina (Avdeeva et al., 2009), K.Y. Belaya, L.P. Anastasova, V.N. Zimonina, G.K. Zaitseva, Kirsty Kawano, Honda C., Naruse T., Tsuchiya-Ito R., Brito R., Dias P. (Brito et al., 2022), Baginsky M., Hickman B., Moriarty J., Manthorpe J. (Baginsky et al., 2020) highlights the issues of instilling basic safety skills in preschool children.

The community of scientists demonstrate an active interest in the problem of ensuring safety, directing attention to the development of theoretical foundations of life safety, such as R.I. Aizman, L.P. Anastasova, E.E. Baryshev; the study of theoretical and practical aspects of teaching children skills to recognize and eliminate dangerous situations are revealed in the research of G.K. Zaitsev, P.F. Kubrushko, L.L. Lashkova and others (Sushkova et al., 2023).

Dissertation studies of Podruchnaya S.N. (Pidruchnaya, 2009), Pelikhova A.V. (Pelihova, 2011), Santaeva T.S. (Santaeva, 2004), Khromtsova T.G. (Hromcova, 2001) are devoted to the issues of safe behavior of preschool children.

In Kazakhstan, the following teachers-scientists N.G. Prikhodko (Prihod'ko, 2006), K. Saudabekov (Saudabekov, 1999), S. Taizhanov, J. Amanzholov, Sh.S. Sultangazieva (Sultangazieva, 2006), E.T. Kurmangalieva and others dealt with the development of safe behavior skills (both preschool and school age). Recently, methodological recommendations developed on the basis of the Institute of Early Childhood Development of the Ministry of Education of the Republic of Kazakhstan have been actively published.

Having analyzed the research of the above-mentioned scientists, teachers and researchers, it can be noted that the main goal of developing the basics of safe behavior is to prepare a person for a safe life in a natural and social environment.

Thus, the concept of "Safety" defines the following key elements:

- the ability of an object, phenomenon, process to preserve its basic characteristic and essence in conditions of purposeful, destructive influence from the outside or in the object, phenomenon, process itself;

- this is a feature of a system built on the principles of determination, self-regulation, integrity;

- one of the defining conditions of the life of an individual, society and the state;

- this is the complete absence of dangers and threats in the material and spiritual space.

The concept of "Fundamentals of safe behavior" should be understood as such stereotypes and actions in a changing environment that would protect the integrity of the individual and the comfort of behavior, prevent physical and mental injuries, and create normal conditions for interaction between people (Levchenko et al., 2019). The formation of a responsible attitude of a person to his safety should take place at all stages of life, while it is necessary to start from preschool age.

To solve the second problem, we have analyzed the types of child safety that are

currently debatable. To this end, we have studied the types of safety reflected in the studies of E.B. Kirichenko, I. A. Baeva, K. Heidelburg, C. Phelps, T.A. Collins, M.V. Khakimova, N.A. Shepilova and others. When determining the types of safety, we faced certain difficulties, due to the fact that there is no single classification. In this regard, this review presents the most common types of safety.

Social safety: in the study by E.B. Kirichenko (Kirichenko, 2013), the social security of children is noted as "the state of protection of an individual, social group, community from threats of violation of their vital interests, rights, freedoms". This implies a state of protection from threats that complicate the process of social formation of children, their preparation for independent life in society.

Physical and psychological safety: in the studies of I. A. Baeva, K. Heidelburg, C. Phelps, T. A. Collins, physical safety is defined as the state of protection of children from threats to their life, health and physical development; psychological safety is defined as the state of protection of children from threats to their psychological well-being (Zadorina, 2022).

Information safety: in the research of M.V. Khakimova and N.A. Shepilova, it was noted that the main threat to the psychological safety of a child is "information that inadequately reflects the world around him, i.e. misleads him". Thus, in the Law of the Republic of Kazakhstan "On the protection of children from information harmful to their health and development", the term "information safety of children" was introduced, which means "ensuring the protection of the rights and legitimate interests of children from information harmful to their health and development" (Zakon RK, 2018).

Transport safety: protection from various threats when using transport infrastructure facilities or vehicles.

Educational safety: protection from various threats in the process of education and training.

Environmental safety: protection from the negative effects of anthropogenic activities and threats of natural and man-made emergencies (Zadorina, 2022).

Medical safety: protection of health and prevention of diseases, including regular medical examinations, vaccinations, compliance with hygiene rules.

Legal safety: ensuring the rights and legitimate interests of children, preventing discrimination against them; as well as promoting the physical, intellectual, spiritual and moral development of children (Law "On the Rights of the Child in the Republic of Kazakhstan" dated August 8, 2002) (Zakon RK, 2002).

Thus, the analysis of psychological and pedagogical literature has shown that the issues of human self-preservation have been studied since ancient times. Since health is an important social indicator of social development, the socio-economic well-being of the country, which is one of the main problems of modern science, since it determines the state of society and the state as a whole. At the same time, it should be noted that this problem is very actively studied in the research of Russian research scientists in the countries of the far and near abroad, whereas in the Republic of Kazakhstan there are practically no accurate and in-depth studies. At the same time, it should be noted that this issue is covered quite often in the normative legal documents of preschool education of the Republic of Kazakhstan, which shows its relevance. The next section presents the current problems of safe behavior of older preschool children.

Results and discussion. In order to solve the third task, the problems of ensuring and threatening the safety of children at home, on the street, in a preschool organization are analyzed and identified.

Thus, modern threats to the safety of children that must be overcome in pre-school education include: an unfavorable environment; psychological discomfort in the family; congenital or acquired mental and physical disorders; difficulties encountered by a child in interacting with peers and adults; insufficient effectiveness of various social and educational practices to ensure the safety of children.

A foreign study by Roscoe Joseph N., Lery Bridgette, Chambers Jaclyn E. identified the following types of threats to child safety: sexual violence; refusal of the guardian to access the child; urgent needs of the child (food, clothing, housing, medical care, supervision); abuse

of psychoactive substances by the guardian (decreased ability to control, protect or take care of the child); physical living conditions of the child; a caregiver threatening to harm the child or take revenge on him; domestic violence; a caregiver who describes a child or acts negatively towards a child; injuries (Roscoe et al., 2018).

Child injury statistics show that more than 70% of injuries are sustained by children at home. The main causes of tragedies are hazards such as fires, poisoning, falling out of windows, drowning, etc.

Based on the above-mentioned threats to the safety of children, we have analyzed the current problems reflected in foreign and Kazakh studies on the safety of older preschool children. The analysis is presented in table 1.

The results of table 1 show that a preschool child, due to his physical and mental characteristics, left unattended for at least a few minutes, can commit or get into a situation that will threaten life and health. The surrounding adults need to pay special attention to the issues of physical, psychological, transport, environmental, social, educational and information security. Since each of the above types of security is characterized by versatility and complexity, becoming relevant especially recently. It is necessary to pay attention to the fact that many parents often violate basic safety rules, showing a low level of conscious compliance with the norms of behavior.

In the studies analyzed above, the following solutions have been identified (according to dissertation research and scientific articles):

Stages of ensuring physical and psychological safety at home: at the first stage - accumulation and systematization of knowledge about the rules of safe living in everyday life (didactic games, viewing photos of their peers while working with everyday objects, reading specially selected works of art); at the second stage - mastering the skills to apply these rules (in gaming activities) (using situational simulation modeling (SIM)); The third stage is the practice of skills in handling accessible potentially dangerous household items (Hromcova, 2001).

Ensuring psychological safety in the educational environment: psychological safety creates conditions for the personal development of the child, the possibility of his self-realization. To create a comfortable, psychologically safe environment in a preschool organization, it is necessary to exclude the possibility of psychological violence against a child by adults and other children, teach children friendly and trusting communication, create conditions for the development of creativity and individuality of each child (Pogodaeva et al., 2014).

Ensuring physical and psychological safety in collaboration with parents on the protection and promotion of children's health: a model of interaction between teachers and parents on the protection and promotion of health, offers the use of both traditional and non-traditional (trainings, family room, picnics, work in clubs) forms of interaction aimed at improving the valeological culture of parents and maintaining a healthy lifestyle life. The complex "Teacher-Child-Parent" can contribute to the successful solution of tasks for the preservation and promotion of children's health (Sultangazieva, 2006).

Ensuring road safety: the model includes the following provisions: the importance of a child's play activity, where play is not only a leading activity, but also a cultural value; the principles of integration, consistency, accessibility, individual approach, integrity, kindergarten-family cooperation; The program "Safety culture according to the rules of the road in kindergarten" is aimed at developing a culture of safe behavior in accordance with the rules of the road and can be used in preschool organizations, primary schools and additional education (Pidruchnaya, 2009).

Ensuring the safety of children in parking lots: 5 types of interventions are offered: individual or small group training, classroom training, computer or virtual reality training, board games or group classes, as well as movies or videos. Individual or group learning strategies are effective because they have been studied for many years and have been described as the most effective child pedestrian safety strategy, targeting children rather than adults or the pedestrian environment. However, such interventions are also very expensive and time-consuming to implement. The appeal of

alternatives such as movies and videos is that once developed, they are easy and inexpensive to widely distribute. Some interventions in the form of peer groups, board games, and computer/virtual realities are effective in individual studies and allow for good results through simulation (Rouse et al., 2019).

Ensuring the safety of children when meeting with stray animals: regulating the number of animals by old totalitarian methods: trapping and euthanizing unclaimed animals; Talking with children about the rules of personal safety with stray animals (dogs, cats); Modeling situations of meeting with stray animals (Zaozerskaya, 2015).

Table 1. *Actual problems of developing safe behavior skills in the research of foreign and Kazakhstani scientists and teachers*

Problem	Researches
Physical and psychological safety	
Ensuring physical and psychological safety at home	The study by T.G. Khromtsova revealed that the result of the study should be the content of knowledge and skills of safe behavior, grouped by types of hazards in everyday life and mastered in a given sequence: cuts; burns, fires and electrical injuries; falls and bruises (Hromcova, 2001).
Ensuring psychological safety in the educational environment	The study by Pogodaeva M.V. notes that when a child enters a preschool organization, serious threats to his psychological safety arise: at the initial stage, there is no system of trust-friendly relations between a child and an adult, a child and other children; the new environment has no reference significance for the child, psychological violence by teachers is possible (Pogodaeva et al., 2014).
Ensuring physical and psychological safety in collaboration with parents on the protection and promotion of children's health	In the study of Sh.S. Sultangazieva, special attention is paid to the interaction of teachers with parents on the protection and promotion of the health of children aged 5-7 years. The researcher identifies 4 groups of parents: parents are aware of the importance of strengthening and maintaining health; parents understand and are aware of responsibility; parents are insufficiently aware of the goals and objectives of consolidating and preserving the health of children in the family, do not feel responsible to society; parents who do not understand and do not want to understand the goals and objectives of strengthening and preserving the health of children in the family are indifferent and negative about the upbringing of a healthy generation (Sultangazieva, 2006).
Transport safety	
Ensuring road safety	In S.N. Pidruchnaya's research, the task is to create the foundations of a culture of safe behavior according to traffic rules among older preschoolers. The author emphasizes that this problem is especially relevant in the last decade due to the increase in the number of cars and the imbalance between an extremely unformed safety culture and the discipline of road users (Pidruchnaya, 2009).
Ensuring the safety of children in parking lots	Rouse J.B., Schwebel David C. studied the behavior of children and their safety risks in parking lots by observing children and adults as they moved from a parked car to a public recreation center (Rouse et al., 2019). As the results of the study showed, 67% of children were unattended by adults (between the parking lot and the entrance to the building); 90% of children at some point were at arm's length from an accompanying adult; more than 50% of the observations of children got out of the car before adults.
Environmental safety	
Ensuring the safety of children when encountering stray animals	The article by E.S. Zaozerskaya notes the following: attacks by stray dogs on people can result in severe bodily injury and even their death; stray animals can be carriers of various infectious diseases; a collision with a dog can be a source of stress for a person, which results in a negative attitude towards animals (Zaozerskaya, 2015).

Ensuring the safety of children during extreme natural conditions	All regions of Kazakhstan are more or less exposed to natural risks. The city of Almaty is characterized by such extreme natural phenomena as earthquake, snowfall, ice, mudflows in mountainous areas, thunderstorms, severe frosts, heavy rains, floods, hurricane winds, and others. In this regard, everyone needs to have a certain amount of information and knowledge about extreme natural phenomena (Levchenko et al., 2019).
Social safety	
Ensuring the social safety of children	In the study of A.V. Pelikhova, a psychological characteristic of a preschooler is given, which differs in such features as susceptibility, trustfulness to surrounding adults and at the same time dependence on them, openness in communication and curiosity, which determine behavior in a dangerous situation and contribute to their vulnerability. The researcher emphasizes that preschoolers often have insufficient readiness for self-preservation behavior, poor development of skills and abilities to analyze the situation, predict the consequences of their actions (Pelihova, 2011).
Educational safety	
Ensuring safety in the conditions of a preschool organization	In the study by T.S. Santayeva, it is noted that the reasons for ignorance of the basics of life safety in a preschool organization are: the lack of necessary knowledge among the vast majority of the staff of a preschool organization; employees do not pay due attention to this issue; high staff turnover, which does not allow for improvement; advanced training in occupational safety and health covers only teachers, mainly from among the administration of a preschool organization, but does not apply to another category of employees (Santaeva, 2004).
Information safety	
Ensuring information safety when using Internet content	Information security of preschoolers implies that there is no risk of harm to the health, mental and spiritual development of children, as well as their moral development. Parents of preschool children often underestimate the threats associated with information that children receive from information sources (P. Dias, R. Brito) (Dias et al., 2021). The facts show (E. Champaoski, V. Quandt) that children's access to digital media should be carried out under parental control and guidance. Accordingly, it can be concluded that the presence of problems determined by parents may be due to the fact that children are not limited in time spent on the Internet, there is no parental control.

Ensuring the safety of children during extreme natural conditions: for better assimilation of the material, organized activities on the basics of safe behavior should use the following methods and techniques: analysis and discussion of the situation; educational training; interactive technologies; creation of posters and comics; mobile and didactic games; conversation; viewing illustrations on the topic; observations; excursions; theatrical performances. The content and forms of work should give the child the opportunity to feel the value of his life, strengthen, protect his health, prepare for clear actions in dangerous situations (Levchenko et al., 2019).

Ensuring the social safety of children: methodological support for pedagogical support of the family in the process of preserving the social safety of a preschool child: taking into account the typology of the family and building on its basis pedagogical measures to ensure the safe development of the child; joint solution of problematic tasks and situations for children and parents; development of socio-psychological qualities in children that contribute to self-preservation behavior. Pedagogical support of the family is implemented through: pedagogical education of parents, informing about the development of a preschool child, the difficulties and prospects of dialogue between the world of childhood and the world of adults; joint project activities in the context of urgent security problems; joint creation of an activity plan with predictable results for each subject (child, parent, teacher); organization of joint activities

of children and parents (holidays, events, joint activities) (Pelihova, 2011).

Ensuring safety in a preschool organization: the concept of life safety in a preschool organization is disclosed, which includes the following aspects: protecting the life and health of children, ensuring safe working conditions for preschoolers. It was determined that the main dangerous places in kindergarten are stairwells, small toys, sports equipment, faulty playgrounds and so on. The necessary pedagogical conditions that ensure the safety of children's life are the creation of a legislative framework; planning of the educational process; the use of interactive means, forms, methods of teaching; taking into account the accessibility of the content of the rules of safety of life; the systematic nature of the provided activities, visual and didactic equipment; the reference of safe behavior of participants in the pedagogical process, etc. (Santaeva, 2004).

Ensuring information safety when using Internet content: Increasing the level of information competence of parents is an effective measure to counter third-party encroachments on the safety of children in the process of using information and communication technologies and the Internet by the latter. That is, by increasing the information competence of parents, thereby ensuring the creation of optimal conditions for the information security of preschoolers. In the field of information security, the family also plays a significant role. It is in the family that children begin to form an initial idea about the computer and the Internet. The information competence of parents determines the way of family life and relations with information and communication resources and is one of the most significant determinants influencing the formation of the foundations of safe behavior of children in the information and communication space (Ivanova et al., 2022).

Thus, the conducted research by foreign and Kazakhstani scientists sets us the task of experimentally verifying previously proposed training options and at the same time searching for effective ways (forms, types of work) to prevent injuries and ensure safe behavior of older preschool children.

Conclusion. After analyzing a significant amount of foreign and domestic scientific literature, we came to the conclusion that the current situation is such that no one can guarantee the safety of a child. Children become not independent, do not show initiative, cannot make their own and correct decisions in various situations, do not know specific safety rules. It is no coincidence that teachers of many preschool organizations are currently trying to find opportunities to work effectively on the "basics of safe behavior of preschoolers". The main purpose of teaching children safe behavior is to give each child an idea of life-threatening situations and appropriate rules of behavior when they occur. After all, safety is not only acquired knowledge, but also the ability to act correctly in various situations. It is important not only to protect the child from danger, but also to prepare for possible difficulties, to instill in him safe behavioral skills.

The analysis of psychological and pedagogical literature has shown that many scientists deal with issues of life safety and identify various ideas and approaches to solving this problem. Based on the best foreign and domestic educational traditions, modern authors of educational programs offer preschoolers a variety of forms and methods of organizing the basics of safe behavior, since safety is not only the sum of acquired knowledge and skills, but also the ability to act correctly in various situations. In addition, children may find themselves in an unpredictable situation in nature, on the street, at home, or in a preschool organization, so the main task of adults is to promote the development of their independence and responsibility. Special attention should be paid to organizing various activities aimed at giving children specific rules of behavior and experience, since what children learn in preschool and at home should be practiced in real life. These knowledge, skills and abilities are formed in the educational process, therefore, teaching children about the safety of their lives is an urgent pedagogical task that requires special attention around the world.

In the perspective of our research, the definition of the effectiveness of "playful learning" in the development of safe behavior skills and its implementation in the educational process of a preschool organization.

References

Baginsky M., Hickman B., Moriarty J., Manthorpe J. (2020). Working with Signs of Safety: Parents' perception of change. Child and Family Social Work, 25 (1), 154-164. Cited 6 times. DOI 10.1111/cfs.12673

Brito R., Dias P. (2022). Pedagogical storytelling material for children regarding online safety: Pilot study in kindergartens. Research Anthology on Early Childhood Development and School Transition in the Digital Era, pp. 404-421. DOI 10.4018/978-1-6684-7468-6.ch020

Dias P., Brito R. (2021). Criteria for selecting apps: Debating the perceptions of young children, parents and industry stakeholders. Computers & Education, vol. 165, 104-134, doi: https://doi.org/10.1016/j.compedu.2021.104134

Roscoe Joseph N., Lery Bridgette, Chambers Jaclyn E. (2018). Understanding child protection decisions involving parents with mental illness and substance abuse. Child Abuse & Neglect. № 81. P. 235-248. DOI: 10.1016/j.chiabu.2018.05.005

Rouse Jenni B., Schwebel David C. (2019). Supervision of young children in parking lots: Impact on child pedestrian safety. Journal of Safety Research. № 70, 201-206. DOI: 10.1016/j.jsr.2019.07.006

Абульханова-Славаская К.А. (1980). Деятельность и психология личности. М.: Наука,1980, 335. http://elib.wku.edu.kz/lib/document/FOND/802464FA-CA5C-49D1-9AF1-BE9C82AE2D63/

Авдеева Н.Н., Князева О.Л, Стеркина Р.Б. (2009). Безопасность: Учебное пособие по основам безопасности жизнедеятельности детей старшего дошкольного возраста. СПб: «ДЕТСТВО-ПРЕСС», 144. http://ds59.seversk.ru/wp-content/uploads/2017/08/programma-Bezopasnost.pdf

Государственный общеобязательный стандарт дошкольного воспитания и обучения Приказ Министра просвещения Республики Казахстан от 3 августа 2022 года №348 (2022). Астана: Акорда. http://irrd.kz/sites/irrd.kz/uploads/docs/PRIKAZY/GOS_DVO_030822_348_rus.pdf

Деркунская В.А. (2005). Диагностика культуры здоровья дошкольников: Учебное пособие. М.: Педагогическое общество России, 96. https://www.libex.ru/detail/book874891.html

Задорина М.А. (2022). Безопасность детей и ее место в системе обеспечения национальной безопасности. Национальная безопасность / nota bene. № 6. DOI: 10.7256/2454-0668.2022.6.39431 EDN: ZSCOJC URL: https://nbpublish.com/library_read_article.php?id=39431

Закон РК «О внесении изменений и дополнений в некоторые законодательные акты Республики Казахстан по вопросам обеспечения прав женщин и безопасности детей» от 15 апреля 2024 года № 72-VIII ЗРК (2024). Астана: Акорда. https://adilet.zan.kz/rus/docs/Z2400000072

Закон РК «О детских деревнях семейного типа и домах юношества» от 13 декабря 2000 года № 113-II (2000). (с изменениями и дополнениями по состоянию на 01.05.2023 г.). Астана: Акорда. https://online.zakon.kz/Document/?doc_id=1020941

Закон РК «О защите детей от информации, причиняющей вред их здоровью и развитию» от 2 июля 2018 года № 169-VI ЗРК (2018). Астана: Акорда. https://adilet.zan.kz/rus/docs/Z1800000169

Закон РК «О правах ребенка в Республике Казахстан» от 8 августа 2002 года № 345-II (2002). (с изменениями и дополнениями по состоянию на 20.08.2024г.). Астана: Акорда. https://online.zakon.kz/Document/?doc_id=1032460

Закон РК «Об образовании» утв. 27.07.2007 (2007). (с изменениями и дополнениями по состоянию на 01.04.2023г.).Астана: Акорда. https://online.zakon.kz/Document/?doc_id=30118747#pos=4;-153

Заозерская Е.С. (2015). Проблема сосуществования человека и бездомных животных. https://narfu.ru/university/library/books/2112.pdf

Иванова И.Ю., Евтушенко И.Н., Быстрай Е.Б., Артеменко Б.А., Беломестнова М.Е. (2022). Анализ проблемы информационной безопасности детей дошкольного возраста в семье. Вестник Мининского университета. №4 (41). https://cyberleninka.ru/article/n/analiz-problemy-informatsionnoy-bezopasnosti-detey-doshkolnogo-vozrasta-v-semie

Кириченко Е.Б. (2013). Социальная безопасность детей-сирот как педагогическая проблема. Ярославский педагогический вестник. Т.2. №2, 23-26. https://cyberleninka.ru/article/n/sotsialnaya-bezopasnost-detey-sirot-kak-pedagogicheskaya-problema

Концепция развития дошкольного, среднего, технического и профессионального образования Республики Казахстан на 2023 – 2029 годы. Постановление Правительства Республики Казахстан от 28 марта 2023 года № 249 (2023). Астана: Акорда. https://adilet.zan.kz/rus/docs/P2300000249

Левченко Т.А., Иминова Ю.Б. (2019). Формирование у детей 5-6 лет навыков правильного поведения в экстремальных ситуациях. Вестник Казахского национального женского педагогического университета. 2019; (1):232-237. https://vestnik.kazmkpu.kz/jour/article/view/151?locale=ru_RU

Мочалова И.В. (2018). Формирование у детей дошкольного возраста представлений об основных источниках опасности в быту, на улице, в природе. Молодой ученый. № 49 (235), 286-288. https://moluch.ru/archive/235/54484/

О внесении изменения в приказ исполняющего обязанности Министра образования и науки Республики Казахстан от 12 августа 2016 года № 499 «Об утверждении Типовых учебных программ дошкольного воспитания и обучения». Приказ Министра просвещения Республики Казахстан от 14 октября 2022 года №422 (2022). Астана: Акорда. http://irrd.kz/sites/irrd.kz/uploads/docs/PRIKAZY/2022/ru_26102022.pdf

О ратификации Конвенции о правах ребенка (1994). Постановление Верховного Совета Республики Казахстан от 8 июня 1994 года. https://adilet.zan.kz/rus/docs/B940001400_

Пелихова А.В. (2011). Педагогическое сопровождение семьи в обеспечении социальной безопасности ребенка дошкольного возраста Дис.канд.п.н., Челябинск, 196. 13.00.02. https://www.dissercat.com/content/pedagogicheskoe-soprovozhdenie-semi-v-obespechenii-sotsialnoi-bezopasnosti-rebenka-doshkolno

Пидручная С.Н. (2009). Формирование основ культуры безопасности по Правилам дорожного движения у детей старшего дошкольного возраста Дис.канд.п.н., Москва, 156. 13.00.07. https://www.dissercat.com/content/formirovanie-osnov-kultury-bezopasnosti-po-pravilam-dorozhnogo-dvizheniya-u-detei-starshego-

Погодаева М.В., Норкина О.В. (2014). Психологическая безопасность как фактор адаптации ребенка в дошкольном учреждении. Вестник ТГПУ. №6 (147). https://cyberleninka.ru/article/n/psihologicheskaya-bezopasnost-kak-faktor-adaptatsii-rebenka-v-doshkolnom-uchrezhdenii

Приходько Н.Г. (2006). Безопасность жизнедеятельности: курс лекций. - Алматы, 366

Сантаева Т.С. (2004). Педагогическое обеспечение безопасности жизнедеятельности детей в дошкольном образовательном учреждении Дис.канд.п.н., Якутск, 199. 13.00.01. https://www.dissercat.com/content/pedagogicheskoe-obespechenie-bezopasnosti-zhiznedeyatelnosti-detei-v-doshkolnom-obrazovateln

Саудабеков К. (1999). Безопасность жизнедеятельности и формирование здорового образа жизни: учебное пособие. Алматы, 240.

Солдатова Г.У., Теславская О.И. (2019). Особенности использования цифровых технологий в семьях с детьми дошкольного и младшего школьного возраста. Национальный психологический журнал. №4 (36). https://cyberleninka.ru/article/n/osobennosti-ispolzovaniya-tsifrovyh-tehnologiy-v-semyah-s-detmi-doshkolnogo-i-mladshego-shkolnogo-vozrasta

Султангазиева Ш.С. (2006). Взаимодействие педагогов с родителями по охране и укреплению здоровья детей 5-7 лет: Автореф. дисс. канд. пед. наук. – Тараз.

Сушкова И.В., Красова Т.Д., Чуйкова Ж.В., Емельянова И.Д. (2023). Опасности для детей в современном мире: опрос педагогов и родителей. Перспективы науки и образования. № 2 (62), 23-49. doi: 10.32744/pse.2023.2.2

Хромцова Т.Г. (2001). Формирование опыта безопасного поведения в быту детей среднего дошкольного возраста Дис.канд.п.н., Санкт-Петербург, 175. 13.00.07. https://www.dissercat.com/content/formirovanie-opyta-bezopasnogo-povedeniya-v-bytu-detei-srednego-doshkolnogo-vozrasta

References

Baginsky M., Hickman B., Moriarty J., Manthorpe J. (2020). Working with Signs of Safety: Parents' perception of change. Child and Family Social Work, 25 (1), 154-164. Cited 6 times. DOI 10.1111/cfs.12673

Brito R., Dias P. (2022). Pedagogical storytelling material for children regarding online safety: Pilot study in kindergartens. Research Anthology on Early Childhood Development and School Transition in the Digital Era, pp. 404-421. DOI 10.4018/978-1-6684-7468-6.ch020

Dias P., Brito R. (2021). Criteria for selecting apps: Debating the perceptions of young children, parents and industry stakeholders. Computers & Education, vol. 165, 104-134, doi: https://doi.org/10.1016/j.compedu.2021.104134

Roscoe Joseph N., Lery Bridgette, Chambers Jaclyn E. (2018). Understanding child protection decisions involving parents with mental illness and substance abuse. Child Abuse & Neglect. № 81. P. 235-248. DOI: 10.1016/j.chiabu.2018.05.005

Rouse Jenni B., Schwebel David C. (2019). Supervision of young children in parking lots: Impact on child pedestrian safety. Journal of Safety Research. № 70, 201-206. DOI: 10.1016/j.jsr.2019.07.006

Abul'khanova-Slavaskaya, K.A. (1980). Deyatel'nost' i psikhologiya lichnosti [Activity and personality psychology]. Moscow: Nauka. [in Russian]

Avdeyeva, N.N., Knyazeva, O.L, & Sterkina, R.B. (2009). Bezopasnost': Uchebnoye posobiye po osnovam bezopasnosti zhiznedeyatel'nosti detey starshego doshkol'nogo vozrasta [Safety: A textbook on the basics of life safety for older preschool children]. Saint Petersburg: "DETSTVO-PRESS". [in Russian]

Gosudarstvennyy obshcheobyazatel'nyy standart doshkol'nogo vospitaniya i obucheniya [State mandatory standard for preschool education and training]. (2022). Order of the Minister of Education of the Republic of Kazakhstan No. 348. Astana: Akorda. [in Russian]

Derkunskaya, V.A. (2005). Diagnostika kul'tury zdorov'ya doshkol'nikov: Uchebnoye posobiye [Diagnostics of preschoolers' health culture: A textbook]. Moscow: Pedagogicheskoye obshchestvo Rossii. [in Russian]

Zadorina, M.A. (2022). Bezopasnost' detey i yeye mesto v sisteme obespecheniya natsional'noy bezopasnosti [Children's safety and its place in the national security system]. Natsional'naya bezopasnost' / nota bene, (6). [in Russian]

Zakon RK "O vnesenii izmeneniy i dopolneniy v nekotoryye zakonodatel'nyye akty Respubliki Kazakhstan po voprosam obespecheniya prav zhenshchin i bezopasnosti detey" [Law of the Republic of Kazakhstan "On amendments and additions to some legislative acts of the Republic of Kazakhstan on ensuring women's rights and children's safety"]. (2024). Astana: Akorda. [in Russian]

Zakon RK "O detskikh derevnyakh semeynogo tipa i domakh yunoshestva" [Law of the Republic of Kazakhstan "On family-type children's villages and youth homes"]. (2000). Astana: Akorda. [in Russian]

Zakon RK "O zashchite detey ot informatsii, prichinyayushchey vred ikh zdorov'yu i razvitiyu" [Law of the Republic of Kazakhstan "On protecting children from information harmful to their health and development"]. (2018). Astana: Akorda. [in Russian]

Zakon RK "O pravakh rebenka v Respublike Kazakhstan" [Law of the Republic of Kazakhstan "On the rights of the child in the Republic of Kazakhstan"]. (2002). Astana: Akorda. [in Russian]

Zakon RK "Ob obrazovanii" [Law of the Republic of Kazakhstan "On education"]. (2007). Astana: Akorda. [in Russian]

Zaozerskaya, E.S. (2015). Problema sosushchestvovaniya cheloveka i bezdomnykh zhivotnykh [The problem of coexistence of humans and homeless animals]. [in Russian]

Ivanova, I.Yu., Yevtushenko, I.N., Bystray, E.B., Artemenko, B.A., & Belomestnova, M.E. (2022). Analiz problemy informatsionnoy bezopasnosti detey doshkol'nogo vozrasta v sem'ye [Analysis of the problem of information security of preschool children in the family]. Vestnik Mininskogo universiteta, (4). [in Russian]

Kirichenko, E.B. (2013). Sotsial'naya bezopasnost' detey-sirot kak pedagogicheskaya problema [Social security of orphans as a pedagogical problem]. Yaroslavskiy pedagogicheskiy vestnik, 2(2), 23-26. [in Russian]

Kontseptsiya razvitiya doshkol'nogo, srednego, tekhnicheskogo i professional'nogo obrazovaniya Respubliki Kazakhstan na 2023 – 2029 gody [Concept for the development of preschool, secondary, technical and vocational education in the Republic of Kazakhstan for 2023-2029]. (2023). Astana: Akorda. [in Russian]

Levchenko, T.A., & Iminova, Yu.B. (2019). Formirovaniye u detey 5-6 let navykov pravil'nogo povedeniya v ekstremal'nykh situatsiyakh [Formation of correct behavior skills in extreme situations in 5-6 year old children]. Vestnik Kazakhskogo natsional'nogo zhenskogo pedagogicheskogo universiteta, (1), 232-237. [in Russian]

Mochalova, I.V. (2018). Formirovaniye u detey doshkol'nogo vozrasta predstavleniy ob osnovnykh istochnikakh opasnosti v bytu, na ulitse, v prirode [Formation of preschool children's ideas about the main sources of danger in everyday life, on the street, in nature]. Molodoy uchenyy, 49(235), 286-288. [in Russian]

O vnesenii izmeneniya v prikaz ispolnyayushchego obyazannosti Ministra obrazovaniya i nauki Respubliki Kazakhstan ot 12 avgusta 2016 goda № 499 "Ob utverzhdenii Tipovykh uchebnykh programm doshkol'nogo vospitaniya i obucheniya" [On amendments to the order of the Acting Minister of Education and Science of the Republic of Kazakhstan dated August 12, 2016 No. 499 "On approval of Standard curricula for preschool education and training"]. (2022). Order of the Minister of Education of the Republic of Kazakhstan No. 422. Astana: Akorda. [in Russian]

O ratifikatsii Konventsii o pravakh rebenka [On ratification of the Convention on the Rights of the Child]. (1994). Resolution of the Supreme Council of the Republic of Kazakhstan. [in Russian]

Pelikhova, A.V. (2011). Pedagogicheskoye soprovozhdeniye sem'i v obespechenii sotsial'noy bezopasnosti rebenka doshkol'nogo vozrasta [Pedagogical support of the family in ensuring the social security of a preschool child] (Doctoral dissertation). Chelyabinsk. [in Russian]

Pidruchnaya, S.N. (2009). Formirovaniye osnov kul'tury bezopasnosti po Pravilam dorozhnogo dvizheniya u detey starshego doshkol'nogo vozrasta [Formation of the basics of safety culture according to Traffic Rules in older preschool children] (Doctoral dissertation). Moscow. [in Russian]

Pogodayeva, M.V., & Norkina, O.V. (2014). Psikhologicheskaya bezopasnost' kak faktor adaptatsii rebenka v doshkol'nom uchrezhdenii [Psychological safety as a factor of child adaptation in a preschool institution]. Vestnik TGPU, (6). [in Russian]

Prikhod'ko, N.G. (2006). Bezopasnost' zhiznedeyatel'nosti: kurs lektsiy [Life safety: a course of lectures]. Almaty. [in Russian]

Santayeva, T.S. (2004). Pedagogicheskoye obespecheniye bezopasnosti zhiznedeyatel'nosti detey v doshkol'nom obrazovatel'nom uchrezhdenii [Pedagogical support of children's life safety in a preschool educational institution] (Doctoral dissertation). Yakutsk. [in Russian]

Saudabekov, K. (1999). Bezopasnost' zhiznedeyatel'nosti i formirovaniye zdorovogo obraza zhizni: uchebnoye posobiye [Life safety and formation of a healthy lifestyle: a textbook]. Almaty. [in Russian]

Soldatova, G.U., & Teslavskaya, O.I. (2019). Osobennosti ispol'zovaniya tsifrovykh tekhnologiy v sem'yakh s det'mi doshkol'nogo i mladshego shkol'nogo vozrasta [Features of the use of digital technologies in families with preschool and primary school children]. Natsional'nyy psikhologicheskiy zhurnal, (4). [in Russian]

Sultangaziyeva, Sh.S. (2006). Vzaimodeystviye pedagogov s roditelyami po okhrane i ukrepleniyu zdorov'ya detey 5-7 let [Interaction of teachers with parents on the protection and promotion of health of children 5-7 years old] (Abstract of doctoral dissertation). Taraz. [in Russian]

Sushkova, I.V., Krasova, T.D., Chuykova, Zh.V., & Yemel'yanova, I.D. (2023). Opasnosti dlya detey v sovremennom mire: opros pedagogov i roditeley [Dangers for children in the modern world: a survey of teachers and parents]. Perspektivy nauki i obrazovaniya, 2(62), 23-49. [in Russian]

Khromtsova, T.G. (2001). Formirovaniye opyta bezopasnogo povedeniya v bytu detey srednego doshkol'nogo vozrasta [Formation of safe behavior experience in everyday life of middle preschool children] (Doctoral dissertation). Saint Petersburg. [in Russian]

N.B. MYRZALY[1], K.K. MUZDYBAYEVA[1], R.G. RAKHYMZHAN[1],*
B.SH. ABDIMANAPOV[1], G.E. BERDYGULOVA[1]

[1]*Abai Kazakh national pedagogical university (Almaty, Kazakhstan)*
[*]*e-mail: naziramyrzaly@gmail.com*

GEOPOLITICS IN SCHOOL EDUCATION: ASSESSING THE PERCEPTION OF KEY ASPECTS BY SECONDARY SCHOOL STUDENTS IN KAZAKHSTAN

Abstract

This article analyzes the section "Geopolitics" in school geography curricula in Kazakhstan and assesses the level of knowledge and perceptions of secondary school students on this topic. To collect data to determine the degree of assimilation of geopolitical concepts, a survey method was used. The authors set the goal of analyzing the content of educational materials, developing a survey instrument, conducting a survey and analyzing the data obtained to identify the level of knowledge and awareness of students. The study found that most students demonstrate a good understanding of geopolitical concepts and are able to analyze world problems by relating them to geopolitical factors. However, some students have an incomplete understanding of geopolitics, which may be due to lack of clarity in teaching materials or lack of interest. Overall, the authors conclude that the study of geopolitics in the school curriculum contributes to the formation of a deep understanding of global issues and analytical skills of students, but requires additional effort to improve the effectiveness of learning. In addition, the study found that geopolitics receives full coverage in the curriculum for grades 10-11. However, the main question remains how students perceive this concept upon completion of studying the section, how much they understand the essence of world problems and assess current global trends in the field of geopolitics of the world and Kazakhstan.

Keywords: education, school geography course, updated content, geopolitics, curriculum, geopolitical education, knowledge assessment, Kazakhstan.

Introduction. At the present stage of development of society, the need to solve problems related to determining priorities in the foreign and domestic policies of states has increased. Geopolitics plays a major role in resolving such issues. The contribution of geopolitics lies in the geographical interpretation of the political organization of society in geographic space and the development on this basis of a strategy for the territorial development of states (Yelsukov 2001). In other words, geopolitics emerged as a science to define he crucial role of geography in shaping world politics (Cohen 2014). According to research, geopolitics is an intermediate science which does not have independent field of research, where geopolitical phenomena are viewed through the prism of various disciplines and approaches, combining political and geographical aspects, and develops through the integration of theoretical and empirical approaches (Nartov, 1999; Flint, 2021). In recent years research on this topic continues to develop, which is confirmed by a number of scientific works. For example, Topalidis et al., (2024), discuss changes in geopolitical theory, noting that geopolitics must take into account dynamic and complex relationship between geographic, social, economic and technological factors. Koopman et al., (2021) examine how critical geopolitics has developed in response to traditional theories and how it has expanded conceptual and empirical agendas to include new directions. These works highlight the importance of geopolitics as an interdisciplinary science that combines geographical and political phenomena.

Geopolitics as an academic field emerged at the turn of the 19th nd 20th centuries and is currently studied at higher level of education, including universities within the framework of geographical education, international relations and political science. Research shows that global political changes influence higher education, educational programs shape students' geopolitical identities, and education and the sociopolitical environment influence students' perceptions of the world politics (Moscovitz & Sabzalieva, 2023; Muller, 2011; Kolosov & Zotova, 2013). These studies highlight the role of education in creating informed and critically thinking global citizens.

Specialized schools of international relations, world politics and diplomacy have a particularly significant influence on the formation of geopolitical views. These educational institutions, such as Columbia University's School of International and Public Affairs or the Moscow State Institute of International Affairs, provide their students with specialized knowledge and professional skills, opening the way to influential positions in international politics (Muller 2011). Studying geopolitics in school as a compulsory subject or as part of the curriculum is not common practice. However, even if world politics is not part of the formal curriculum, assumptions about the role of the state on the world stage are conveyed through classroom conversations and the use of maps and atlases, and elements of geopolitics can be incorporated into geography and history curricula in countries around the world. Consequently, in some countries, school textbooks are the interface of formal, practical and popular geopolitical discourses and are therefore well suited to uncover geographical ideas that resonate between these three areas (Ide 2016). For example, in the Kazakh education system, taking into account the age characteristics of students and the need to adapt educational materials and teaching methods to their abilities and needs, this area is considered within the framework of geographical education in 10-11 grade programs. In particular, the "Geopolitics" section is being integrated into the curriculum, which contributes to the comprehensive development and understanding of modern geopolitical processes by secondary school students.

According to the curriculum for high school (Kaimuldinova, et al., 2019), the main goal of modern geopolitics in the school course is to define and generalize the geostrategy of the state. The main tasks include studying the mechanisms and forms of control over geospace, determining and forecasting the spatial boundaries of various forces at the global level, geopolitical zoning of the world based on identifying regions of interaction between the

main forces and the development of geopolitical codes for geopolitical actions. The scientific basis of geopolitics is laid in geography, therefore spatial patterns are important for geopolitics: it studies the nature of space and the relationship of forces in it. Accordingly, one of the goals of the geographical program of updated content, compiled on the basis of the approved state standards of compulsory education for all levels of education, adopted in 2018 by the Ministry of Education of the Republic of Kazakhstan, is to "promote the acquisition of knowledge about geographical space aimed at solving geopolitical and global problems".

Based on all of the above, the relevance of studying geopolitics in a school geography course is manifested in several aspects. Firstly, it is an understanding of the world situation, which contributes to civic education and the development of critical thinking among students. Secondly, researchers emphasize that the study of geopolitics contributes to the development of geographic consciousness by helping to understand the influence of geography and location on the politics and economics of different countries and regions. Third, the study of geopolitics helps learners develop civic responsibility, because they begin to understand the importance of world events and their country's role in them. Finally, the study of geopolitics allows to integrate global topics into the educational process, which is important for preparing for life in a global and multicultural society.

The object of the study – school education system in Kazakhstan. The subject – analysis of the perception of key aspects of geopolitics by secondary school students in Kazakhstan. The purpose of the article is to analyze the "Geopolitics" section in the school geography course and, using the survey method, to assess the level of knowledge and perception of key aspects of geopolitics by secondary school students. The tasks assigned to the authors to achieve this goal: analyze the section of geopolitics, develop a survey tool to assess the level of knowledge of learners, use the survey for students in secondary schools in Kazakhstan (Almaty), analyze the data obtained to identify the level of awareness of learners, and formulate conclusions.

Materials and methods. According to the model curriculum [8], the subject "Geography" of high school is focused on creating conditions for students to apply geographic knowledge, skills and abilities aimed at solving geo-ecological, geo-economic, social, geopolitical and global problems that arise at all levels of geographical space:

- the X class program is aimed at developing knowledge about the relevance of geopolitics, the global geopolitical space, geopolitical factors, the morphology of state territory and state borders;

- the XI class program generalizes knowledge of geopolitics and examines the geographical aspects of the most important problems of our time both on a general, global scale and at the regional level, such as the study of modern world geopolitical processes and the study of the geopolitical position of Kazakhstan, its geopolitical security and integration.

As a result, presenting the section "Geopolitics" in textbooks for grades 10-11, they meet the basic requirements for updating the content of school education. In particular, this is a combination of the principle of helicity, gradual complication of the material, and the development of thinking skills according to Bloom's Taxonomy from knowledge and understanding to assessment (Krathwohl 2002).

Method of research. In this work, to analyze the perception of key aspects of geopolitics by secondary school students in Kazakhstan, both quantitative and qualitative methods were used. The quantitative method involved conducting a survey that revealed general trends and patterns in students' knowledge and opinions, as well as gathering statistical data for analysis. Qualitative method included research and analysis of the curriculum, as well as interpretation of survey results, which allowed for a deeper understanding of students' perception and understanding of geopolitical issues.

Research model. This paper used a survey method using Google Forms based on a semi-structured interview. The purpose, tasks, subject, object, categories of geopolitics and the main methods and technologies were analyzed in the study of the section "Geopolitics" in the

school geography textbooks. After an 11-item survey was developed, containing survey types as long answer, a detailed answer, free survey, choice from several options and choice from the grid https://forms.gle/qkX4TG5No2Ti5xBh8.

Participants. The survey was applied to 101 secondary school students of Almaty in grades 10 and 11.

Data collection tools. In general, the questionnaire consisted of 11 questions aimed at comprehensively studying the understanding and application of geopolitical knowledge among respondents. The questions covered several key aspects of geopolitics:

- concepts and application of geopolitics;
- applying geopolitical knowledge to solve world problems;
- factors that determine a country's potential in regional and global level;
- current geopolitical situation around the world;
- key players and conflicts in modern geopolitics;
- territories with geopolitical potential;
- current geopolitical conflicts;
- major geopolitical trends and challenges;
- geopolitical priorities of Kazakhstan;
- relations of Kazakhstan with neighboring countries and its strategic interests.

Data collection process. The survey was developed based on the analysis "Geopolitics" section of school geography textbooks. Then it was submitted to school students by free online tool - Google Forms. Responses were collected over a two-week period.

Data analysis. The survey data were analyzed by processing and interpretation the results obtained. To visualize information, pie charts and bar charts were constructed, which clearly demonstrated students' views about key aspects of geopolitics. This approach helped to identify the main trends in students' perception of geopolitical problems and determine students' views on world geopolitics and the role of Kazakhstan in it.

Results. *1) The concept of "geopolitics" and its connection to geography*

The first question was aimed at identifying how students interpret the concept of "geopolitics", since it is very often subject to misunderstanding and misinterpretation, then to determine its connection with geography. the main thesis put forward by the majority of participants is the definition of geopolitics as the science of control over space. It is important to note that most students also emphasized the importance of physical, economic and political geography in this context. however, some respondents also highlight other more detailed aspects that are related to the study of countries and peoples, government and public activities. While these characteristics may reflect certain aspects of geopolitics, it is important to clarify their relationship to geographic factors. Thus, although there is some diversity in the interpretation of this concept, the majority of respondents understand and emphasize the importance of geographical factors in geopolitics.

2) Appling geopolitical knowledge to solve world problems

As shown in figure 1, on the question of the role and relevance of using knowledge on geopolitics in solving world problems, 61.4% of students noted diplomatic settlement and mediation in international conflicts. This indicates students' high importance and interest in these aspects of geopolitics, which may be due to their importance in ensuring international stability and security. The development of sustainable development strategies ranks second with a share of 24.8%. This is also an important aspect that likely reflects students' interest in issues of sustainable development and the global economy. Development of economic cooperation received a share of 7.9%, which reflects some interest among students in the economic aspects of geopolitics, although it is lower than that of other aspects. Forecasting potential crises has the lowest share – 5.9%. This may indicate that students view this aspect as less significant or complex than other aspects of geopolitics. Overall, the results of this survey item suggest that students pay attention to various aspects of geopolitics, with a particular emphasis on diplomatic conflict resolution and development strategies, while aspects of crisis forecasting and economic cooperation are perceived as less significant.
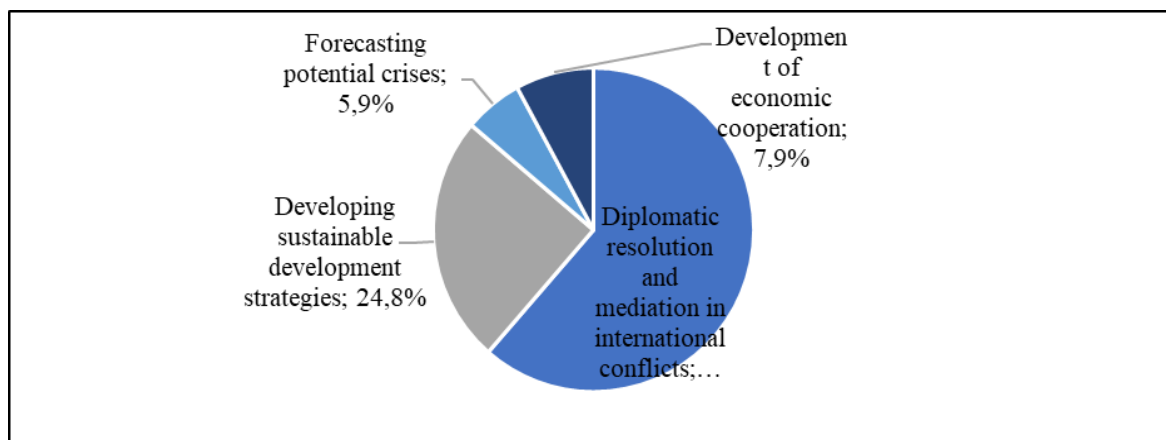
Figure 1: Using knowledge of geopolitics in solving world problems

3) Geopolitical factors that determine the country's potential.

The third point of the survey was aimed at identifying the most (1) and least (7) important factors that determine the country's potential at the regional and global levels. As a result, most students consider the political factor to be the most significant when assessing the geopolitical potential of a country. This may include the stability of the political system, the level of democracy, influence on the international arena, etc. The next most important factor is economic, the potential of which affects the country's capabilities in the international arena, determines its influence on world trade and other aspects. The demographic factor, characterized by the population, its composition, ability to work etc., is also considered important, but somewhat less important than political and economic factors. The social factor, which include sociocultural aspects, education, healthcare etc., was rated by students as less important compared to previous factors. According to the respondents, the military factor is less important compared to other factors, although opinion of students was divided: the majority indicated it in third and sixth places in importance. The role of information factor, which include the media, communication technologies and etc., was rated by respondents as less important. the natural factor is also rated as average on the scale, which indicates that it is perceived as not as decisive as the political or economic components.

Thus, based on the respondents' assessment, political and economic factors are considered the most important in determining the geopolitical potential of countries, and information and social factors are considered as the least significant. The military factor takes an intermediate position, while the natural factor is assessed by students as average in importance among other factors, which allows it to occupy an intermediate position in the context of geopolitical analysis.

4) Evaluation of the current global geopolitical landscape.

According to the survey results (fig. 2), 86% of respondents believe that the world is dominated by a unipolar geopolitical picture, where one superpower or one center which occupies a dominant position in world affairs. However, the remaining 14% of respondents support a multipolar world system, which implies a relative distribution of power between several states or centers of power. Thus, despite the fact that the majority of respondents see the world as unipolar, the question of the nature of the geopolitical map of the world remains a subject of debate among analysts and political observers.

5) Key actors in modern geopolitics of the world

According to the data and analysis of answers (fig. 3), the key participants in modern geopolitics are the United States, China, Russia and the European Union. The US got the highest percentage (90.1%) and, according to the respondents, is considered as a superpower with a leading role in economics, international relations and military power. China, with its booming economy and growing global influence, also got highest percentage (72.3%).

Next is Russia, which is also a significant player due to its military and energy resources and got 56.4% of respondents vote. The EU took the same percentage of responses (56.4%) and demonstrates strong political influence and active development of economic and political ties. Additionally, some respondents note that all these states and associations have equal high potential, and their role in modern geopolitics should be properly assessed.
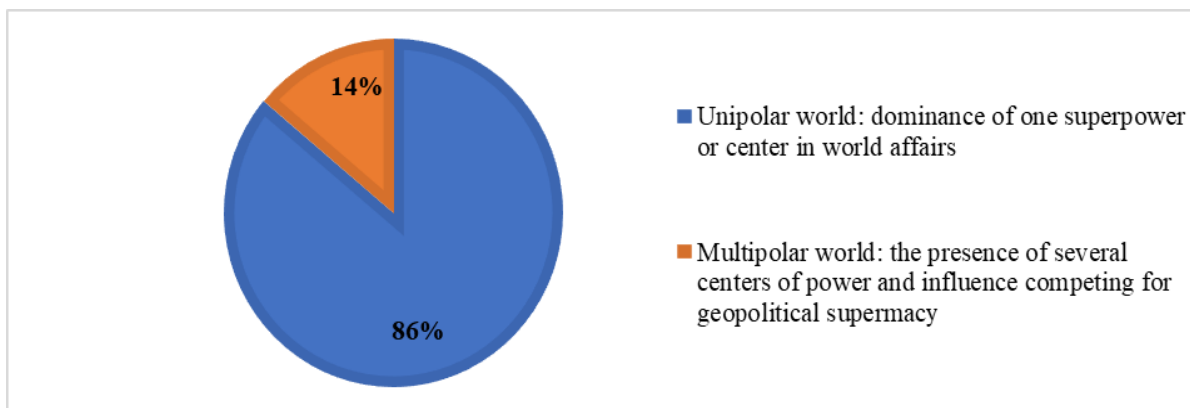
Figure 2: Evaluation of the current global geopolitical landscape
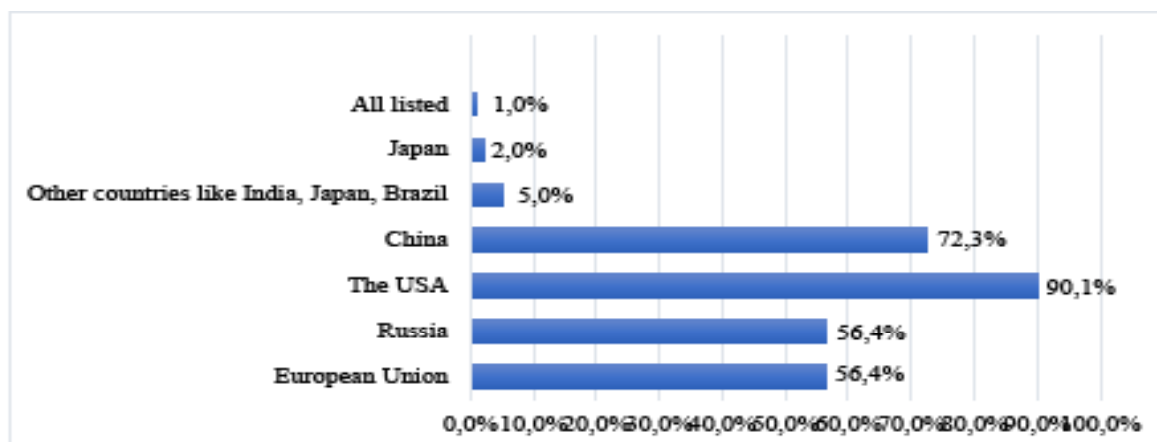
Figure 3: Key actors in modern geopolitics of the world

6) Region with the highest geopolitical potential

The next point of the survey was to determine the territory with the greatest geopolitical potential. As a result, 43% of respondents note the geopolitical space of Asia as the most promising. The analysis shows that Asia plays a key role in modern geopolitics due to its enormous size, cultural diversity, population and economic potential. The region includes important states such as China, India, Japan and others, which have significant influence on world affairs in various aspects including economics, politics and security.

However, it should also be noted that the geopolitical spaces of Europe and America (North and South) retain a significant role in modern geopolitics, although they received a smaller share of responses in this survey.

7) Current geopolitical conflicts

The survey results (fig. 5) indicate that the Russian-Ukraine confrontation and the Israel-Palestine conflict are perceived as the most urgent issues. These conflicts significantly affect international security, economics, and political stability. While some students mentioned other conflicts, the majority of respondents identified these two as the most critical.

It is also impetrations that many participants consider all the listed conflicts to be relevant and note the difficulty of choosing one most significant. This indicates an awareness that each of these conflicts impacts the global political landscape and can have serious consequences.
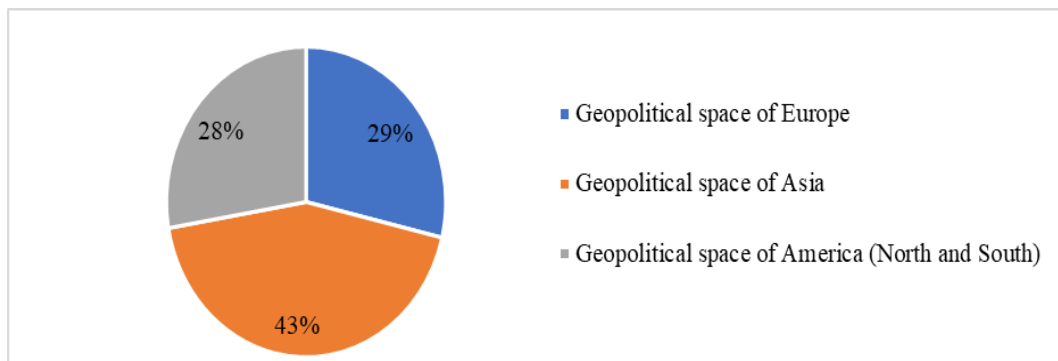
Figure 4: Region with the highest geopolitical potential
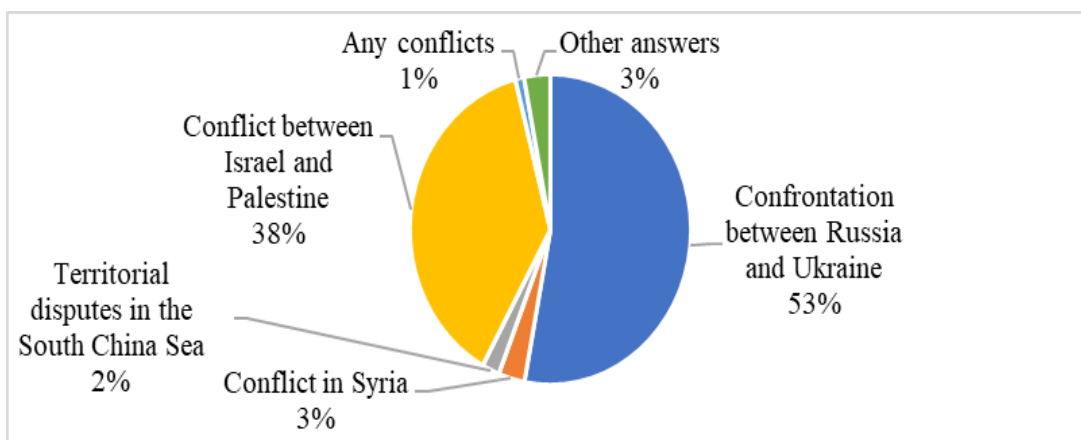
Figure 5: Current geopolitical conflicts

8) Geopolitical trends and challenges

According to the interpretation of the answers, regarding the geopolitical trends and challenges that exist on the modern geopolitical map of the world (fig. 6), the largest percentage of respondents (32.7%) pointed to regional conflicts and security threads, including territorial disputes, terrorism and cyber threats. 17.8% of respondents emphasized the growth of global challenges such as climate change, energy security and their impact on the geopolitical landscape. About 15.8% identified geopolitical competition among the main players in the world politics as a significant issue. This suggest that the most important aspect of modern geopolitics remains competition between major global players such as the USA, Russia, China, the EU and others. 15.8% of respondents noted the expanding influence of new geopolitical players, such as developing countries and regional superpowers. This trend implies a change in the nature of global politics and the growing influence of countries beyond the traditional world leaders. Similarly, 15.8% of respondents expressed concern about violations of international law, aggression and instability in various regions. and only 2% of respondents indicated each of these factors together are decisive and significantly influence the modern geopolitical picture of the world. Thus, these results highlight the diversity and complexity of contemporary geopolitics, reflecting student respondents' perceptions of major trends and issues in the world.

9) Geopolitical priorities of the Republic of Kazakhstan.

The next question was devoted to assessing the geopolitical priorities of Kazakhstan, influencing its foreign policy and strategic decisions. As a result, the most significant priority is the development of peaceful and stable relations with neighboring countries. The next priority area was multifaceted cooperation with international partners and organizations. In the third place in important, according to answers, was attracting investments and technologies for economic development.

Figure 6: Geopolitical trends on the modern political map of the world

No less important is the issue of promoting peace, security and sustainable development in Central Asia. Finally, the relatively least important area, chosen by the smallest number of respondents, was the development of transport and energy infrastructure, with the aim of strengthening regional integration. Thus, from the results of the survey it follows that the main priority areas in the country's foreign policy and in resolving strategic issues are the development of peaceful relations and cooperation with international partners.
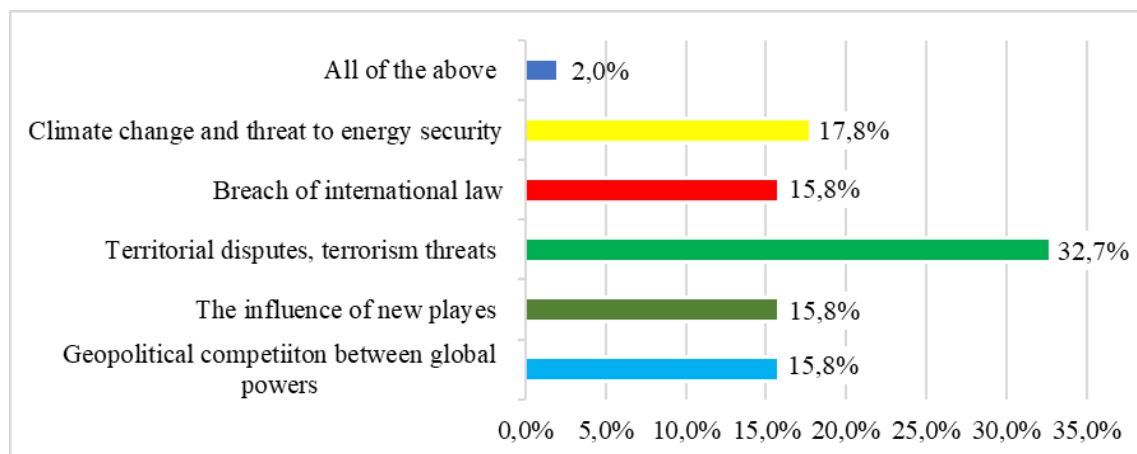
10) Geopolitical aspects that determine Kazakhstan's relations with its neighbors

The results of respondents' answers to questions about the main aspects of geopolitics (fig. 7), which determine the relationship of Kazakhstan with neighboring countries, demonstrate the following percentage indicators. Economic cooperation, including trade, investments and energy projects, occupies a leading position among other aspects, gaining 50.5% of the votes. The next important aspect is political stability, which implies the desire to cooperate in the field of security and work to resolve regional conflicts. This aspect was selected by 16.8% of respondents, which indicates their awareness of the importance of strengthening security and stability for the development and maintenance of peaceful relations. Kazakhstan's role in the regional integration, including participation in multilateral organizations such as the ECO and SCO, was chosen by 11.9% of respondents, indicating a desire for active role in regional

integration and cooperation with partners. Cultural and ethnic ties, which includes the exchange of culture, language and traditions with the people of neighbor countries and implies a desire to deepen cultural understanding and cooperation between countries, was selected by 9.9% of respondents. Geographical competition, which is associated with the desire to maintain a balance of interests and neutrality in relations with Russia and China, was noted by 6.9% of respondents. These results indicate that school students are aware of the need for balance in foreign policy relations to ensure the interests of their country. An integrated approach, combining all of the above aspects, was chosen by 1% of respondents, which indicates an understanding of the importance of all the listed aspects in determining international relations and emphasizes the need for an integrated approach in developing foreign policy strategies.

Overall, the findings indicate the diversity and complexity of factors influencing Kazakhstan's relations with its neighbors and highlight the importance of taking various aspects into account when formulating foreign policy strategies.

11) Factors and strategic interests determining the geopolitical position of Kazakhstan.

Analyzing the answers of respondents (fig. 8) regarding the main factors and strategic interests that determine the geopolitical position of Kazakhstan in the region and the world community, the following percentage indicators can be identified.
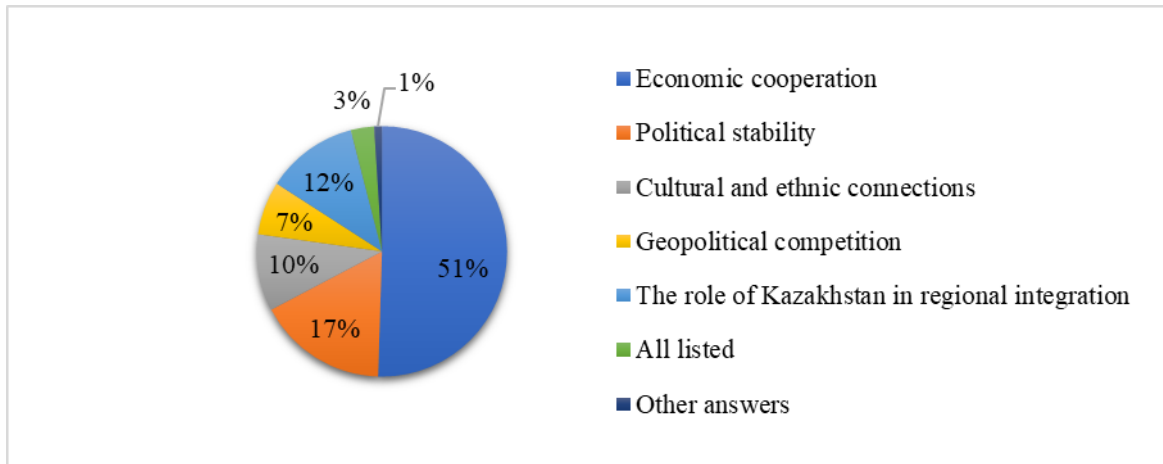
Figure 7: Geopolitical aspects that determine Kazakhstan's relations with its neighbors

Kazakhstan's role as a major energy producer and exporter received 20.8% of respondents' votes, indicating the importance of the energy sector for the country's geopolitical position and its economic development.

Kazakhstan's location at the crossroads of Europe and Asia, as well as its borders with Russia, China and the Central Asian states, was noted by 27.7% of respondents, indicating the strategic importance of Kazakhstan's geographic location for international relations and economic development. The desire for peaceful coexistence and cooperation within the framework of multilateral organizations and initiatives received 22.8% of the votes of respondents, indicating Kazakhstan's desire to actively participate in international cooperation and support of peace initiatives. Kazakhstan's policy of maintaining independence and neutrality in global conflicts and confrontations

was noted by 16.8% of respondents, indicating the country's desire to maintain its independence and avoid participation in geopolitical conflicts. Strategic investments and trading partners aimed at strengthening Kazakhstan's economic position were selected by 7.9% of respondents, indicating the importance of economic development in strengthening the country's geopolitical position. An approach that combines all of the above factors was chosen by only about 2% of respondents, indicating that most respondents pay attention to specific aspects of Kazakhstan's geopolitical position.

Overall, the findings highlight the variety of factors influencing Kazakhstan's geopolitical position and show that the country's strategic interests include both economic and political aspects, as well as its international obligations and desire for peaceful coexistence.
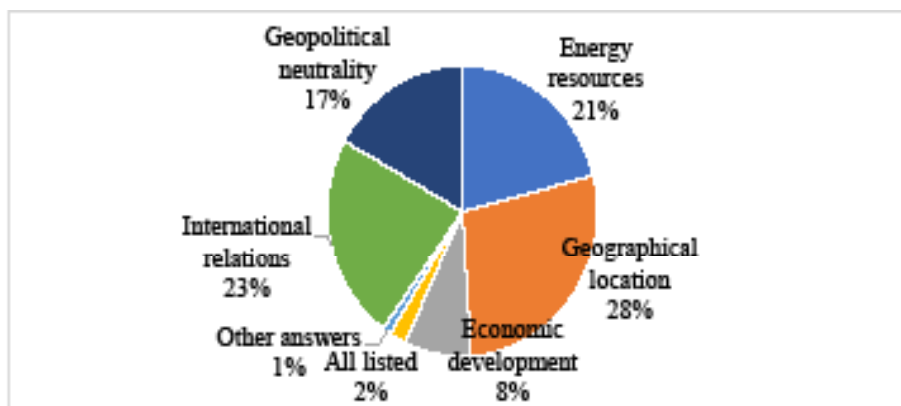
Figure 8: Factors and strategic interests determining the geopolitical position of Kazakhstan

Discussion. In preparing young people for life in a global and multicultural society, the study of geopolitics is important. It encourages students to develop critical thinking, civic responsibility and geographic awareness. Research by Makinen (2014) confirms that teaching geopolitics develops analytical skills among students. The author notes that students acquire the ability to analyze and critically evaluate geopolitical processes, which corresponds to the results of the study. In assessing students' perception of geopolitics textbooks plays an important role, since they reflect the values and knowledge defined by a given society as necessary. Ide's (2016) work emphasizes the importance of high-quality, up-to-date educational materials for developing geopolitical understanding. This observation highlights the need to update and improve learning resources. A study by the Holm and Farber (2002) found that students' awareness of geopolitics requires significant improvement. This demonstrates the need to review and improve teaching methods to effectively prepare students for today's global challenges. Such methods may include discussions and projects (Martini 2022), which allows students better understand geopolitical contexts and their impact on political thinking, the use of simulation method (Saddington & McConnel, 2024), which effectively fills gaps in students' knowledge, offering students the opportunity to apply theoretical knowledge in practice. The use of modern technologies such as Web GIS (Puertas-Aguila, at. al., 2023) for the study of geopolitics can contribute to a deeper understanding of geopolitical processes and issues. Visualization and analysis of geopolitical data using such tools significantly improves the educational experience of students.

Conclusions. During the analysis of the "Geopolitics" section in the curriculum and teaching materials of the school geography course, some features were discovered. According to the results of the study, it turned out that geopolitics receives full coverage in the curriculum of Kazakhstan for grades 10-11. However, the main question was to determine how students perceive this concept upon completion of studying the section, how much they understand the essence of world problems and how they assess current global trends in the field of geopolitics of the world and Kazakhstan.

As a result of the analysis, it became clear that the vast majority of students demonstrate a good understanding of geopolitical concepts and their application to contemporary world events. They display the ability to analyze world problems and relate them to geopolitical factors, as well as the ability to assess the impact of these factors on international relations and political processes. In addition, students develop an interest in global trends and events in geopolitics, especially their impact on the regional level, including Kazakhstan. This suggests that studying geopolitics not only enhances students' knowledge of world politics, but also helps them better understand their country's place in the global context and analyze its foreign policy. From this it can be concluded that the study of geopolitics as part of the geography curriculum has a positive impact on the development of global thinking and analytical skills in students, which is an important aspect of their education and preparation for active participation in the modern world.

However, based on the results of some answers, it turned out that not all students correctly understand the essence of geopolitics. Some of them may have an incomplete or distorted understanding of what this concept means and how it affects world processes. This may be due to lack of clarity of textbook material, lack of depth of teaching, or lack of student interest in the topic. Consequently, there is a need for more careful study and explanation of geopolitical concepts, as well as additional training activities aimed at improving students' understanding of the topic, which will make learning more effective and ensure deeper mastery of the material.

In summary, the study of geopolitics in Kazakhstan's geography curricula contributes to students' deep understanding of global issues, analytical skills, and awareness of their country's role in the global context, but more efforts are needed to improve the clarity of materials and maintain student engagement to ensure more effective learning, as the field of geopolitics is a challenging topic for students.

References

Cohen, B. (2014). Geopolitics: The Geography of International Relations. Washington, DC: Rowman & Littlefield. ISBN 10: 1442223502 ISBN 13: 9781442223509.

Flint, C. (2021). Introduction to Geopolitics. Routledge, 4th edition, 324. https://doi.org/10.4324/9781003138549

Holm, G., & Farber, P. (2002). Teaching in the dark: The geopolitical knowledge and global awareness of the next generation of American teachers. International Studies in Sociology of Education, 12(2), 129–144. https://doi.org/10.1080/09620210200200087

Ide T. (2016). Critical geopolitics and school textbooks: The case of environment-conflict links in Germany, Political Geography, №55. 61-70. https://doi.org/10.1016/j.polgeo.2016.07.002

Kolosov, V.A. & Zotova, M.V. (2013). Geopolitical worldview of Russian students. Regional Research of Russia, 3, 265–276. https://doi.org/10.1134/S2079970513030040

Krathwohl D.R. (2002). A Revision of Bloom's Taxonomy: An Overview. Theory Into Practice, 41(4), 212–218. https://doi.org/10.1207/s15430421tip4104_2

Mäkinen, S. (2014). Geopolitics Teaching and Worldviews: Making the Future Generation in Russia. Geopolitics, 19(1), 86–108. https://doi.org/10.1080/14650045.2013.847430

Martini, A. (2022). Deconstructing geopolitics in the classroom. Grasping geopolitical codes through active learning. Revista Española de Ciencia Política, 60, 145–173. https://doi.org/10.21308/recp.60.05

Miguel-Ángel Puertas-Aguilar, Sipols, A. E., & María-Luisa de Lázaro-Torres. (2023). Web GIS to Learn Geopolitics in Secondary Education: A case study from Spain. European Journal of Geography, 14(2), 15–31. https://doi.org/10.48088/ejg.m.pue.14.2.015.031

Moscovitz, H. & Sabzalieva, E. (2023). Conceptualising the new geopolitics of higher education. Globalisation, Societies and Education, 2(21), 149-165. https://doi.org/10.1080/14767724.2023.2166465

Müller M. (2011). Education and the Formation of Geopolitical Subjects. International Political Sociology, №1, 1-17. https://doi.org/10.1111/j.1749-5687.2011.00117.x

S. Koopman, S. Dalby, N. Megoran, J Sharp, G. Kearns, R. Squire, A. Jeffrey, V. Squire, G. Toal. (2021). Critical Geopolitics/critical geopolitics 25 years on. Political Geography, 90(3), 102421. https://doi.org/10.1016/j.polgeo.2021.102421

Saddington, L., & McConnell, F. (2024). Simulating alternative internationals: Geopolitics role-playing in UK schools. Geoforum, 151, 104011. https://doi.org/10.1016/j.geoforum.2024.104011

Topalidis, G.T., Kartalis, N.N., Velentzas, J.R., & Sidiropoulou, C.G. (2024). New Developments in Geopolitics: A Reassessment of Theories after 2023. Social Sciences, 13(2), 109. https://doi.org/10.3390/socsci13020109

Елсуков М.Ю. (2001). Геополитическая мысль: эволюция, современные направления, географическая интерпретация, 162. https://shorturl.at/eiehl

Каймулдинова К.Д. & Абильмажинова С.А. (2019). География: учебное пособие для 10 класса общеобразовательной школы по естественно-математическому направлению. Алматы: Мектеп, 289. https://okulyk.kz/geografija/#10-class

Каймулдинова К.Д., Абдиманапов Б.Ш. & Абильмажинова С.А. (2019). География: учебное пособие для 11 класса общеобразовательной школы по естественно-математическому направлению. Алматы: Мектеп, 288. https://okulyk.kz/geografija/#11-class

Нартов Н.А. (1999). Геополитика: Учебник для вузов, Москва: ЮНИТИ, 359. http://yanko.lib.ru/books/politologiya/nartov-geopolitika-2004-a.htm

О внесении изменений в приказ Министра образования и науки Республики Казахстан от 8 ноября 2012 года №500 «Об утверждении типовых учебных планов начального, основного среднего, общего среднего образования Республики Казахстан». (2022). Приказ Министра просвещения Республики Казахстан от 30 сентября 2022 года №412. https://shorturl.at/jYsoT

Об утверждении государственных общеобязательных стандартов дошкольного воспитания и обучения, начального, основного среднего и общего среднего, технического и профессионального, послесреднего образования. (2022). Приказ Министра просвещения Республики Казахстан от 3 августа 2022 года № 348. ИПС «Әділет» https://adilet.zan.kz/rus/docs/V2200029031

References

Cohen, B. (2014). Geopolitics: The Geography of International Relations. Washington, DC: Rowman & Littlefield. ISBN 10: 1442223502 ISBN 13: 9781442223509.

Flint, C. (2021). Introduction to Geopolitics. Routledge, 4th edition, 324. https://doi.org/10.4324/9781003138549

Holm, G., & Farber, P. (2002). Teaching in the dark: The geopolitical knowledge and global awareness of the next generation of American teachers. International Studies in Sociology of Education, 12(2), 129–144. https://doi.org/10.1080/09620210200200087

Ide T. (2016). Critical geopolitics and school textbooks: The case of environment-conflict links in Germany, Political Geography, №55. 61-70. https://doi.org/10.1016/j.polgeo.2016.07.002

Kolosov, V.A. & Zotova, M.V. (2013). Geopolitical worldview of Russian students. Regional Research of Russia, 3, 265–276. https://doi.org/10.1134/S2079970513030040

Krathwohl D.R. (2002). A Revision of Bloom's Taxonomy: An Overview. Theory Into Practice, 41(4), 212–218. https://doi.org/10.1207/s15430421tip4104_2

Mäkinen, S. (2014). Geopolitics Teaching and Worldviews: Making the Future Generation in Russia. Geopolitics, 19(1), 86–108. https://doi.org/10.1080/14650045.2013.847430

Martini, A. (2022). Deconstructing geopolitics in the classroom. Grasping geopolitical codes through active learning. Revista Española de Ciencia Política, 60, 145–173. https://doi.org/10.21308/recp.60.05

Miguel-Ángel Puertas-Aguilar, Sipols, A. E., & María-Luisa de Lázaro-Torres. (2023). Web GIS to Learn Geopolitics in Secondary Education: A case study from Spain. European Journal of Geography, 14(2), 15–31. https://doi.org/10.48088/ejg.m.pue.14.2.015.031

Moscovitz, H. & Sabzalieva, E. (2023). Conceptualising the new geopolitics of higher education. Globalisation, Societies and Education, 2(21), 149-165. https://doi.org/10.1080/14767724.2023.2166465

Müller M. (2011). Education and the Formation of Geopolitical Subjects. International Political Sociology, №1, 1-17. https://doi.org/10.1111/j.1749-5687.2011.00117.x

S. Koopman, S. Dalby, N. Megoran, J Sharp, G. Kearns, R. Squire, A. Jeffrey, V. Squire, G. Toal. (2021). Critical Geopolitics/critical geopolitics 25 years on. Political Geography, 90(3), 102421. https://doi.org/10.1016/j.polgeo.2021.102421

Saddington, L., & McConnell, F. (2024). Simulating alternative internationals: Geopolitics role-playing in UK schools. Geoforum, 151, 104011. https://doi.org/10.1016/j.geoforum.2024.104011

Topalidis, G.T., Kartalis, N.N., Velentzas, J.R., & Sidiropoulou, C.G. (2024). New Developments in Geopolitics: A Reassessment of Theories after 2023. Social Sciences, 13(2), 109. https://doi.org/10.3390/socsci13020109

Elsukov, M.YU. (2001). Geopoliticheskaya mysl': evolyuciya, sovremennye napravleniya, geograficheskaya interpretaciya [Geopolitical thought: evolution, modern directions, geographical interpretation]. 162. https://shorturl.at/eiehl [in Russian]

Kaimuldinova, K.D. & Abil'mazhinova, S.A. (2019). Geografiya: uchebnoe posobie dlya 10 klassa obshcheobrazovatel'noj shkoly po estestvenno-matematicheskomu napravleniyu [Geography: textbook for 10th grade of general education school in natural-mathematical direction]. Almaty: Mektep, 289. https://okulyk.kz/geografija/#10-class [in Russian]

Kaimuldinova, K.D., Abdimanapov, B.SH. & Abil'mazhinova, S.A. (2019). Geografiya: uchebnoe posobie dlya 11 klassa obshcheobrazovatel'noj shkoly po estestvenno-matematicheskomu napravleniyu [Geography: textbook for 11th grade of general education school in natural-mathematical direction]. Almaty: Mektep, 288. https://okulyk.kz/geografija/#11-class [in Russian]

Nartov, N.A. (1999). Geopolitika: Uchebnik dlya vuzov [Geopolitics: Textbook for universities]. Moskva: YUNITI, 359. http://yanko.lib.ru/books/politologiya/nartov-geopolitika-2004-a.htm [in Russian]

O vnesenii izmenenij v prikaz Ministra obrazovaniya i nauki Respubliki Kazahstan ot 8 noyabrya 2012 goda №500 «Ob utverzhdenii tipovyh uchebnyh planov nachal'nogo, osnovnogo srednego, obshchego srednego obrazovaniya Respubliki Kazahstan» [On amendments to the order of the Minister of Education and Science of the Republic of Kazakhstan dated November 8, 2012 No. 500 "On approval of standard curricula for primary, basic secondary, general secondary education of the Republic of Kazakhstan"]. (2022). Prikaz Ministra prosveshcheniya Respubliki Kazahstan ot 30 sentyabrya 2022 goda №412. https://shorturl.at/jYsoT [in Russian]

Ob utverzhdenii gosudarstvennyh obshcheobyazatel'nyh standartov doshkol'nogo vospitaniya i obucheniya, nachal'nogo, osnovnogo srednego i obshchego srednego, tekhnicheskogo i professional'nogo, poslesrednego obrazovaniya [On approval of state mandatory standards for preschool education and training, primary, basic secondary and general secondary, technical and vocational, post-secondary education]. (2022). Prikaz Ministra prosveshcheniya Respubliki Kazakhstan ot 3 avgusta 2022 goda № 348. IPS «Ədilet» https://adilet.zan.kz/rus/docs/V2200029031 [in Russian]

G.S. TAZHENOVA¹, Zh.K. AKSAKALOVA¹*, S.D. POLATOVA², A.E. MANKHANOVA ³

¹ Abai National Pedagogical University (Almaty, Kazakhstan)
²Miras university (Shymkent, Kazakhstan)
*³ Gumarbek Daukeev Almaty university of power engineering and Telecommunications (Almaty, Kazakhstan) *e-mail: janna13.12@mail.ru*

PSYCHOLOGICAL AND PEDAGOGICAL EXPERIENCE OF MEDIA EDUCATION

Abstract

The article highlights the importance of developing media competence among students. The authors discuss theoretical and practical ways to promote media literacy education and develop media competence essential for students' comprehensive preparation to use mass media. As practice shows the digitalization of all areas of social life brings not only advantages as professional and personal growth opportunities but also other additional concerns. People struggle to analyze, evaluate and comprehend the information because there are so many resources, the information is disseminated through various channels with tremendous speed. There is a rising need to promote media competences among students who consumes large amounts of information. In this rapidly developing digital world information consumers need a new set of competences to search for information effectively, intake and analyze it. It is important to facilitate systematic knowledge transfer on media and promotion of media competence needed to analyze the subject of the information and its purpose.

Keywords: mass media, media education, media literacy, media competence.

Introduction. Media competences is crucial in today's information-driven society. Media competences foster critical thinking. Developing media competences helps individuals question, analyze, and evaluate media content, promoting a more discerning and skeptical approach to information consumption (Andrew M., Guess et al., 2020).

Recent education documents show attention to this issue. UNESCO considers policy in the field of student education as a constant process not only of enrichment of knowledge and skills, but also, to a large extent, as a process of creation or creation of a personality (Nodira Rustamova, 2021).

The meanings of media competence refer to:
a) The ability to access mass media, to understand an evaluate contents and various other aspects of mass media critically;
b) The capacity to create/produce in the field of communication;

c) The ability to filter, select and use to own benefit the multitude of information sent by the mass media.

Media competence is a key concept in the field of media literacy and media education. However, its two components - media and competence - can be interpreted differently, which has an impact on the theoretical concepts of media competence. The term can be used both in the sense of a general human capacity and a goal for media education activities. Against this background, and in the context of the critique of media competence as a key concept, conceptual clarifications are made. They can serve as a basis for the creation of liable concepts for stimulating and developing media competence. Thus, competence standard models can play an important role as guidelines for media education activities (Tulodziecki, G., & S. Grafe., 2019).

Materials and methods. In today's digital landscape, misinformation and fake news are widespread. Developing media competences equips individuals with the skills to identify and navigate misinformation effectively. By understanding how information is produced, disseminated, and verified, individuals can protect themselves from falling victim to misinformation and make informed decisions based on credible sources (Nicole M. Lee, 2018).

Developing media competences is important because it promotes media literacy, critical thinking, and protects from misinformation. It equips individuals with the skills necessary to navigate the digital landscape and engage responsibly with media in an increasingly interconnected world (Kimberly A. Lawless & P. G. Schrader, 2018). The importance of developing media competences among university students was highlighted in the works of Smyrnova-Trybulska Eugenia (2019), Zhu, S. et al. (2020), Gutiérrez-Pequeño et al. (2023), Fedorov Alexander & Levitskaya Anastasia (2017), Kuatbekov, A. et al. (2023).

Digitalization affects all areas of our private and professional lives, posing new requirements to cope with new technologies and the possibilities they offer. New competences are needed for mastering these challenges. The problem is that learning settings often do not address media literacy as a main competence goal (Yvonne Sedelmaier et al., 2023). According to survey conducted in the United States of America and India (Andrew M. Guessa et al., 2020) the youth display a higher level of knowledge in terms of media languages and technology usage, however they are not as strong in skills linked to reception and audience and are lacking in skills in production and programming processes and dissemination, with a basic level in aspects related to ideology and values. The similar findings were obtained by López-Meneses et al. (2020) where the results showed that 1,073 students of one Italian and two Spanish universities had an upper intermediate level of competence in information and digital literacy, and communication and collaboration, but a lower intermediate level in terms of digital content creation, particularly in the creation and dissemination of multimedia content using different tools.

The experimental work on the formation of media competences of students was carried out in the following stages: determining, forming and summing up. Pedagogical support of the process of formation of media creativity of students, the implementation of psychological and pedagogical conditions that improve the effectiveness of the process, diagnosis, monitoring and proving the effectiveness of practical experimental work on the criteria and indicators of the formation of media reporting of students in the groups where the experiment was staged.

Results and discussion. During the study, pedagogical practice lectures, seminars on interactive methods of interaction and dialogue interaction in the hours of sociology allowed students and teachers to work together to make decisions and to innovate the educational process in the formation of the media creativity among students. Thus, the experiment on the formation of the research was carried out in accordance with the initial plan and we were able to solve the tasks set.

At the end of the shaping experiment, diagnostic methods, which were carried out during the determining experiment on the formation of medical competence of students, were repeated. With the results of the first survey, it is clear that the control and experiment groups did not change their decision that the majority of students were the internet as the main media, followed by television. And now, in order to determine the knowledge of our students about media, media production, media literacy, we have repeated the questionnaire of Fetiskin by modifying (Sukhodolskij G. V.,1998) the methodology "Knowledge of information technologies" with the name "Do you know about the media world?" (Glass Dzh. & Stehnli Dzh., 1976).

Table 1. *In the control and experiment groups, the relative percentage of the survey selected using the methodology "Do you know about the media world?" (According to N.P. Fetiskin's methodology)*

№	Recognition of information and communication technologies	Control group	Experimental group
1	high	48,2	49,8
2	medium	42	42
3	low	9	8,2
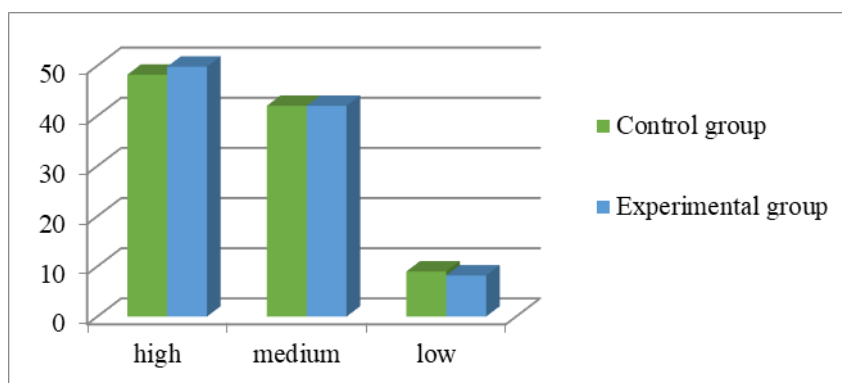
Figure 1: The relative percentage of survey selected by the methodology "Do you know about the media world?" in control and experiment groups (%) (According to N.P. Fetiskin's methodology)

Table 2. *The result of the survey before and after the experiment carried out in control and experiment groups with the "Do you know about the media world?" methodology (According to N.P. Fetiskin's methodology)*

№	Levels	Before the experiment (%)		After the experiment (%)	
		Control group	Experimental group	Control group	Experimental group
1	high	10,5	12,2	48,2	49,8
2	medium	42,3	44,5	42,	42
3	low	47,2	43,3	9	8,2
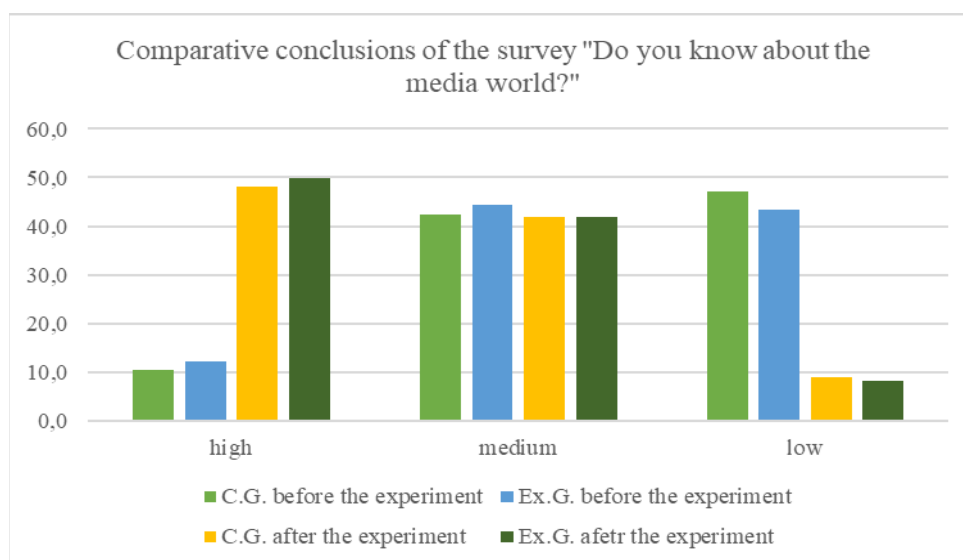
Figure 2: Comparative conclusions of the survey "Do you know about the media world?" in control and experiment groups (%) before and after the experiment (According to N.P. Fetiskin's methodology)

Table 3. *Comparative summary of the comparative results of Lukanova's survey "How to diagnose the level of formation of the cyber terrorism prevention activities"*

№	Criteria	Control group			Experimental group		
		Levels					
		high	medium	low	high	medium	low
1	Motivational	51,7	36	12,3	53,4	35	11,6
2	Cognitive	51,5	37	11,5	51,5	35	13,5
3	Evaluative	48,6	38	13,4	49,6	35	15,4

Figure 3: The comparative results of Lukanova's survey on "How to diagnose the level of formation of the cyber terrorism prevention activities" (%) after the experiment

Table 4. *The comparative results of Lukanova's survey on "How to diagnose the level of formation of the cyber terrorism prevention activities"*

Formation of incentives to combat cyber terrorism activities	Before experiment (%) - BE						After experiment (%) - AE					
	Control group			Experimental group			Control group			Experimental group		
	levels						levels					
	high	Medium	low	high	Medium	low	high	Medium	low	high	Medium	low
Motivational	12,5	39,1	48,4	13,6	39	47,4	51,7	36	12,3	53,4	36	10,6
Cognitive	10,2	39,2	50,6	11,2	39,3	49,5	51,5	37	11,5	51,5	37	11,5
Evaluative	9,5	38	52,5	10,5	36	53,5	48,6	38	13,4	49,6	38	12,4
Average	*10,7*	*38,76*	*0,5*	*11,76*	*38,1*	*50,13*	*50,6*	*37*	*12,4*	*51,5*	*37*	*11,5*

According to the methodology "How to diagnose the level of formation of incentives for combating cyber terrorism activities" modified by control and experimental groups, we used "Student's T-criterion for independent scans" in order to determine the difference between the levels of knowledge about media, media products, media reporting.
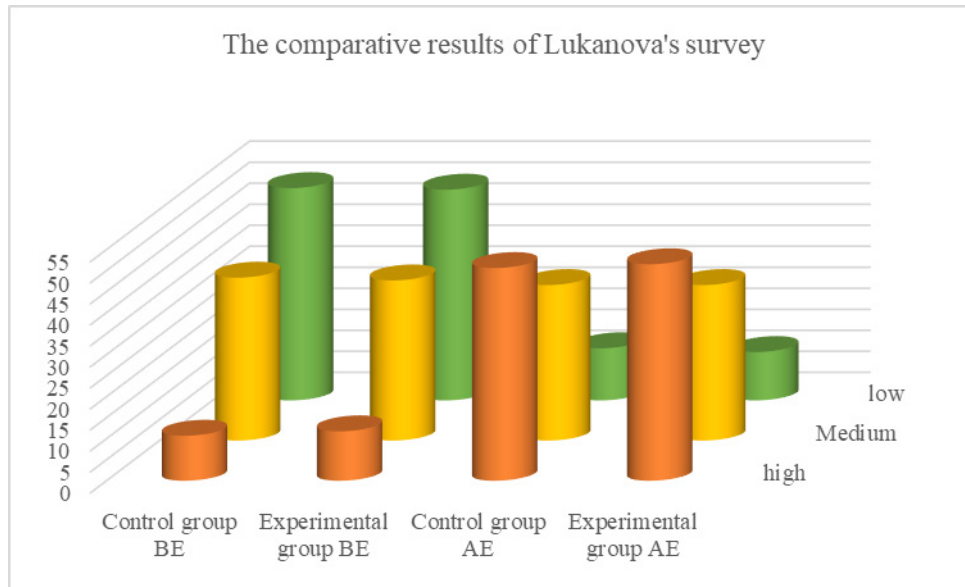
Figure 4: The comparative results of Lukanova's survey on "How to diagnose the level of formation of the cyber terrorism prevention activities"

Table 5. *The comparative results of Lukanova's survey on "How to diagnose the level of formation of the cyber terrorism prevention activities" have been experienced in the past (%)*
(according to "Student's T-criterion for independent selects")

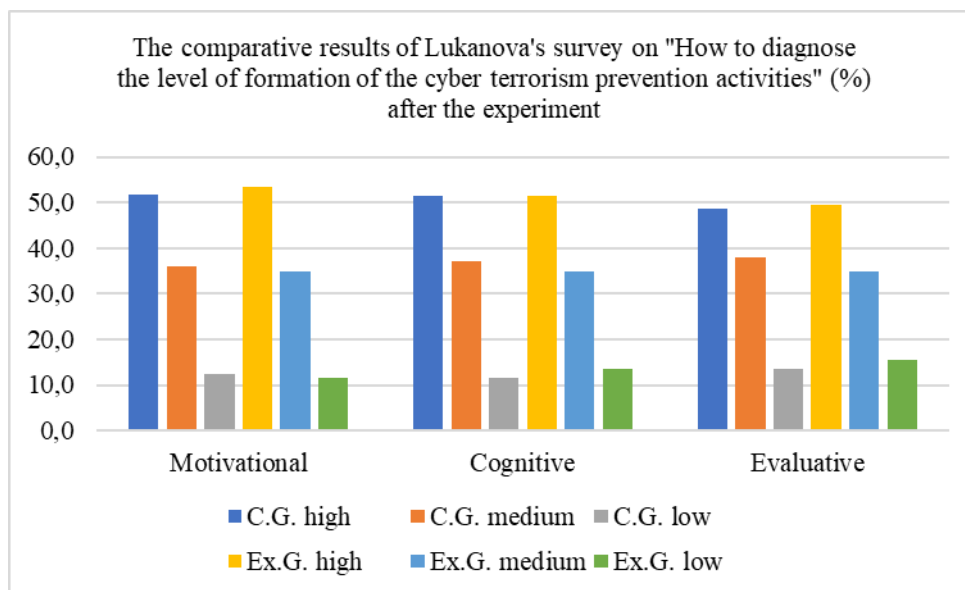| Formation of incentives to combat cyber terrorism activities	Before experiment (at %)						after experiment (at %)						C.G. Temp. P	Ex.G. Temp. p
	C.G. levels			Ex.G. levels			C.G. levels			Ex.G. levels				
	M_1	m_1	σ1	M_1	m_1	σ1	M_2	m_2	σ2	M2	m2	σ2		
M	1,8	0,34	2,1	1,84	0,9	2,73	1,1	1	0,1	1,9	0	1,9	0,440	p=0,05 0,275
T	0,5	0,44	0,1	0,56	1,2	0.63	0,9	0	0.9	0	0	0	0,318	p=0,05 1.604
Б	1,2	0.76	2	1,26	2,1	3.37	2	1	1	1,9	0	1,9	0,110	p=0,05 0,452

Verification of the reliability of our research results was carried out using the criterion "Hi-square". Here's the formula for calculating the size:

$$x_n^2 = \sum_{i=1}^{n} \frac{(O_i - E_i)^2}{E_i}$$

To determine whether differences in actual and expected frequencies are reliable, you need to compare the value of χ^2exp with the critical value of this criterion.

You can only conclude about the reliability of the differences when the value of the value of χ^2exp exceeds the critical value χ^2crit.

In this case, the value was equal to the values of the χ^2exp = 482.071, and the χ^2krit = 447.68. This means that the experimental value exceeded the critical. Therefore, the level of

reality between control and experimental groups is shown in p = 0,05.

The final calculations show an increase in the results in the experimental group rather than the control group. The results of the shaping experiment demonstrate the effectiveness of the work aimed at the development of analytical and thoughtfulness in the consumption of media products, providing students with a set of theoretical and practical knowledge about "media", "media education", "media literacy", "consciousness dancing", "media corruption".

If we look at the previous and recent results of the survey synthesis of the control and experiment groups, there is little progress in the responses of the students of the control group, and there is a slight improvement in the response results of the students of the experiment group.

The final results of the shaping experiment required the release of the growth dynamics of the components of media properties.

A graphic image of the data on the indicators of motivational, cognitive and appraisal components of the media content defined in our article is shown in the following graph.
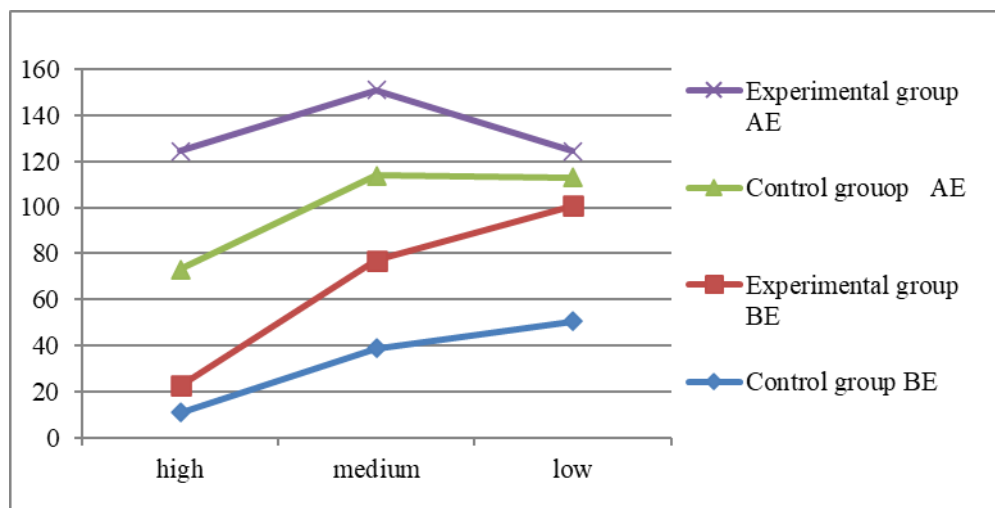
Figure 5: Student's Media Incentive before (BE) and after experiment (AE) (%)

The graph shows an increase in results in the practice group as compared to the control group. The results of the shaping experiment demonstrate the effectiveness of the work aimed at the development of analytical and thoughtfulness in the consumption of media products, providing students with a set of theoretical and practical knowledge about

"media", "media education", "media literacy", "consciousness dancing", "media corruption".

To confirm the results, we compared the t-criterion Student size by comparing the averages using the following formula:

$$t = \frac{M_1 - M_2}{\sqrt{m_1^2 + m_2^2}}$$

Arithmetic mean of the first set of M_1, M_2 - arithmetic mean of the second relative set, m_1 - error of the first arithmetic mean, m_2 - error of the second arithmetic mean.

$$t_{emp} = \frac{|\bar{\bar{x}} - \bar{\bar{y}}|}{\sqrt{n_1 * D_x + n_2 * D_y}} * \sqrt{\frac{n_1 * n_2}{n_1 + n_2} * (n_1 + n_2 - 2)}$$

As noted above, because the calculated criterion value is higher than the critical value, we see that the data observed in the experimental group was less than the t-empirical value. That is, compared to the control group, we make sure that the experimental group is not accurate.

For us, the main method of prevention of sanity on the basis of universities - the formation of media literacy on the issue of consciousness, not only the understanding of the need for knowledge, but also the self-improvement of the ability to resist it, it has also contributed widely

to the formation of skills, skills, knowledge, qualities and motivational goals in this direction.

The use of an action-oriented approach to the formation of media literacy of students, the focus of this approach on active, productive, self-and group work of students, the variability of the content of pedagogical work, the selection of active methods of teacher training, which are visible in the variety of work performed by students, reduced the synthesis of lessons and increased students' interest in the work carried out.

One of the objectives of the study was the development of media literacy, which allowed future professionals to accumulate theoretical and practical knowledge and skills related to the media. It has contributed to the formation of skills of applying knowledge in practice.

Special methods used during the author's course on the development of knowledge of the media and the competent use of medi-products have contributed to the development of their critical thinking. In turn, the students' ability to think from a critical point of view showed that they have developed the necessary competencies as mediators. The work carried out in this direction in the course of the experiment showed the effectiveness of the technology of the process of formation of medical certificates of students.

Conclusion. It proves that the research tasks have been solved, that the psychological and pedagogical conditions proposed were correctly chosen. In the framework of the research tasks, the three main stages ("diagnostics - course - diagnostics") presented in the program of the experiment were proved to be the most logical correct decision. These periods made it possible to analyze the changes occurring in the indicators and criteria of media competence of the test subjects during all periods of the experiment, and the formative period of the experiment showed that there is an increase in the formation of all components of media competence which is similar to the results gained during study which was held in the Rostov State University of Economics, Russian Federation. Researchers Fedorov Alexander & Levitskaya Anastasia (2017) conclude, that the level of media competence of students who have a one-year training course in the framework of media literacy education courses four times higher than in similar indicators in the control group.

References

Andrew M. Guess, Michael Lerner, Benjamin Lyons, Jacob M. Montgomery, Brendan Nyhan, Jason Reifler, and Neelanjan Sircar. (2020). A digital media literacy intervention increases discernment between mainstream and false news in the United States and India. Proceedings of the national academy of sciences Vol. 117 | No. 27.

Fedorov Alexander, Levitskaya Anastasia (2017). Comparative analysis of the indicators' levels of students' media competence development in the control and experimental groups. International Journal of Media and Information Literacy. №1. URL: https://cyberleninka.ru/article/n/comparative-analysis-of-the-indicators-levels-of-students-media-competence-development-in-the-control-and-experimental-groups.

Gutiérrez-Pequeño, José Miguel, Rocío Anguita-Martínez, and Yasna P. Pradena-García. (2023). "Social Media Labs in the Social Education Degree: Exploring Digital Competences of University Students". Education Sciences 13, no. 1: 20. https://doi.org/10.3390/educsci13010020

Kimberly A. Lawless, P. G. Schrader (2018) Where Do We Go Now? Understanding Research on Navigation in Complex Digital Environments. Handbook of Research on New Literacies

Kreativ research. Retrieved from http://www.mediapedagogy.eu/media-competence/ 01.11.2024.

Kuatbekov, A., Vershitskaya, E., Kosareva, I., & Ananishnev, V. (2023). RETRACTED: E-Learning as a basis for the development of media competences in students. Journal of Information Science, 49(4), 1111-1125. https://doi.org/10.1177/01655515211040656

López-Meneses, E., Sirignano, F. M., Vázquez-Cano, E., & Ramírez-Hurtado, J. M. (2020). University students' digital competence in three areas of the DigCom 2.1 model: A comparative study at three European universities. Australasian Journal of Educational Technology, 36(3), 69–88. https://doi.org/10.14742/ajet.5583

Nicole M. Lee. (2018). Fake news, phishing, and fraud: a call for research on digital media literacy education beyond the classroom. Communication Education, 67:4, 460-466, DOI: 10.1080/03634523.2018.1503313

Nodira Rustamova (2021). Issues of development of students' media competence based on vitagenic (life) experience. Journal of Physical Education and Sport ® (JPES), vol 21 Issue 6, Art 359. 2599-2616.

Smyrnova-Trybulska Eugenia. (2019). Evolution of media competences. "Open educational e-environment of modern university" special edition, 77-92. https://rebus.us.edu.pl/handle/20.500.12128/11392

Tulodziecki, G., and S. Grafe. (2019). "Media Competence." In The International Encyclopedia of Media Literacy. Hoboken, NJ: Wiley-Blackwell. 1–14. https://doi.org/10.1002/9781118978238.ieml0113.

Yvonne Sedelmaier, Ercole Erculei, Dieter Landes Enhancing. (2023). Media Literacy in Higher Education. In book: Learning in the Age of Digital and Green Transition, 390-399. www.researchgate.net

Zhu, S., Hao Yang, H., Xu, S., & MacLeod, J. (2020). Understanding Social Media Competence in Higher Education: Development and Validation of an Instrument. Journal of Educational Computing Research, 57(8), 1935-1955. https://doi.org/10.1177/0735633118820631

Гласс Дж., Стэнли Дж. (1976). Статистические методы в педагогике и психологии. - М.: Изд-во «Прогресс» (с. 495). http://www.mediapedagogy.eu/media-competence/

Сидоренко Е. В. (2003). Методы математической обработки в психологии / СПб.: Речь, с. 84.

Суходольский Г. В. (1998). Основы математической статистики для психологов. СПб.: Издательство С. - Петербургского университета, с. 464.

References

Andrew M. Guess, Michael Lerner, Benjamin Lyons, Jacob M. Montgomery, Brendan Nyhan, Jason Reifler, and Neelanjan Sircar. (2020). A digital media literacy intervention increases discernment between mainstream and false news in the United States and India. Proceedings of the national academy of sciences Vol. 117 | No. 27.

Fedorov Alexander, Levitskaya Anastasia (2017). Comparative analysis of the indicators' levels of students' media competence development in the control and experimental groups. International Journal of Media and Information Literacy. №1. URL: https://cyberleninka.ru/article/n/comparative-analysis-of-the-indicators-levels-of-students-media-competence-development-in-the-control-and-experimental-groups.

Gutiérrez-Pequeño, José Miguel, Rocío Anguita-Martínez, and Yasna P. Pradena-García. (2023). "Social Media Labs in the Social Education Degree: Exploring Digital Competences of University Students". Education Sciences 13, no. 1: 20. https://doi.org/10.3390/educsci13010020

Kimberly A. Lawless, P. G. Schrader (2018) Where Do We Go Now? Understanding Research on Navigation in Complex Digital Environments. Handbook of Research on New Literacies

Kreativ research. Retrieved from http://www.mediapedagogy.eu/media-competence/ 01.11.2024.

Kuatbekov, A., Vershitskaya, E., Kosareva, I., & Ananishnev, V. (2023). RETRACTED: E-Learning as a basis for the development of media competences in students. Journal of Information Science, 49(4), 1111-1125. https://doi.org/10.1177/01655515211040656

López-Meneses, E., Sirignano, F. M., Vázquez-Cano, E., & Ramírez-Hurtado, J. M. (2020). University students' digital competence in three areas of the DigCom 2.1 model: A comparative study at three European universities. Australasian Journal of Educational Technology, 36(3), 69–88. https://doi.org/10.14742/ajet.5583

Nicole M. Lee. (2018). Fake news, phishing, and fraud: a call for research on digital media literacy education beyond the classroom. Communication Education, 67:4, 460-466, DOI: 10.1080/03634523.2018.1503313

Nodira Rustamova (2021). Issues of development of students' media competence based on vitagenic (life) experience. Journal of Physical Education and Sport ® (JPES), vol 21 Issue 6, Art 359. 2599-2616.

Smyrnova-Trybulska Eugenia. (2019). Evolution of media competences. "Open educational e-environment of modern university" special edition, 77-92. https://rebus.us.edu.pl/handle/20.500.12128/11392

Tulodziecki, G., and S. Grafe. (2019). "Media Competence." In The International Encyclopedia of Media Literacy. Hoboken, NJ: Wiley-Blackwell. 1–14. https://doi.org/10.1002/9781118978238.ieml0113.

Yvonne Sedelmaier, Ercole Erculei, Dieter Landes Enhancing. (2023). Media Literacy in Higher Education. In book: Learning in the Age of Digital and Green Transition, 390-399. www.researchgate.net

Zhu, S., Hao Yang, H., Xu, S., & MacLeod, J. (2020). Understanding Social Media Competence in Higher Education: Development and Validation of an Instrument. Journal of Educational Computing Research, 57(8), 1935-1955. https://doi.org/10.1177/0735633118820631

Glass, Dzh., & Stanley, Dzh. (1976). Statisticheskiye metody v pedagogike i psikhologii [Statistical methods in pedagogy and psychology]. Moscow: Progress. [in Russian]

Sidorenko, E. V. (2003). Metody matematicheskoy obrabotki v psikhologii [Methods of mathematical processing in psychology]. Saint Petersburg: Rech. [in Russian]

Sukhodolskiy, G. V. (1998). Osnovy matematicheskoy statistiki dlya psikhologov [Fundamentals of mathematical statistics for psychologists]. Saint Petersburg: Izdatel'stvo S.-Peterburgskogo universiteta. [in Russian]

A.ZADAYEVA¹, V.ZHUMAGULOVA¹, A.SATBEKOVA¹, G.SEIDULLAYEVA²

¹Kazakh National Women's Teacher Training University (Almaty, Kazakhstan)
²International Educational Corporation, Kazakh-American University (Almaty, Kazakhstan)
*e-mail: zadaevaalmagul@mail.ru

FUNDAMENTALS OF QUALITY ASSURANCE IN THE HIGHER EDUCATION SYSTEM

Abstract

This study explores the critical issue of quality assurance in higher education systems, both in Kazakhstan and globally, where universities operate in a «consumer market» with students selecting educational programs, institutions, and resources. Based on an analysis of international and domestic research, the study aims to identify the foundations of quality assurance in higher education. The authors highlight key aspects of higher education quality, including student quality, teaching characteristics, academic regulations, and administrative support. Educational quality is examined within the context of international standards as a matter of national importance, with education levels serving as a foundation for economic development of both state and society. The research analysis reveals that various approaches, methods, and criteria for quality management are employed in creating systems for ensuring and assessing the quality of higher education institutions in Kazakhstan and abroad. These include the evaluative method of university activity quality management (SWOT analysis), Total Quality Management (TQM) strategy, and an approach based on the requirements of international quality standards ISO 9000:2000. The study notes that Kazakhstan has adopted a management model based on the ISO 9000:2000 international quality standards. This comprehensive review contributes to the understanding of quality assurance mechanisms in higher education and their implications for educational policy and practice.

Keywords: quality assurance, higher education, Kazakhstan, international standards, quality management.

Introduction. Ensuring the quality of the education system is a crucial issue not only in Kazakhstan but also worldwide, where universities operate in a «consumer market» and students have the freedom to select educational programs, institutes, libraries, resources, and acquire knowledge (Chapman & Adams, 2002; Doherty, 2008). The study aims to determine the fundamentals of supporting quality in the higher education system by analyzing foreign and domestic research conducted by various scholars (Arcaro, 1995; Barrett et al., 2006; Belohlav et al., 2004; Calvo-Mora et al., 2006; Crawford & Shutler, 1999; Fernández Cruz et al., 2016; Frederiks et al., 1994; Hopkins, 2015; Ingason, 2015; Kusainov, 2013; Laevers, 1994; Navaratnam, 1997; Permyakov, 2007; Puyt et al., 2020; Taskov & Mitreva, 2015; Vlašić et al., 2009; Yelezhanova et al., 2020; Zaharias & Pappas, 2016).

The authors emphasize various aspects that contribute to the quality of higher education, including the quality of students, teaching characteristics, academic regulations, and administrative support.

The quality of education is addressed in accordance with international standards as a task of national significance, recognizing that the level of education serves as the foundation for the economic development of the state and society.

An analysis of research indicates that in developing systems for ensuring and evaluating the quality of activities in higher education institutions, both in Kazakhstan and internationally, various approaches, methods, and criteria for quality management are utilized (Barrett et al., 2006; Yelezhanova et al., 2020). These include:

The evaluative method of managing university activity quality, specifically SWOT analysis (Puyt et al., 2020);

Total Quality Management (TQM) strategy (Taskov & Mitreva, 2015);

An approach based on the requirements of international quality standards ISO 9000:2000 (Ingason, 2015).

Notably, Kazakhstan has adopted a management model that aligns with the requirements of international quality standards ISO 9000:2000 (Kusainov, 2013; Permyakov, 2007).

In the history of human development, education is one of the factors of economic and social progress, contributing to the development of society, enhancing human potential, along with the global level of general and professional culture of society, as well as the integration of an individual into national and world culture. It ensures the formation of a personality oriented towards development.

Quality assurance in the education system has become an important issue worldwide, as universities represent a «consumer market» and students can choose educational programs, institutes, libraries, resources, and acquire knowledge.

Aspects of higher education quality include the quality of students, teaching features, academic rules, and administrative support.

Materials and Methods. Research Model: This study employed a systematic literature review method with elements of comparative analysis.

Data Collection: Data were collected through the analysis of scientific publications focused on quality assurance in higher education. Databases used included Web of Science, Scopus, and Google Scholar. Key search terms included «quality assurance», «higher education»,

«education quality management», «TQM in education», and «ISO 9000 in universities».

Ensuring Validity and Reliability: To ensure the validity and reliability of the data, the following source selection criteria were used:

1. Publications in peer-reviewed journals

2. Works published within the last 20 years

3. Studies focusing on higher education systems

Data Analysis: The collected data were analyzed using the content analysis method. The main approaches to ensuring education quality were systematized and categorized.

Data Interpretation: Interpretation was conducted by comparing various approaches to education quality assurance, identifying common trends and peculiarities in the application of these approaches in different contexts.

In the scientific literature, there are many variations in the definition of the concept of «quality of education» reflecting the essence of the described phenomenon differently. For example, G.D. Doherty defined the quality of higher education as:

1) transcendent quality, the result of the prestige and competence of the teaching staff;

2) quality based on production, a service that meets the specification and can be used in its creation;

3) quality based on the product, advanced knowledge of students, improved by the teacher based on developed curricula;

4) quality based on values, based on accessibility;

5) quality based on the user, in accordance with the needs, desires, and preferences of students (Doherty, 2008).

According to C.Bayne-Jardine, the quality of education is the relationship between the goal and the result, a measure of achieving goals (results), and the goals will be operational and predictable only in the area of the learner's potential development (Bayne-Jardine, 2005).

P.Zaharias and C.Pappas give the following definition: «The quality of education is the degree to which the expectations of various participants in the pedagogical process are met by the educational services provided by the university» (Zaharias, 2016).

Improving the quality of education in accordance with international requirements is a task of national importance. For example, A.K. Kusainov studies the level of education as the main foundation for the economic development of the state and society. According to him, an effective education system includes three classes of elements: «standards and accountability (international requirements, information transparency, equality of access), human capital (best candidates, improving pedagogical competence, strong leadership at the school level); management structure (effective apparatus, public participation, responsibility)» (Kusainov, 2013).

S.Vlašić, S.Vale, and D.K. Puhar link the process of ensuring the quality of education with the process of standardization and identify three areas of pedagogical standards: conceptual, normative, and methodological (Vlašić, 2009).

At the level of standards for core curricula and disciplines, the content and procedural aspects of general secondary education are regulated in a normative manner. The methodological component includes curricula, textbooks, and teaching materials.

Overall, the quality of education reflects the standards that need to be met to achieve the set goals. At the same time, the guarantee of the quality of education is understood as a mechanism for monitoring the achievement of a set of goals.

When assessing the quality of education, ENQA recommends working in three areas:

a) ensuring appropriate and sustainable resources and their effectiveness;

b) integration of advanced achievements in teaching and research;

c) transparency of higher education institutions and improvement of their international activities (Permyakov, 2007).

The quality of education is the requirements of the labor market, which change depending on the economic situation and the compliance of the graduate's work result. Let's highlight the main characteristics of the category «quality of education»:

- compliance of the knowledge and skills of graduates with the planned level;

- compliance with established standards;

- compliance with the requirements of state certification and accreditation;

- the degree of satisfaction of the expectations of various participants in the educational process (society, state, students, employers) (Arcaro, 1995).

According to D.W. Chapman and D.K. Adams, the quality of education should be considered in two dimensions: the quality of the holistic pedagogical process, as a consequence - educational services and graduate training (Chapman, 2002). This is reflected in the difference between the internal and external components of the quality of education (Table 1).

Table 1. *Components of education quality*

Internal components	External components
Conditions of a holistic pedagogical process	Student education and compliance of education with the requirements of their parents
The quality of the implementation of the holistic pedagogical process	Compliance of education with the State mandatory standard of higher education
The quality of the results of the holistic pedagogical process	The image of the university as a guarantee of quality education
Internal components of the field of pedagogy and personnel policy	Compliance with the requirements of the modern labor market

Defining the concept of «quality of education», we have identified three main areas in the work of the university, proposed by D.Hopkins (Hopkins, 2015):

- ensuring the quality of the content of education;

- ensuring the quality of educational outcomes (the quality of education of university graduates);

- ensuring the quality of educational technologies (the quality of teaching and upbringing methods).

Focusing on the most important problem of ensuring the quality training of a future graduate, we note that the goal of an educational institution is a competitive specialist with the required level of training.

Speaking about managing the quality of training of a future teacher, one should focus on all the components of the scheme:

- any process, including educational, depends on the input parameters (the educational process at the university depends on the level of preparedness of applicants: assessing them at the «entrance» to the holistic pedagogical process, we thereby measure the quality of this initial stage);

- each area of training should be provided with a high-quality Educational program, educational and material resources, and a qualified teaching staff, which guarantees the quality of student training at different levels of the educational process; it should be taken into account that without improving academic disciplines and teaching technologies, that is, without improving the educational process, it is impossible to achieve compliance (quality) of graduate training with the requirements of the state compulsory standard of higher education.

It is known that any process is managed more efficiently if there is feedback, positive or negative. For the holistic pedagogical process, this is the quality of education received through the eyes of the student, since the graduate is a consumer of educational services. Questioning students allows identifying the most significant disciplines for the formation of professional competence, i.e., the graduate himself assesses the quality of the education received from the inside, as a process in which he is a participant.

At the present stage, a significant improvement in the quality of the system in the development of vocational education is reflected in the formation of the applied level of theory. The quality of education is considered by many foreign authors as a positive and dynamic idea. For example, L.Ed. Crawford and P. Shutler consider it as an investment in the content of education (Crawford, 1999), K.K. Navaratnam

defines the quality of products and services as a planned, implemented, evaluative, ongoing process, which has its own solution, and the search for quality should not be consumer-oriented (Navaratnam, 1997).

The quality of education is designed to satisfy customer needs, continuous improvement, motivation for leadership, development of human resources, evaluation and reward, coordinated teamwork, monitoring, and decision-making.

F. J. Fernandez Cruz, I. Egido Galvez, and R. Carballo Santaolalla argue that when the quality of education corresponds to the learning outcomes, they are achieved and are the planned goals, features, and requirements. However, quality is not a vague concept, but a conscious planned effort at all stages and components of this activity (Fernandez, 2016).

The essence of the ideology of modern pedagogical education as a system of ideals and goals is not to give it new knowledge, goals, values, and personal meaning, but to reveal the main strength of the teacher - his intellectual and moral potential. The ability to move freely in the cultural environment, implementing not only modern pedagogical technologies but also innovative processes, improving the process of self-development and personal qualities.

The results of modern pedagogical education are aimed at the formation of a personality: a) a developed, spiritually and morally rich personality; b) a teacher who has mastered modern knowledge and works with students; c) a specialist in a certain field of science that can be taken into account in the modern education system and cultural practice. These requirements correspond to the modern system of pedagogical education.

In recent years, there has been high competition among educational universities for each potential student. The main task of the educational policy of any country is to ensure high quality of education based on maintaining its fundamentality and compliance with the current and future needs of the individual, society, and the state. In order to be competitive, it is necessary to quickly adapt, open new demanded areas of training, ensure the quality of education, introduce new teaching methods,

update the regulatory and laboratory base, and increase the level of competence of the teaching staff. At the same time, the issue of competition among universities is quite acute. Let's consider what has been done to solve the problem of ensuring the quality of professional competence in the Republic of Kazakhstan in higher education.

First of all, in order to integrate into the global educational space, in 2010, the universities of the Republic switched to the Bologna Process, which involves the creation of an integrated pan-European system of higher education based on common principles of organization and quality standards of higher education. At the same time, the concept of quality of education covers teaching and research work, leadership and management of an educational institution, the ability to satisfy the needs of students, and the provision of other services to society by universities.

Second, one of the necessary conditions for any university to confirm its status is the presence of a quality management system. Universities operating in a competitive environment feel the need to develop such systems and obtain effectiveness and efficiency from their implementation. There are two main ways of forming a QMS in universities:

- development of a unique model of a quality management system based on the example of a specific educational institution, partly universal and applicable to other organizations;

- use of universal principles for creating modern quality management systems used in various spheres of human activity, i.e., direct application of the principles of total quality management (TQM), which are reflected in the requirements of the international ISO 9000:2000 standards and the criteria of national quality awards.

The main form of activity of a university is the provision of educational services. An educational service is a set of purposefully created offered opportunities for acquiring knowledge and skills in order to satisfy educational needs.

The state, society, employers, students, and their parents are interested in improving the quality of education. Currently, most universities, when organizing their activities, are mainly focused on meeting the requirements of the state reflected in the state compulsory educational standards and indicators of state certification and accreditation of universities. Both can be considered as regulatory requirements for an educational service, the need for compliance with which is a condition for the existence of universities with budget funding.

To the greatest extent, employers are consumers of university graduates, since it is in the sphere of the real economy that the result of an educational service, expressed in the knowledge and skills of a graduate, can fully manifest itself. Therefore, it is obvious that by cooperating with potential employers, universities should determine which characteristics of graduates are most significant for them.

When creating systems for ensuring and evaluating the quality of higher education institutions in Kazakhstan and abroad (Barrett, 2006), various approaches, methods and criteria for quality management are used:

- evaluation method of university quality management (SWOT analysis);

- TQM strategy;

- an approach based on the requirements of the international quality standards ISO 9000:2000.

The quality assessment method based on SWOT analysis involves systematic self-assessment to identify the strengths and weaknesses of the university's activities, as well as positive and negative factors of its development. Based on the use of this method, measures are developed and proposed to resolve problematic situations and improve the activities of the institution of higher education.

In accordance with the terms of the evaluation method, the assessment of activities is based on statistical data obtained from centralized university services (HR, planning and finance department, accounting, research part, etc.), annual reports of departments and information provided by the deans of institutes. Based on these data, relative indicators (per teacher, researcher,

student) are calculated for the university as a whole, as well as for each institute individually.

Based on the data obtained, a self-assessment report is being prepared. The purpose of the self-assessment report is to analyze all aspects of the university's activities that have an impact on the quality of education and research. In the process of conducting a self-assessment of an educational institution, a SWOT analysis is used to identify the strengths and weaknesses of the university's activities, as well as positive and negative factors of its development. The peculiarity of this method is that its parameters and characteristics may vary depending on national and local characteristics (Puyt, 2020).

The quality assessment method based on the principles of TQM (Universal Quality Management) is based on a deeper analysis of the university's activities as a manufacturer of products and services. The TQM concept assumes that the university has a clearly and clearly formulated mission, strategic goals that have been developed as a result of comprehensive studies of the needs of the external environment in the main products of the university's activities (Taskov, 2015).

When choosing a TQM strategy, the main goal of an organization's functioning is quality in the broadest sense of the word. It is not only about the quality of the services or products themselves, but about the quality of the organization's interaction with the outside world, the quality of its functioning and management, and the quality of life of its employees (table 2).

Table 2.*TQM methods and tools in the holistic pedagogical process*

Planning and management tools	affinity diagram – collecting and grouping ideas relationship graph – identification of cause-and–effect relationships tree – decomposition of tasks for their solution priority matrix - search for relationships flowchart of the decision-making process, coupled planning - network graph, drawing up a decision-making plan matrix diagram – search for relationships
Methods of organizing the thought process	reformulation of the problem – identification of the structure of the problem and the relationship between its elements brainstorming – collective development of ideas brainstorming – a structured process of generating ideas in writing
Quality control tools	causal diagram - analysis of the underlying causes of the problem Pareto diagram – identification of key problems timeline – identification of trends graph – identification of the relationship between variables histogram – adjustment, spread, form of the process control map – identification of sources of variation

And another method based on the requirements of international quality standards ISO 9000:2000 involves identifying interested parties, identifying their requirements for product quality, and creating a system of continuous improvement of activities. This method is based on the fundamental principles of quality management, including the process approach. In contrast to the TQM model, the key management tool becomes a documented management system focused on quality.

In particular, such documents are developed as «quality manual», «documentation manage-ment», «personnel management», «classroom fund management», «logistics management», «library information resources management», «management of the selection process for applicants», etc. To support and facilitate the application of this documentation, an information model of the quality management system is created, which is accessible to all interested audiences. A feature of ISO-based models is that they do not imply uniformity in the structure of quality management and uniformity of documentation, which introduces specificity

into university models of management systems (Ingason, 2015).

In accordance with the requirements of international standards, the quality system is interpreted as a quality management system consisting of three subsystems: a quality management system, a quality assurance system, and a quality confirmation system. Quality management is based on documentation that describes all processes, as well as the actions of process participants to achieve the required level of quality. The necessary documentation is available in each university, primarily technological documentation (educational programs), regulations on structural units, internal audit plans, etc.

Technological and regulatory documentation form the foundation of the entire quality management system, so it must be brought in line with modern requirements (including the requirements of state standards).

The mandatory documents of the quality system include (Laevers, 1994):

- goals and policy in the field of quality;
- quality management instruction;
- description of processes;
- description of the interaction between processes;
- registered quality data (quantitative indicators).

Results and Discussion. Currently, universities use the following models of quality management systems based on the above methods:

EFQM Model (European Foundation for Quality Management). Among European organizations, the most popular model is the European Quality Award model developed by the European Foundation for Quality Management (EFQM). The application of the EFQM model involves not only a competitive assessment but also a serious diagnostic study and measurement of the strength and effectiveness of the organization's management potential, an assessment of the maturity of the management system relative to the reference level, identifying strengths, as well as areas where it is advisable to make improvements (Calvo-Mora, 2006).

The model of the national American quality award «Baldrige National Quality Award» in the field of education. This model is based on criteria in education for achieving excellence: leadership, strategic planning, focus on students, stakeholders and the market, measurements, analysis and knowledge management, focus on faculties and staff, process management, results (Belohlav, 2004).

The model of the quality management system according to the international standard ISO 9001:2000. This model assumes a demonstration of the university's ability to produce products that satisfy the consumer, and his requests are regularly monitored and studied. In accordance with the requirements of ISO 9001:2000, the main goal of the university should be to increase the satisfaction of clients - individuals, society and the state - in educational services, training of specialists, scientific products, etc. (Ingason, 2015).

Model of the Association of Universities of the Netherlands (VSNU). This model is based on the idea of dividing all university activities into three main business processes: educational activities, research and services offered to society (Frederiks, 1994).

Benchmarking model for Australian universities. The aim of this model was to develop a perfect Guide to Benchmarking Australian Universities (Griffith University, 1994) in order to conduct self-assessment and independent assessment of their activities and results obtained, and to evaluate the university's quality management system. The Benchmarking Guide is intended:

- to provide the university's senior management with tools for identifying development trends and conducting continuous improvement of activities;
- for structural units of universities wishing to compare the quality of various types of their activities;
- to determine the competitiveness of the university.

The Belgian-Dutch model (HBO Expert Group) or «Method for improving the quality of higher education based on the EFQM model» was developed in 1999 by an expert group consisting of representatives from the

Netherlands, Denmark and Belgium. The method is focused on quality management issues in higher education institutions and can be used for self-assessment and determining directions for improving the activities of an educational institution, and also allows universities to thoroughly prepare for an external check (Yelezhanova, 2020).

ENQA standards and guidelines. To coordinate the development of European quality standards and solve the problems of certification and accreditation of educational programs and institutions, the European Network (Association) of Quality Assurance Organizations (ENQA) in the field of higher education was created. In accordance with the decision of the Berlin Declaration, ENQA has developed the «Standards and Guidelines for Quality Assurance of Higher Education in the European Region». This document is the basis for building systems of internal and external assessment and quality assurance of education and accreditation of European agencies for assessing the quality of education (Permyakov, 2007).

Each model is applied in universities of different countries depending on the policy and structure of the educational institution. As is known, Kazakhstan has chosen a management model based on the requirements of international quality standards ISO 9000:2000. The choice of the model is most likely explained by the presence of the following advantages (Ingason, 2015): the transformation of the educational process into a modern system focused on quality, i.e. focused on meeting the needs of stakeholders and, first of all, the student as the main consumer of education; improving the quality of the recruitment of applicants; growth in the level of attendance and academic performance of students; advantages in licensing and certification; measurability of indicators by which teaching work is evaluated; growth in the level of competence of teachers, improvement of the level of qualification in conducting disciplines; clear planning of the class schedule, advance information about changes in the schedule and replacements of teachers;

streamlining the management of external and internal documentation, including in cases of changes made to the documentation, and familiarizing specialists with them; increasing the overall competitiveness and image of teachers and the university; visibility of the university's compliance with the accreditation indicator «effectiveness of the intra-university system for ensuring the quality of education».

Conclusion. The quality of education is the conformity of education (as a result, as a process, as a social system) with the diverse needs and interests of the individual, society, and the state; it is a systemic set of hierarchically organized, socially significant essential properties (characteristics, parameters) of education (as a result, as a process, as a social system) or a set of consumer properties of an educational service that provides the opportunity to satisfy a complex of needs for the comprehensive development of the student's personality. The main factors that determine the quality of education are: the teaching staff; educational and methodological support; material and technical base; intellectual potential of the educational institution; students and graduates. The main task of the educational policy of the Republic of Kazakhstan is to ensure high quality of education based on maintaining its fundamentality and compliance with the current and future needs of the individual, society and the state. To address the challenge of ensuring professional competence quality in higher education, a transition to an integrated pan-European system has been implemented, along with the introduction of effectiveness and efficiency systems (Yelezhanova et al., 2020). These systems include: An evaluative method for managing university quality activities, specifically SWOT analysis (Puyt et al., 2020); Total Quality Management (TQM) strategy (Taskov & Mitreva, 2015); An approach based on the requirements of international quality standards ISO 9000:2000 (Ingason, 2015). These initiatives aim to enhance the quality assurance processes in higher education institutions and align them with international standards (Fernández Cruz et al., 2016).

References

Arcaro, J. (1995). Quality in education: An implementation handbook. CRC Press.

Barrett, A. M., Lowe, J., Nikel, J., Ukpo, E., & Chawla-Duggan, R. (2006). The concept of quality in education: A review of the 'international'literature on the concept of quality in education. URL: https://assets.publishing.service.gov.uk/media/57a08c3de5274a31e0001115/intqual.pdf

Belohlav, J. A., Cook, L. S., & Heiser, D. R. (2004). Using the Malcolm Baldrige national quality award in teaching: one criteria, several perspectives. Decision Sciences Journal of Innovative Education, 2(2), 153-176. DOI: https://doi.org/10.1111/j.1540-4609.2004.00045.x

Calvo-Mora, A., Leal, A., & Roldán, J. L. (2006). Using enablers of the EFQM model to manage institutions of higher education. Quality Assurance in Education, 14(2), 99-122. DOI: https://doi.org/10.1108/09684880610662024

Chapman, D. W., & Adams, D. K. (2002). The quality of education: Dimensions and strategies. Hong Kong: Asian Development Bank.

Crawford, L. E., & Shutler, P. (1999). Total quality management in education: problems and issues for the classroom teacher. International Journal of Educational Management, 13(2), 67-73. DOI: https://doi.org/10.1108/09513549910261122

Doherty, G. D. (2008). On quality in education. Quality assurance in Education, 16(3), 255-265. DOI: https://doi.org/10.1108/09684880810886268

Fernández Cruz, F. J., Egido Galvez, I., & Carballo Santaolalla, R. (2016). Impact of quality management systems on teaching-learning processes. Quality Assurance in Education, 24(3), 394-415. DOI: https://doi.org/10.1108/QAE-02-2015-0010

Frederiks, M. M., Westerheijden, D. F., & Weusthof, P. J. (1994). Effects of quality assessment in Dutch higher education. European Journal of Education, 29(2), 181-199. URL: https://www.jstor.org/stable/1503744

Griffith University, & Meade, P. (1994). A guide to benchmarking. Brisbane: Griffith University.

Hopkins, D. (2015). Improving the quality of education for all: A handbook of staff development activities. Routledge.

Hoy, C., Bayne-Jardine, C., & Wood, M. (2005). The Quality Business. In Improving Quality in Education (pp. 10-26). Routledge.

Ingason, H. T. (2015). Best project management practices in the implementation of an ISO 9001 quality management system. Procedia-Social and Behavioral Sciences, 194, 192-200. DOI: https://doi.org/10.1016/j.sbspro.2015.06.135

Kusainov A.K. Kachestvo obrazovaniya v mire i v Kazahstane // Almaty, 2013.– 268 s

Laevers, F. (Ed.). (1994). Defining and assessing quality in early childhood education (No. 16). Leuven University Press.

Navaratnam, K. K. (1997). Quality management in education must be a never-ending journey. Educational Dilemmas: Debate and Diversity, 6.

Puyt, R., Lie, F. B., De Graaf, F. J., & Wilderom, C. P. (2020). Origins of SWOT analysis. In Academy of management proceedings (Vol. 2020, No. 1, p. 17416). Briarcliff Manor, NY 10510: Academy of Management. DOI: https://doi.org/10.5465/AMBPP.2020.17416

Taskov, N., & Mitreva, E. (2015). The motivation and the efficient communication both are the essential pillar within the building of the TQM (total quality management) system within the Macedonian Higher Education Institutions. Procedia-Social and Behavioral Sciences, 180, 227-234. DOI: https://doi.org/10.1016/j.sbspro.2015.02.109

Vlašić, S., Vale, S., & Puhar, D. K. (2009). Quality management in education. Interdisciplinary Management Research, 5, 565-573.

Yelezhanova, S., Myrzasheva, A., Khairzhanova, A., Syrbayeva, S., Shuakbayeva, R., Myrzagereikyzy, G., ... & Tilegenova, T. (2020). Current quality assurance methods for higher education activities. Dilemas Contemporáneos: Educación, Política y Valores, 7(2). URL: https://www.dilemascontemporaneoseducacionpoliticayvalores.com/index.php/dilemas/article/view/2177

Zaharias, P., & Pappas, C. (2016). Quality management of learning management systems: A user experience perspective. Current Issues in Emerging eLearning, 3(1), 5. URL: https://scholarworks.umb.edu/ciee/vol3/iss1/5/

Пермяков О.Е. Совершенствование системы качества образовательного учреждения высшего профессионального образования в контексте требований ENQA // Университетское управление: практика и анализ. – 2007. – №3. – С. 97-101.

References

Arcaro, J. (1995). Quality in education: An implementation handbook. CRC Press.

Barrett, A. M., Lowe, J., Nikel, J., Ukpo, E., & Chawla-Duggan, R. (2006). The concept of quality in education: A review of the 'international' literature on the concept of quality in education. URL: https://assets.publishing.service.gov.uk/media/57a08c3de5274a31e0001115/intqual.pdf

Belohlav, J. A., Cook, L. S., & Heiser, D. R. (2004). Using the Malcolm Baldrige national quality award in teaching: one criteria, several perspectives. Decision Sciences Journal of Innovative Education, 2(2), 153-176. DOI: https://doi.org/10.1111/j.1540-4609.2004.00045.x

Calvo-Mora, A., Leal, A., & Roldán, J. L. (2006). Using enablers of the EFQM model to manage institutions of higher education. Quality Assurance in Education, 14(2), 99-122. DOI: https://doi.org/10.1108/09684880610662024

Chapman, D. W., & Adams, D. K. (2002). The quality of education: Dimensions and strategies. Hong Kong: Asian Development Bank.

Crawford, L. E., & Shutler, P. (1999). Total quality management in education: problems and issues for the classroom teacher. International Journal of Educational Management, 13(2), 67-73. DOI: https://doi.org/10.1108/09513549910261122

Doherty, G. D. (2008). On quality in education. Quality assurance in Education, 16(3), 255-265. DOI: https://doi.org/10.1108/09684880810886268

Fernández Cruz, F. J., Egido Galvez, I., & Carballo Santaolalla, R. (2016). Impact of quality management systems on teaching-learning processes. Quality Assurance in Education, 24(3), 394-415. DOI: https://doi.org/10.1108/QAE-02-2015-0010

Frederiks, M. M., Westerheijden, D. F., & Weusthof, P. J. (1994). Effects of quality assessment in Dutch higher education. European Journal of Education, 29(2), 181-199. URL: https://www.jstor.org/stable/1503744

Griffith University, & Meade, P. (1994). A guide to benchmarking. Brisbane: Griffith University.

Hopkins, D. (2015). Improving the quality of education for all: A handbook of staff development activities. Routledge.

Hoy, C., Bayne-Jardine, C., & Wood, M. (2005). The Quality Business. In Improving Quality in Education (pp. 10-26). Routledge.

Ingason, H. T. (2015). Best project management practices in the implementation of an ISO 9001 quality management system. Procedia-Social and Behavioral Sciences, 194, 192-200. DOI: https://doi.org/10.1016/j.sbspro.2015.06.135

Kusainov A.K. Kachestvo obrazovaniya v mire i v Kazahstane // Almaty, 2013.– 268 s

Laevers, F. (Ed.). (1994). Defining and assessing quality in early childhood education (No. 16). Leuven University Press.

Navaratnam, K. K. (1997). Quality management in education must be a never-ending journey. Educational Dilemmas: Debate and Diversity, 6.

Puyt, R., Lie, F. B., De Graaf, F. J., & Wilderom, C. P. (2020). Origins of SWOT analysis. In Academy of management proceedings (Vol. 2020, No. 1, p. 17416). Briarcliff Manor, NY 10510: Academy of Management. DOI: https://doi.org/10.5465/AMBPP.2020.17416

Taskov, N., & Mitreva, E. (2015). The motivation and the efficient communication both are the essential pillar within the building of the TQM (total quality management) system within the Macedonian Higher Education Institutions. Procedia-Social and Behavioral Sciences, 180, 227-234. DOI: https://doi.org/10.1016/j.sbspro.2015.02.109

Vlašić, S., Vale, S., & Puhar, D. K. (2009). Quality management in education. Interdisciplinary Management Research, 5, 565-573.

Yelezhanova, S., Myrzasheva, A., Khairzhanova, A., Syrbayeva, S., Shuakbayeva, R., Myrzagereikyzy, G., ... & Tilegenova, T. (2020). Current quality assurance methods for higher education activities. Dilemas Contemporáneos: Educación, Política y Valores, 7(2). URL: https://www.dilemascontemporaneoseducacionpoliticayvalores.com/index.php/dilemas/article/view/2177

Zaharias, P., & Pappas, C. (2016). Quality management of learning management systems: A user experience perspective. Current Issues in Emerging eLearning, 3(1), 5. URL: https://scholarworks.umb.edu/ciee/vol3/iss1/5/

Permyakov, O. E. (2007). Sovershenstvovaniye sistemy kachestva obrazovatel'nogo uchrezhdeniya vysshego professional'nogo obrazovaniya v kontekste trebovaniy ENQA [Improving the quality system of a higher professional education institution in the context of ENQA requirements]. Universitetskoye upravleniye: praktika i analiz - University Management: Practice and Analysis, (3), 97-101. [in Russian]

SH.KOLUMBAYEVA¹*, B.NARBEKOVA¹, A.TANATOVA¹

¹Abai Kazakh National Pedagogical University (Almaty, Kazakhstan)
*e-mail: kolumb_09@mail.ru

SWOT ANALYSIS OF KAZAKHSTANI STUDENTS' NETWORK INTERACTION IN VIRTUAL SPACE

Abstract

The article presents an analytical review of theoretical material on the study of the problem of network interaction in virtual space and the identification of the attitude of Kazakhstani students of pedagogical specialties of higher educational institutions to virtual communication and interaction in social networks. The trends of the influence of the Internet and digital resources on the development of networking and learning are studied. A SWOT analysis of the features of youth network interactions in the virtual space is presented, recommendations are given on managing existing risks in the development of online student interaction in the digital educational space. The authors have developed two models, one is related to the influence of network interaction on the formation of a network communicative culture of students, the second represents a network communicative culture of interaction between students and university teachers.

Keywords: virtual communication, online communication, network interactions, digital culture, digital ethics, virtual educational space.

Introduction. In modern conditions, there is a significant growth of the Internet and digital technologies in the field of communication and social relations, which have changed the methods and forms of interaction itself. Network interaction and communicative Internet culture determine the methods and rules of user interaction in the digital virtual space. This includes not only the ability to correctly interpret and respond appropriately to online communication, but also the ability to create a supportive and productive environment for all participants in online communities. In these conditions, work related to informing students about compliance with the rules of balanced online and offline interactions on the network, as well as developing online socialization and communication skills, is relevant.

Research into digital interactions can help identify potential threats and challenges associated with the use of the Internet and social media. This may concern not only cybersecurity, but also the threat of disinformation and manipulation through digital platforms. Understanding these threats and developing strategies and technologies to overcome them are becoming increasingly important in today's information society, helping to ensure the effective and safe use of digital technologies, where the online space is already becoming an integral part of our daily lives.

Modern society observes that social networks, originally created as entertainment content, have evolved from basic chats to serious mobile applications (Kacker and Saurav, 2020), providing unlimited opportunities for establishing personal contacts, exchanging opinions, comments, various documents in a wide Internet space without restrictions (Antonetti and Crisafulli, 2021), creating virtual communities, uniting all users (Barlettetal, 2018), thereby demonstrating the global popularity and widespread use of platforms such as Facebook, Twitter, Instagram, Snapchat (Alhabasn and Ma, 2017).

The massive passion of users for social platforms (Facebook, Twitter, Instagram, Snapchat) attracted the attention of foreign scientists (Grieve, 2017; Meshietal, 2020; Macksonetal, 2019; Johnsonetal, 2020; Oladimeji and Kyobe, 2021; InaraRodis, 2021) in studying their features and capabilities , identifying the social activity of users, ranging from the amount of daily time spent on platforms, studying the choice of content of users, to identifying their true motives in establishing interpersonal interaction with other network participants.

Online communities based on personal and professional interests, hobbies, political beliefs, religious ideology, or cultural identities. Virtual communities on the Internet play a significant role in shaping social dynamics and culture. They bring people together with common interests and goals, providing platforms for information exchange, support and socialization. Therefore, we believe that a social network, providing any user with freedom of speech and expression, is a powerful tool in the Internet space that remotely influences the perception, consciousness, attitude and worldview of users. Any of our comments or actions on a social network entail at least certain emotional reactions from both an individual user and a certain community. Content quality, digital culture and user etiquette are integral components in the development of constructive or destructive network interaction and communication. The quality of life in the virtual space depends not only on digital competence, but also on the skills of critical thinking, reflection and self-regulation, which allow users to distinguish truth from misinformation and maintain healthy online interactions.

Social networks, being an integral part of our daily life, affect the development of personal relationships, education, career, arrangement and quality of life. With just one click on the Internet you can solve everything (get to know each other, support, exchange opinions, knowledge, work experience, buy something, etc.) or destroy everything in one mig (support and incite disinformation, expose or be subjected to trolling, cyberbullying, etc.p.).

Materials and methods. Network interaction and online communication in the Internet play an important role in modern society, defining new opportunities and forms of communication through E-mail, chats, forums, video conferencing, learning platforms, social networks and other online platforms that allow users to exchange information and interact online or real time.

Online communication differs from traditional offline communication in its asynchrony, the possibility of anonymity and wide access to information. These features influence the perception of messages, emotional reactions and the formation of a level of trust and security between participants in online interaction. A social network, providing any user with freedom of speech and expression, is a powerful tool in the Internet space that influences the perception, consciousness, attitude and worldview of users.

Online communication also affects the processes of socialization and cooperation, leading to the formation of virtual relationships (short-term, long-term). Virtual relationships can have both positive and negative effects on the mental well-being of participants. They can help improve self-esteem, social support and expand social circles, but can also be a source of stress, cyberbullying and isolation.

Reality shows that the harm caused by the Internet and digital technologies to the emotional and personal states of network users is increasing. All these problems require deeper understanding and study by society.

The purpose of this article is to present a SWOT analysis of the study of the process of development of network interaction in virtual space among students of pedagogical specialties.

With the development of social networks, instant messengers and online platforms, new opportunities for communication have emerged, which has led to the formation of virtual relationships. These relationships can be either short-term (for example, through online games or forums) or long-term (including online friendships and romantic relationships).

It should be noted that with the advent of the pandemic, the possibilities for using various training formats have rapidly expanded, from "on-line", distance learning, mobile, "off-line", "blended learning" to the use of artificial intelligence ("LeanDash"). Social networks have become more active and have become an integral part of communication in various areas from leisure, educational to professional.

With the spread of the Internet, cases of digital violence and bullying are increasingly occurring, which can lead to serious psychological problems for Internet users, including frustration, isolation, depression and suicidal thoughts.

In our opinion, the work of Eraslan and Kukuoglu (2019) is attractive with the hypothesis

that most people are prone to the manifestation of network social addiction, which manifests itself in many users as a certain source of providing social self-realization and interaction with other users through the provision of audio and visual content. Scientists actualize that unlimited access to certain network content, demonstrating the visual component of the user's lifestyle and thoughts, can cause other opponent users, along with minor pleasant moments, to a greater extent - unfavorable emotional reactions, leading to isolation. The reaction of opponents online, and even more so their aggressive comments, can be irresponsible and unsafe.

For Internet users, social interaction in an online community presents different emotional appeals, immersing users in experiencing a palette of reactions from pleasant online communication to the manifestation of unfavorable digital behavior with manifestations of aggression (Whittaker and Kowalski, 2014; Lietal, 2020; Peterson and Densley, 2017; MCCreery and Krach, 2018; Malmasietal, 2019; Coyneetal, 2008; Lietal, 2020).

The content used on social networks has a different impact on the emergence and development of the emotional state of Internet users. Recently, there has been a noticeable increase in research examining the influence of network interaction on the emergence of frustration and aggression (Breuer and Elson, 2017; Alhabash and Ma, 2017; Tia Porterfield, 2022).

Reality shows that the harm caused by the Internet and digital technologies to the emotional and personal states of network users is increasing. All these problems require deeper understanding and study by society. For example, various aspects of the influence of network communication on social and personal processes are reflected in foreign works (Rogers, E. M. 1986; Castells, 2001; Adler & Rodman, 2006; Fontaine, 2007; Boyd, d., & Ellison, N. B., 2007; Littlejohn & Foss, 2008; DeVito, 2019).

An overview of the development of social networks is presented in the work of DanahBoyd and Nicole B Ellison (2008), who explore their influence on the development of users'

personal identity and the formation of social relationships.

The works of Karpenko A.S., Churochkina L.A. studied the influence of social media on adolescents. The development of the worldview of young people was studied by Koryagina S.A., Kravchenko I.O. In addition, N.E. Simonovich examined the consciousness and psyche of young people, the perception of social support and the development of interpersonal relationships are reflected in the works of Kallin K., Milgrom L.M. (2015), virtual interaction was studied by Ioana-Narcisa Crețu, Melissa Harris, features of working in virtual teams and strategies for effective management are presented in the works of Terri R. Kurtzberg, ethical issues associated with online communications and social networks are considered Rafael Capurro – Christoph Pingel.

Kazakhstani scientists studied Internet communications and the characteristics of the Kazakhstani Internet community (Chernykh I., 2014), identified the needs for the use of the Internet and social networks by medical students (Mingisheva N.A., 2018), and considered issues formation of cultural identity (B.Karipbayev, 2019), the influence of social networks on communication processes (Marmontova T., Tazhibaev A.,2023), interaction in online communities (Moglan, D.V., 2014), the potential and prospects are analyzed development of online participation of citizens in Kazakhstan (Zhusuppova A., 2021). The conducted research emphasizes the relevance and importance of digital technologies and Internet communications in expanding the cultural and social ties of Kazakh society, the formation of a new open consciousness of citizens and the interaction between government and education of society.

Results. In this article, we rely not only on an analytical review of theoretical material on studying the problem of network interaction in virtual space, but also study the attitude of Kazakh university students to virtual communication and interaction in social networks. We used content analysis, SWOT analysis and methods of theoretical study, comparison, generalization of the work of foreign and domestic scientists who have studied issues of digitalization, online communication and interaction in the Internet

space. The SWOT analysis based on the results of a student survey we conducted, which made it possible to identify and analyze the data obtained in the context of existing network interactions in the virtual space, summarize them, and present recommendations.

A theoretical review on the topic under study allowed us to create a questionnaire that included 5 sections studying students' opinions about the level and quality of communication, interaction, and establishing relationships in online communities.

We focused on students born in the new millennium and inseparable from the Internet to understand how they perceive virtual relationships and how this reflects on their personality. It was important for us to determine how Kazakh students understand virtual support, love, friendship, enmity and sympathy in the online community.

Our goal was to identify the personal attitude of pedagogical students towards virtual communication and interaction. Based on this, the first section of the questionnaire allowed us to study demographic information about the respondents - age, gender, course of study. The second section contained questions regarding "following" (virtual support). The third section examined students' understanding of virtual love. The fourth section revealed the respondents' attitude towards "friending" (virtual friendship). The fifth section analyzed students' attitudes towards trolling.

The survey was conducted anonymously and covered 430 students from various universities of the Republic of Kazakhstan studying in pedagogical specialties from first to 4th year. The results of the survey collected anonymously via Google Drive; after conducting an online survey, the data were summarized and analyzed. A detailed analysis of the results obtained is presented in the article "Monitoring virtual romantic relationships and behavioral deviations among university students in Kazakhstan in the "on-line community".

Discussions. The analysis of theoretical material allowed us to develop a model of the influence of network interaction on the formation of a network communicative culture of students (Fig. 1.).

Digital etiquette and digital culture, in our understanding, should not be considered in isolation from each other, because only in tandem can they influence the process of forming a network communication culture among users. For this purpose, the university needs specially create an educational environment with a full package of necessary educational resources and high-quality digital content of relevant content. This, in a way, will become the basis for the development of digital competencies and digital etiquette among students, which will assist in establishing constructive network interactions with other users of the virtual space: from simple effective online communication, exchange of comments, subscription to significant accounts (following) to the establishment of strong secure personal connections and friendships (friending, virtual friendship).

The model demonstrates how digital work and communication skills today expand the boundaries of knowledge and interaction, helping, through joint learning and development, to come to one's own deeper study and understanding of the material, analyzing the situation and making thoughtful and correct decisions. The development of digital competence, along with critical thinking and the ability to navigate in the virtual space, will help students from self-learning and self-regulation skills to achieve self-realization and self-affirmation.

In the model, we presented how the quality of the network interaction itself in the virtual space can both influence the development of the individual himself and the formation of his digital communication, and also have a negative impact on his destructive network behavior, manifested as hating, trolling, flames, cyberbullying.

Virtual communication and relationships are a complex and multifaceted problem that requires attention to the psychological, social, ethical and legal aspects of the lives of network users. Understanding this interaction, and developing appropriate strategies and policies, will help ensure the effective and safe use of digital technologies in a world where the online space is becoming an integral part of our daily lives. The refore, in our opinion, the issue of studying the culture and etiquette of online communication

and interaction in the digital educational space is becoming increasingly relevant and important. In addition, the communication culture of the digital generation requires close study and development of innovative methods for creating a network communication culture and digital etiquette for teachers and students of higher educational institutions.
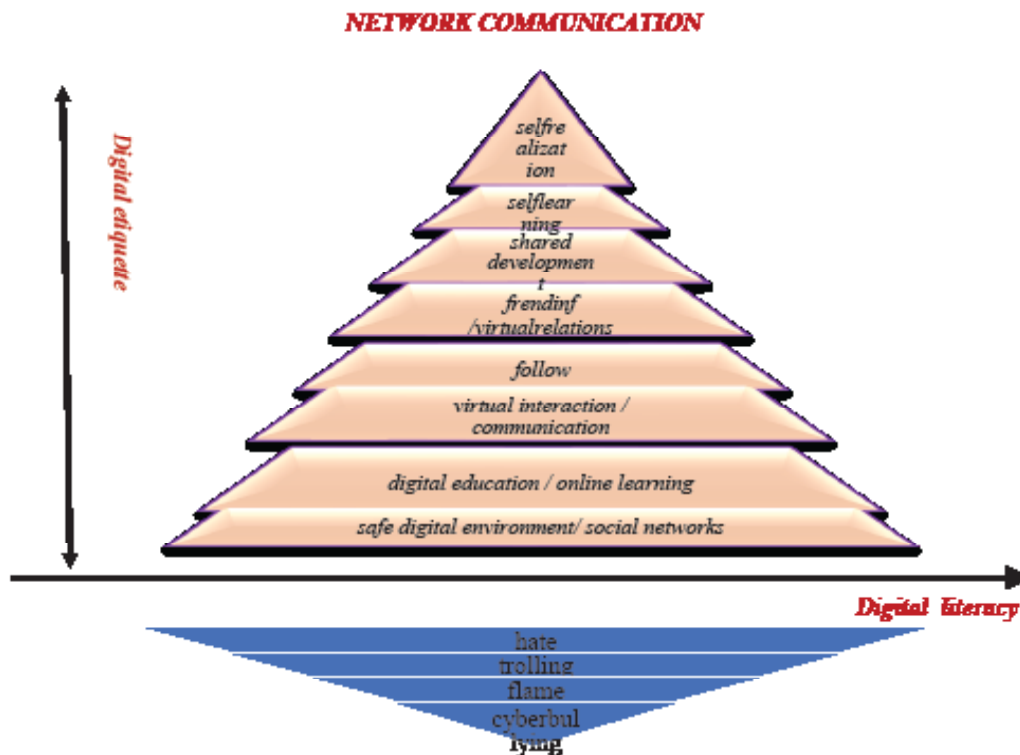
Figure 1: Model of the influence of network interaction on the formation of a network communicative culture of students

Before presenting the final SWOT analysis of the identified patterns based on statistical data, the results obtained for each individual section of the survey, starting from the 2nd to the 5th inclusive, should be discussed.

The results of the 2nd section of the survey revealed that students actively use social networks to subscribe to interesting accounts and receive motivation from online communities. Virtual communication is definitely important for many. For example, most students:

- understanding "following" as subscribing to interesting accounts on social networks, they demonstrate their desire to be aware of current events and content;

- appreciate motivating posts and comments, which confirms the importance of psychological support online and motivation in the online environment (community);

- highly appreciate the importance of virtual communication, which indicates its importance in the modern world, although a significant part of students also recognize that communication in real life is still of greater importance;

- are skeptical about the idea of using following to improve their visibility and interaction in the online environment, especially in relation to teachers.

At the same time, respondents' opinions divided regarding the importance for them of following other students and teachers. Most students prefer to use following in moderation to improve the quality of their online presence. This may be due to the risks associated with virtual space and the existing fear of using following for the purposes of personal fame and popularity. Therefore, students use following to stay relevant, informed and motivated through social media content.

The final data of the 3rd section of the questionnaire, regarding questions of virtual love, indicate that the majority of respondents:

- have a neutral attitude towards virtual love, although there are also significant amounts of wariness and negative perception;

- recognize that virtual love can arise and develop through various virtual forms of establishing interpersonal contact (text messages, video calls, other online forms of communication);

- prefer offline relationships, considering them more meaningful and fulfilling;

- attracts the possibility of international communication and expanding the circle of acquaintances through virtual platforms.

Among the respondents were those who had never encountered virtual love and those who, having experienced it and not receiving the desired effect (satisfaction), left it.

The results obtained allow us to state that students, seeing the potential in virtual relationships for establishing an emotional connection, continue to maintain a wary or neutral attitude towards it. They believe that virtual relationships cannot completely replace offline communication, so they prefer traditional forms of communication for more meaningful and long-term relationships.

Statistical data from the 4th section of the questionnaire determined the respondents' attitude towards "friending" from positive to wary. The results show that students have varied perceptions and attitudes towards virtual friendship. Most people see "friending" as an opportunity for online dating and expanding their social circle, but there is also some skepticism. For example, many remain wary or have a neutral attitude towards virtual friendships. Offline communication is still the preferred option for most students, despite the proliferation of online communication and dating options.

The fifth section of the survey made it possible to identify attitudes towards trolling and determine its manifestations on the social network. The results show that students have a clear understanding of trolling as a form of online aggression or harassment that manifests itself as a negative phenomenon in the online environment. Most of them have not encountered trolling or prefer to avoid controversial discussions online, as well as participation in conflict situations. In response to trolling, the main strategies are to ignore or block the user. Students also tend to deny both their own use of trolling and the possibility of its use in critical situations.

In general, students still show developed awareness and maintain a balance in their use of online social platforms in interaction with other users. They appreciate the opportunities that social networks provide, but prefer to maintain a common sense approach to using them for personal and professional growth, as well as for forming interpersonal connections.

Analysis of the results obtained among the students surveyed demonstrated both positive and negative aspects identified in virtual relationships. The generalized conclusions presented in the SWOT table (Table 1).

Table 1. *SWOT analysis of respondents' attitudes towards network interactions in virtual space*

Strengths	Weakpoints
1. For some students, following is motivating and useful in an online community.	1. Most students prefer real relationships instead of virtual ones.
2. Most respondents understand what following, friending, and bullying are.	2. Some students take friending unreasonably seriously and understand it as providing mutual support and exchanging various data with network participants.
3. For some, virtual love provides an opportunity for emotional expression and communication.	3. For many students, following other users does not improve their own comfort in the online environment.
	4. Some students doubt that friending can replace personal communication in real life.
	5. Some students are ready to continue virtual love offline.
	6. Some students do not understand what following is, and also cannot explain what virtual love and trolling are.

Opportunities	Threats
1. Most students through networking see the prospect of communicating with various people from other foreign countries. 2. Friendlingcan be considered as a completely new way to qualitatively expand your social circle and add new friends. 3. Students can use online interactions to express emotions and motivate other users.	1. Some students show a negative attitude towards various forms of network interaction in the virtual space. 2. Some students take virtual love quite seriously, which can lead them to the illusion of reciprocity and depth of feelings. 3. Some students are attracted to virtual communication and interaction by the freedom of emotional self-expression and maintaining anonymity. 4. Some students themselves were subject to trolling, while others used it.

The data of the presented SWOT analysis indicate the existing contradictory facts regarding the attitude of the surveyed students to virtual relationships. So, for example, along with those who are clearly aware of the real relevance, understand the essence of online relationships, and also know how to interact in the Internet space, there are also those who are either not yet aware or have had negative experiences in online communications and interactions. Therefore, network interaction evokes various emotions in respondents, from potentially approving to extremely wary. This can be an important aspect in teaching students the emotional intelligence that is so necessary in the virtual space. The refore, it is important to take these factors into account and create safe and useful conditions for students to effectively use the networking capabilities of the Internet. In this regard, a SWOT analysis of students' attitudes towards network interaction made it possible to determine what specific measures the education system needs to take to manage existing risks and shortcomings. Recommendations are presented in the table (Table 2).

Based on the proposed recommendations, we could note that educational activities will help students make informed decisions:

- in building constructive virtual relationships;
- using social media for personal and professional development;
- demonstrating safe and ethical behavior in the online environment;
- in building constructive dialogues and discussions with all network users.

Table 2. *Recommendations for managing existing risks in the development of network interaction among students in the virtual space*

Recommendations for developing network communication skills in students,based on the forms of virtual interaction:

following	frending	virtuallove	trolling
Conduct educational activities, covering them in the mass media (digital educational space), organizing training programs (courses, trainings) to improve network literacy, digital competencies, digital etiquette, which influence the development of the following skills in students:			
- maintaining confidentiality and security in the Internet space; - awareness and identification of risks (threats) when reading and publishing comments on the Internet; - critical thinking, from the skills of analyzing and evaluating online publications to the ability to recognize possible threats on the network;	- recognizing and understanding one's own needs and motives of Internet users; - understanding and managing your emotions; - showing empathy towards other users; - listening carefully and understanding the online interlocutor; - expressing your thoughts in a clear and	- understanding the value of privacy and security; - knowledge of the psychological aspects of virtual relationships; - conscious understanding of the existing differences between virtual and offline relationships; - reflection on possible risks (threats, consequences) associated with virtual communication and interaction; - critical thinking, from the skills of analyzing and evaluating	- compliance with the basics of security in the Internet space; - understanding and distinguishing the types and characteristics of destructive communication on the network; - self-control and not allowing reactions to various provocations; - conflict management in the online environment;

- effective use of the social network for personal and professional development.	- maintaining safety and building healthy relationships in online friendships.	information on the Internet, to the skills of recognizing fakes, manipulation and deception on the Internet.	- application of digital etiquette and digital culture in online discussions; - using safe methods of responding and protecting against online aggression.

Develop skills in observing the rules of digital culture, digital etiquette and network communication culture in the Internet space

To this end, it is necessary to inform students about maintaining balanced online and offline interactions on the network, as well as to develop their online socialization and communication skills. These skills and competencies will help students effectively manage the quality of their online participation online (correctly interpret and respond appropriately to online communication, create a supportive and productive environment for all participants in online communities), develop emotional intelligence, healthy relationships, and avoid potential risks related to the use of social networks and Internet platforms in communication and interaction.

To summarize, we can actualize that students can use social networks as a tool for searching for information, working, participating in-group educational projects, expanding their social circle, etc. Therefore, social networks play an important role in the development of personal potential, creativity, self-expression and self-realization. Not only by consuming the content of other users, but also by creating and distributing one's own through following, friending and virtual relationships (Fig. 1). Thus, one of the important tasks of the education system is to teach students digital literacy, digital etiquette, and critical thinking in the field of networked social media. To this end, it is necessary to analyze not only the negative aspects of the influence of the social network, but also find ways to use them in the positive development of the personal and professional development of students (Fig. 1). Based on the above, we have developed a model of a network communicative culture of interaction between students and teachers in virtual space (Fig. 2).

The model demonstrates the process of high-quality establishment of interpersonal contacts between students and university teachers in the virtual space. This model, while maintaining the student-centered learning paradigm, reflects the essence and importance of the processes of self-learning and mutual learning of students in the digital educational environment, based on mandatory effective network interaction and online communication. Accordingly, the level and quality of timely provision by teachers and students of constructive feedback (help) to needy students in accordance with their requests and needs, then, accordingly, their level of development of self-regulation, from self-learning skills to self-affirmation and self-realization depends on this.

A generalized analysis of literary sources and interpretation of the results of a student survey allowed us to conduct an integrated comparative SWOT between existing problematic aspects and the potential of network interaction in the virtual space. The analysis is presented in the form of a SWOT table (Table 3).
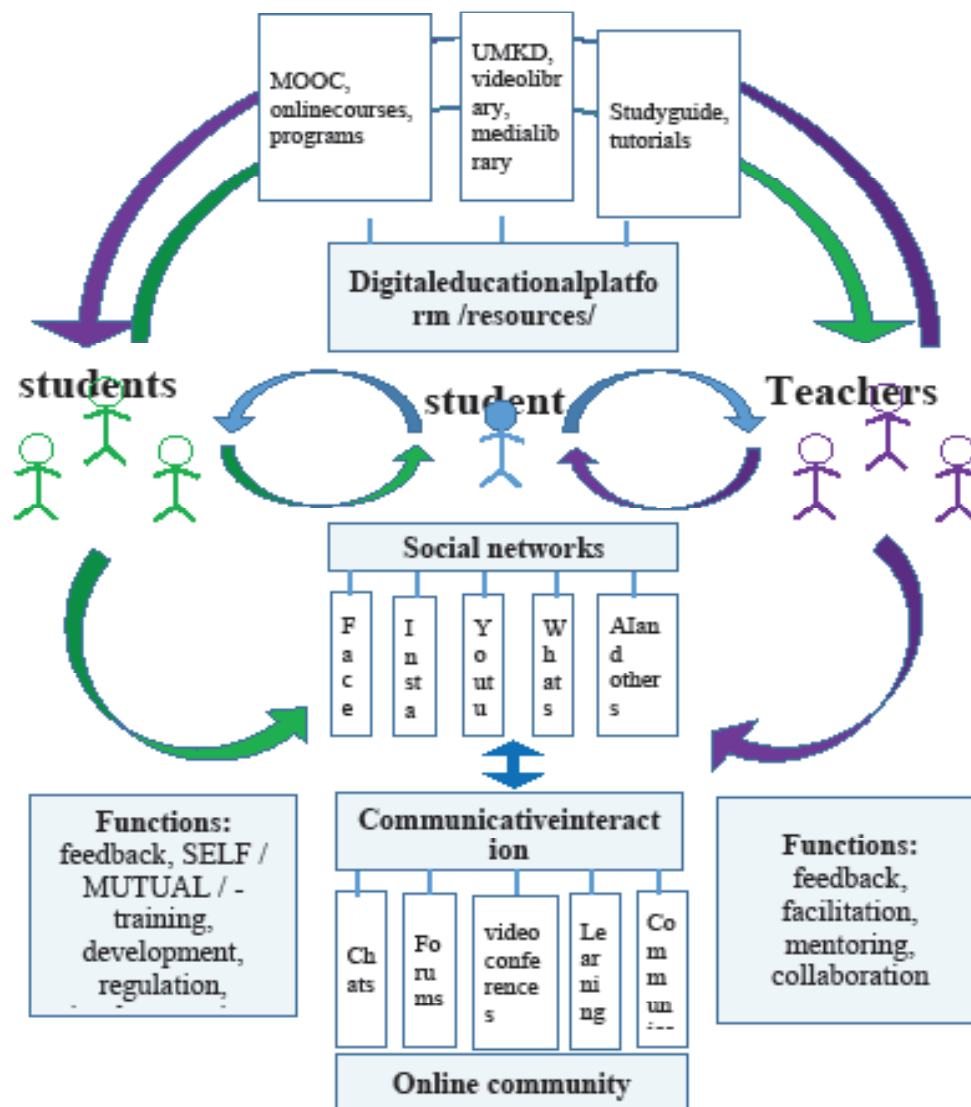
Figure 2: Model of network communication culture of interaction between students and university teachers in virtual space

Table 3. *SWOT analysis of the quality of network interaction in the virtual space*

strengths	weakpoints
- Global availability and scale. Virtual space allows university students and teachers quick and easy access to information and communication regardless of physical, geographic location, promoting intercultural exchange, intercultural understanding and expanding social circles, providing access to educational resources anytime and anywhere. - Expanding learning opportunities. The virtual learning environment provides access to a variety of learning resources, courses and experts from around the world, helping to raise educational standards and learning opportunities while providing additional materials, interactive activities and feedback.	- Technical problems and availability. Uneven access to high-speed Internet and the need for specialized equipment can create barriers to full participation in virtual communication. - Dependence on technology. Internet connection failures or technical problems can lead to interruptions in communication, learning and work. -Lack of personal contact and interpersonal connections. Virtual learning may not provide the full development of interpersonal skills and the formation of personal connections between students and teachers,which are very important for creating an educational environment. - Limited non-verbal elements of communication.

This contributes to the effectiveness of the exchange of knowledge and experience between all participants in the educational process of the university.

- Efficiency of communication. The use of modern technologies enables fast and multi-channel communication through text messages, video calls, forums, chats and online platforms, which develops socialization and promotes improved cooperation and information exchange.

- Effective interaction and feedback. The possibility of instant exchange of information and feedback between students and teachers helps improve the quality of the educational process and a student-centered approach to each teacher, based on his needs and capabilities.

Virtual interaction is devoid of non-verbal signals (gestures, facial expressions) and physical presence, which sometimes makes it difficult to convey emotions and understand implicit signals. It can lead to misunderstandings and a decrease in the emotional tone of communication.

- Limited non-linguistic capabilities. Not all platforms support multilingual interfaces and translation functions, which may limit access and interaction for participants from different countries and cultures.

- Data security and privacy. Possible threats to data security and information confidentiality may arise during the use of virtual educational platforms. Therefore, the risk of data leaks and privacy violations when exchanging information in the virtual space requires careful monitoring and protection.

Opportunities	Threats
- Development of digital skills. Virtual interaction helps develop digital literacy and skills in working with new technologies, which is a key aspect of preparing for the modern job market. - Innovative technologies and teaching methods. Opportunities to use new technologies, such as virtual and augmented reality, adaptive learning and online games, help improve the educational process and attract students to learning activities. - Development of flexible forms of training. The possibility of distance learning and online courses creates new opportunities for the university educational process and professional development. - Improving access to education. The ability to learn and interact remotely contributes to the accessibility of education for the general population and people with disabilities. - Increase in social activity. Networking promotes the development of social skills and creates opportunities to participate in various projects and initiatives.	- Digital divide. Limited access to technology and the internet can create digital inequality and exclude certain groups from education and interaction. - Cybersecurity. The threat of cyber-attacks and data privacy violations in virtual environments is increasing, requiring increased attention to the protection of personal information and data of participants. - Limited social connection. Prolonged virtual interaction can lead to social isolation and decreased quality of interpersonal relationships, especially in the absence of regular face-to-face communication. - Cultural and language barriers. Differences in cultural norms and language barriers can make it difficult for participants from different regions and countries to effectively communicate and understand. - Quality of the educational process. The possibility of loss of quality of the educational process due to the limitations of the virtual format, lack of motivation among students or insufficient qualifications of teachers. -Technology Addiction. Unavailability of technologies or their malfunctions can significantly affect the continuity of the educational process and the quality of learning.

Thus, in our opinion, the impact of the Internet and digital resources on the development of networking and learning is based on the following key aspects:

- *increasing accessibility and globalism*: thanks to the capabilities of the Internet, unlimited access to establishing and expanding online relationships, obtaining educational resources, as well as the opportunity to undergo training anywhere in the world is open;

- *interactivity and feedback*: digital educational platforms and resources create conditions for interactive interaction of students with educational material, teachers and other students. Feedback, online discussions, forums, online diagnostics and testing directly affect the effectiveness of learning and interaction online;

- *personalization and individualization of training*: differentiation of educational materials,

content, taking into account the diversity of knowledge levels and needs of students, allows you to offer individual courses, programs, MOOC, assignments, recommendations, etc. This personalization in building an individual educational route increases the motivation of students and contributes to more effective training that meets the modern needs of employers. This, in turn, contributes to the implementation of a customized approach in education;

- *innovations in educational technologies:* the rapid development of Internet technologies contributes to the timely creation and implementation of new innovative educational tools (virtual reality, artificial intelligence, adaptive learning, etc.).

This process is dynamic, enriches the educational process, making it accessible, interactive and effective for network learning and interaction in the virtual space.

The presented framework demonstrates how the Internet and digital resources influence networking and education by creating new learning opportunities, expanding access to knowledge, and facilitating greater innovation in educational technologies.

Conclusion. The development of the Internet and social networks has increased the time allocated by users for online communication and interaction. The prerequisites for society's choice in favor of online communication are associated with asynchrony, anonymity and wide access to information and instant contacts. The perception of digital content and Internet messages has different perceptions among network users, and therefore corresponding emotional reactions that influence the formation of the degree of trust between participants. Therefore, these features influence the quality and methods of establishing interpersonal communication online. Understanding these processes and factors can help develop strategies for users to

maintain their skills in establishing high-quality social connections online and improve the level of communication. Consequently, the study of network communication of young people in virtual space remains today a relevant topic in modern science and social research.

The SWOT analysis we conducted revealed both the strengths and opportunities, as well as the weaknesses and threats of virtual interaction, also allowed us to develop recommendations for the development of network interaction among students in the virtual space.

We understand that in the conducted research, there is some limitation in the sample of students (pedagogical specialties), so we propose to further expand the coverage and attract students from all specialties of universities in Kazakhstan. It should be noted that further research could also be aimed at studying the impact of digital technologies on the quality of education and training. Research in this area can lead to the development of innovative approaches to education, improving the quality of education and preparing young workers for life in the age of networked social development and digital economy.

In addition, it is possible to conduct research on the impact of network interaction on the health and well-being of children, adolescents, students and teachers. Research in this area can help develop recommendations for parents, teachers and public organizations on the effective use of digital technologies without harming the health, development and formation of the younger generation.

Reference:
Danah Boyd&Nicole B Ellison (2007). Social Network Sites: Definition, History, and Scholarship. Journal of Computer-Mediated Communication 13(1):210-230. -. DOI:10.1111/j.1083-6101.2007.00393.x
Eraslan, L., &Kukuoğlu, A. (2019). Social relations in virtual world and social media aggression. World Journal on Educational Technology: Current Issues, 11(2), 140–149.https://doi.org/10.18844/wjet.v11i2.4145
Harris, M. (2019). Technological innovations and virtual communication efficiency. International Journal of Communication Studies, 7(3), 102-115. https://govciomedia.com/why-communication-can-be-key-to-tech-modernization/

Ioana-Narcisa Crețu (2021). Characteristics of online interaction. SAECULUM Vol. 52, nr. 2, pp. 39 - 44 DOI: 10.2478/saec-2021-0016 Online ISSN 2601-1182 https://intapi.sciendo.com/pdf/10.2478/saec-2021-0016

Kurtzberg, T.R. (2014). Virtual Teams: Mastering Communication and Collaboration in the Digital Age. Santa Barbara: Praeger. Retrieved August 13, 2024, from http://dx.doi.org/10.5040/9798216032564

Rafael Capurro - ChristophPingel. (2002).Ethical issues of online communication research // Ethics and Information Technolog. Vol. 4, No. 3, p. 189-194. https://capurro.de/onres.htm

Абдигапбарова У.М., Колумбаева Ш.Ж., Танатова А.Д., Жиенбаева Н.Б. (2023) . Концепция кастомизации системы формирования сетевой коммуникативной культуры и цифрового этикета преподавателей и студентов в «on-line community». Алматы, 72 с.

Жусупова А. (2021). Потенциальные социальные сетей как механизм реализации концепции «Слышащего государства» в Казахстане // Научный журнал Казахстан – Спектр. , 1(98). С. 223-43 https://doi.org/10.52536/KS/vol_98_issue_2_A2

Интернет-коммуникации в Казахстане: степень мобилизационного потенциала (по результатам социологического исследования) – Алматы: КИСИ при Президенте РК, 2014. – 172 с. https://kisi.kz/wp-content/uploads/2023/06/ik_2014-2.pdf

Карипбаев, Б. (2019). Идентичность казахстанской молодежи: влияние глобализации и неотрадиционализма DOI: https://doi.org/10.37178/ca-c.21.2.12 https://ca-c.org.ru/journal/2021/journal_rus/cac-02/12.shtml

Карпенко А.С., Чурочкина Л.А. (2021).Особенности воздействия массмедиа на подростков в современных условиях // Человеческий капитал,. - № 12(156) том 1. – С. 87-99. DOI: 10.25629/HC.2021.12.08

Колумбаева Ш.Ж., Нарбекова Б.М., Танатова А.Д. (2023). Мониторинг виртуальных романтических отношений и девиаций поведения у студентов вузов Казахстана в «on-line community» // Вестник КазНПУ им.Абая (Серия «Педагогические науки»). – 2024. – No2(82), С. 5-25. https://doi.org/10.51889/2959-5762.2024.82.2.001

Корягина С. А., Кравченко И. О. (2019). Анализ эффективности воздействия СМИ на формирование мировоззрения молодежи в информационном пространстве // Вопросы теории и практики журналистики. Т. 8, №4. С. 763–773. https://cyberleninka.ru/article/n/analiz-effektivnosti-vozdeystviya-smi-na-formirovanie-mirovozzreniya-molodezhi-v-informatsionnom-prostranstve

Мармонтова, Т., Тажибаев, А. (2023). Социальные сети 2023: как сильно политизирован казахстанский сектор Интернета? https://nicrus.ru/analytics/socialnie-seti-2023-kak-silno-politizirovan-kazahstanskiy-sektor-interneta/

Мингишева, Н.А. (2019). Интернет и молодежное потребление в Казахстане // Социальные технологии работы с молодежью в условиях становления общества: сборник статей IV Международной научно-практической конференции. – Уфа: РИЦ БашГУ, – С. 177-183. https://scholar.google.co.th/citations?view_op=view_citation&hl=th&user=GSmYZhgAAAAJ&citation_for_view=

Моглан, Д.В. (2014.) Типы взаимодействий в образовательном сетевом сообществе // Вестн. Сам. гос. техн. ун-та. Сер. Психолого-педагогич. науки. №3 (23). URL: https://cyberleninka.ru/article/n/tipy-vzaimodeystviy-v-obrazovatelnom-setevom-soobschestve.

Симонович, Н. Е.(2016) Влияние СМИ на сознание и психику молодежи в эпоху глобализации // Аграрное образование и наука. № 4. С. 56. https://cyberleninka.ru/article/n/vliyanie-smi-na-soznanie-sovremennoy-molodezhi

Reference:

Danah Boyd&Nicole B Ellison (2007). Social Network Sites: Definition, History, and Scholarship. Journal of Computer-Mediated Communication 13(1):210-230. -. DOI:10.1111/j.1083-6101.2007.00393.x

Eraslan, L., &Kukuoğlu, A. (2019). Social relations in virtual world and social media aggression. World Journal on Educational Technology: Current Issues, 11(2), 140–149.https://doi.org/10.18844/wjet.v11i2.4145

Harris, M. (2019). Technological innovations and virtual communication efficiency. International Journal of Communication Studies, 7(3), 102-115. https://govciomedia.com/why-communication-can-be-key-to-tech-modernization/

Ioana-Narcisa Crețu (2021). Characteristics of online interaction. SAECULUM Vol. 52, nr. 2, pp. 39 - 44 DOI: 10.2478/saec-2021-0016 Online ISSN 2601-1182 https://intapi.sciendo.com/pdf/10.2478/saec-2021-0016

Kurtzberg, T.R. (2014). Virtual Teams: Mastering Communication and Collaboration in the Digital Age. Santa Barbara: Praeger. Retrieved August 13, 2024, from http://dx.doi.org/10.5040/9798216032564

Rafael Capurro - ChristophPingel. (2002).Ethical issues of online communication research // Ethics and Information Technolog. Vol. 4, No. 3, p. 189-194. https://capurro.de/onres.htm

Abdigapbarova, U. M., Kolumbayeva, Sh. Zh., Tanatova, A. D., & Zhiyenbayeva, N. B. (2023). Kontseptsiya kastomizatsii sistemy formirovaniya setevoy kommunikativnoy kul'tury i tsifrovogo etiketa prepodavateley i studentov v «on-line community» [Concept of customization of the system for forming network communication culture and digital etiquette of teachers and students in the "online community"]. Almaty, 72 p. [in Russian].

Zhusupova, A. (2021). Potentsial'nyye sotsial'nyye setey kak mekhanizm realizatsii kontseptsii «Slyshashchego gosudarstva» v Kazakhstane [Potential of social networks as a mechanism for implementing the concept of a "Listening State" in Kazakhstan]. Nauchnyy zhurnal Kazakhstan – Spektr - Scientific Journal Kazakhstan - Spectrum, 1(98), 223-243. https://doi.org/10.52536/KS/vol_98_issue_2_A2 [in Russian].

Internet-kommunikatsii v Kazakhstane: stepen' mobilizatsionnogo potentsiala (po rezul'tatam sotsiologicheskogo issledovaniya) [Internet communications in Kazakhstan: the degree of mobilization potential (based on the results of a sociological study)]. (2014). Almaty: KISI pri Prezidente RK, 172 p. https://kisi.kz/wp-content/uploads/2023/06/ik_2014-2.pdf [in Russian].

Karipbayev, B. (2019). Identichnost' kazakhstanskoy molodezhi: vliyaniye globalizatsii i neotraditsionalizma [Identity of Kazakhstani youth: the impact of globalization and neo-traditionalism]. https://doi.org/10.37178/ca-c.21.2.12 [in Russian].

Karpenko, A. S., & Churochkina, L. A. (2021). Osobennosti vozdeystviya massmedia na podrostkov v sovremennykh usloviyakh [Features of the impact of mass media on adolescents in modern conditions]. Chelovecheskiy kapital - Human Capital, 12(156) vol. 1, 87-99. DOI: 10.25629/HC.2021.12.08 [in Russian].

Kolumbayeva, Sh. Zh., Narbekova, B. M., & Tanatova, A. D. (2023). Monitoring virtual'nykh romanticheskikh otnosheniy i deviatsiy povedeniya u studentov vuzov Kazakhstana v «on-line community» [Monitoring of virtual romantic relationships and behavioral deviations among university students in Kazakhstan in the "online community"]. Vestnik KazNPU im.Abaya (Seriya «Pedagogicheskiye nauki») - Bulletin of KazNPU named after Abai (Series "Pedagogical Sciences"), 2(82), 5-25. https://doi.org/10.51889/2959-5762.2024.82.2.001 [in Russian].

Koryagina, S. A., & Kravchenko, I. O. (2019). Analiz effektivnosti vozdeystviya SMI na formirovaniye mirovozzreniya molodezhi v informatsionnom prostranstve [Analysis of the effectiveness of media influence on the formation of youth worldview in the information space]. Voprosy teorii i praktiki zhurnalistiki - Questions of Theory and Practice of Journalism, 8(4), 763–773. [in Russian].

Marmontova, T., & Tazhibayev, A. (2023). Sotsial'nyye seti 2023: kak sil'no politizirovan kazakhstanskiy sektor Interneta? [Social networks 2023: how politicized is the Kazakhstani Internet sector?]. https://nicrus.ru/analytics/socialnie-seti-2023-kak-silno-politizirovan-kazahstanskiy-sektor-interneta/ [in Russian].

Mingisheva, N. A. (2019). Internet i molodezhnoye potrebleniye v Kazakhstane [Internet and youth consumption in Kazakhstan]. In Sotsial'nyye tekhnologii raboty s molodezh'yu v usloviyakh stanovleniya obshchestva: sbornik statey IV Mezhdunarodnoy nauchno-prakticheskoy konferentsii [Social technologies of work with youth in the conditions of society formation: collection of articles of the IV International Scientific and Practical Conference] (pp. 177-183). Ufa: RITs BashGU. [in Russian].

Moglan, D. V. (2014). Tipy vzaimodeystviy v obrazovatel'nom setevom soobshchestve [Types of interactions in the educational network community]. Vestn. Sam. gos. tekhn. un-ta. Ser. Psikhologo-pedagogich. nauki - Bulletin of Samara State Technical University. Series: Psychological and Pedagogical Sciences, 3(23). [in Russian].

Simonovich, N. E. (2016). Vliyaniye SMI na soznaniye i psikhiku molodezhi v epokhu globalizatsii [The influence of mass media on the consciousness and psyche of youth in the era of globalization]. Agrarnoye obrazovaniye i nauka - Agrarian Education and Science, 4, 56. [in Russian].

Z.K. JUMABAYEVA[1]*, A.S. SHILIBEKOVA[1], N.M.A. DIETEREN[2],
A.S. JANDAROVA[1], N.T. SHORA[1]

[1]Nazarbayev Intellectual schools (Astana, Kazakhstan)
[2] Centraal Instituut voor Toetsontwikkeling (Arnhem, Netherlands)
*e-mail: jumabayeva_zh@cpi.nis.edu.kz

NAZARBAYEV INTELLECTUAL SCHOOLS' UPDATED STUDENT SELECTION SYSTEM: ANALYSIS OF THE EFFECTIVENESS AND VALIDITY

Abstract

This paper presents the validation research conducted in 2020 for a testing system designed to identify prospective students for a network of selective STEM schools. The initial validation, carried out in 2015, established that the assessment system was fit for purpose, effectively selecting suitable candidates. Since then, the selection process has undergone modifications, prompting the need for further validation. This study evaluates the effectiveness and predictive validity of the updated selection system, focusing on students in grade 7. Data were collected from a single cohort during the 2019-2020 academic year, focusing on their assessment results. The findings indicate that the selection test successfully predicts academic achievement in mathematics and quantitative reasoning, with moderate predictive accuracy in languages. Despite changes to the selection test since 2019, the overall predictive validity of the subtests remains strong. The paper emphasizes the practical significance of these findings for educational institutions, offering insights to improve admission processes. By refining the selection system, educational organizations can better identify and support talented students, ultimately improving educational outcomes. The study also contributes to the ongoing improvement of assessment practices, ensuring that selection procedures remain effective in identifying students capable of thriving in rigorous academic environments.

Keywords: validation research; selection test; predictive validity; quantitative reasoning; intellectual school

Introduction. Nazarbayev Intellectual schools (NIS) constitute a system of STEM-based (science, technology, engineering, and mathematics) educational institutions that specifically target exceptional and motivated students during their selection process. STEM education, initially conceived as a meta-discipline that integrated knowledge from various fields, has now become a focal point for many educators and policymakers, emphasizing the integration of STEM disciplines in schools (Chomphuphra et al., 2019). Admission to NIS is based on competitive examinations. As of 2013, the selection process included tests in mathematics, languages (Kazakh, Russian and English), and the ability test (quantitative reasoning and spatial reasoning).

Since 2019, the NIS selection test has undergone several modifications to align with the updated curriculum content taught to students from 6th grade onwards. As a result, the student selection test now follows a new format to accommodate these changes and includes tests in mathematics, quantitative reasoning,

and languages (Kazakh, Russian and English) (Center for Pedagogical Measurements, 2023). As can be seen, the composition of the ability test changed, leaving only the quantitative reasoning subtest as part of the selection test procedure. The total score scale for selection test was also extended from 1000 to 1300. Changes also affected the mathematics subtest booklet, reflecting the updated curriculum.

This paper is focused on 2020 validation research conducted to evaluate the effectiveness of the testing system used in the selection of prospective students for enrollment at NIS. For the first time in 2015, validation research was carried out to verify the appropriateness of the assessment systems and to ensure that the selection process accurately identified the suitable candidates for admission to NIS.

In the paper we will particularly explore the effectiveness and predictive validity of the student selection system for 2,925 students in grade 7 from 19 schools. The predictive validity of 2019 selection test was analysed for the first cohort that took this test in the updated version.

As quantitative data, the results of mathematics, quantitative reasoning, and languages (Kazakh, Russian and English) subtests were extensively used. These results were correlated with students' scores for each grade 7 subject at the end of each term and their monitoring assessment results (Nazarbayev Intellectual schools, 2023).

The key question addressed in this study is whether modifications to the composition of the selection test and its subtests have led to significant changes in their predictive validity. To explore this question, the analysis is divided into two sub-questions aimed at assessing the effectiveness of the test in identifying appropriate candidates. These sub-questions

are: (1) have suitable students been selected, and (2) have students been selected in the right way. The following sections will examine these issues in greater depth to determine if notable changes have occurred in the predictive validity of the test and its components following the recent modifications.

Composition of the selection test. It is important to highlight that the administration of the selection test in 2019 differed from the previous administrations since 2013. The table 1 provides an overview of these differences. These notable changes provided a compelling rationale for conducting fresh validation research following the 2019 selection test administration.

Table 1. *Composition and structure of the NIS selection test*

	2013-2018	2019
Day 1	Mathematics *(60 minutes)* Kazakh/Russian as 1st language *(40 minutes)* Kazakh/Russian as 2nd *language (40 minutes)* English language *(40 minutes)*	Mathematics *(60 minutes)* Quantitative Reasoning *(30 minutes)*
Day 2	*77 minutes* Quantitative Reasoning Spatial Reasoning	*120 minutes* Kazakh language (1st or 2nd) Russian language (1st or 2nd) English language

As it can be seen from the table, the composition of the subject's test remained the same, but the languages subtests were shifted from day 1 to day 2. Total testing time for these subjects remained the same, but instead of having three separate 40-minute sessions for languages subtests, they were combined into one longer session that lasted 120 minutes. This single session included all the language test questions in a single booklet.

As mentioned above, the composition of the CTY abilities test changed, leaving only the quantitative reasoning subtest as part of the selection test procedure.

Furthermore, there were some new topics introduced in the mathematics subtest booklet, according to the revised test matrix that was based on the updated curriculum.

Finally, the scores from five subtests were added together to calculate a total score, which had a maximum possible value of 1300. This

combined score was then used to create a ranking for all candidates per school (city) and per language stream (Kazakh or Russian). For the subtests Mathematics and QR there is also a minimum passing score applicable, what means that candidates who do not reach one or both pass scores will not be selected, whatever their overall score might be.

Over time, the student selection process has evolved to include two comprehensive paper-based tests: the STEM test (mathematics, quantitative reasoning, natural science sections) and language test (Kazakh, Russian and English) (Nazarbayev Intellectual schools, 2023). However, the 2019 test does not cover the 2022 natural sciences subtest.

Materials and Methods. To validate the selection test, we first analyzed the relation between school success of the students that have entered grade 7 in NIS (results monitoring tests and the summative scores on terms), the results

on the selection test and background variables such as language, school and region. The method we use is LISREL (LInear Structural RELations).

There are two research sub-questions:
1: Have the suitable students be selected?

Did the selection test effectively support the selection of the students that have the highest chance of being successful in the NIS educational career? This research question can be answered by calculating the degree of correlation between individual learners' performances in the selection test (total and per subtest) and the performances of the same learners in all subjects and terms in grade 7.

2: Are the students selected in the right way?

Is the composition and the structure of the test appropriate for the aim of the assessment? In this question we want to relate elements of the design of the test, like number of subtests, number of items in relation to assessment time and assessment objectives, to the purpose: selecting for grade 7 the most gifted learners who have the highest probability of achieving the final qualification of NIS at grade 12.

For this research we used data of one cohort: the grade 7 cohort of 2019-2020 academic year, that participated in the selection test in 2019. The goal is to predict successfulness of selection and the differences between certain subgroups/ subdimensions. The predictive validity of the selection test and each of the subtests must be explored and described. The limitation of this research approach is that we do not have data about students' performance- over the whole NIS career. For this research we assume that students who are most successful in achieving high marks/scores in grade 7 will also be the most successful students when doing the final qualification at the end of NIS grade 12.

Correlation research of the results of selection test 2019 was broken down into the subtests performance, with separate attention for the QR subtest. The QR subtest underwent substantial changes in the content and underlying test matrix. And 2019 was the first time that the subscore on the QR-test was fully included in the overall scoring of selection test results.

Data Methods. The data that were based on the assessment results of one cohort of NIS students: the selected grade 7 candidates from the 2019 selection test cycle. The available data contained the following parameters (See Table 2).

Table 2: *Data for the 2020 validation research of NIS selection test*

Field name	Data type	Constraint	Description	Notes
iin	Text	Primary Key	Student national ID number	12-digit Individual Identification Number
school_id	Number	Not null	School (NIS) ID	1-2, 4-21
gender	Number	Not null	Student gender	1 – male, 2 – female
lang	Number	Not null	Student language of study	1 – kazakh, 2 – russian
locality	Text	Not null	Student urban-rural classification based on previously attended school	1 – urban, 2 – rural
CTY group	Text	Not null	Students' abilities to study natural and mathematical sciences	Levels: I – very high, II – high, III – average, IV – sufficient
ko_math	Number	Not null	Selection test Mathematics results	Max – 400

ko_qr	Number	Not null	Selection test Quantititave Reasoning results	Max – 300
ko_d1_score	Number	Not null	Selection test Day I results	Max – 700
ko_kz	Number	Not null	Selection test Kazakh language results	Max – 200
ko_ru	Number	Not null	Selection test Russian language results	Max – 200
ko_en	Number	Not null	Selection test English language results	Max – 200
ko_d2_score	Number	Not null	Selection test Day 2 results	Max – 600
ko_total	Number	Not null	Selection test Final results	Max – 1300
SOR_SUBJECT_TERM	Number	-	Summative score per section	Terms 1–4 (I–IV). Max – 50
SOCH_SUBJECT_TERM	Number	-	Summative score per term	Terms 1–4 (I–IV). Max – 50
ML919_SUBJECT	Number	-	Monitoring Language results (September 2019)	Max – 50
level_SUBJECT	Text	-	Monitoring Language results classification (September 2019)	Levels: Base, Beginner, Good, Advanced
1N_M19	Number	-	Monitoring Mathematics results (September 2019)	1N – Numbers. Max – 50
2A_M19	Number	-	Monitoring Mathematics results (September 2019)	2A – Algebra. Max – 50
3G_M19	Number	-	Monitoring Mathematics results (September 2019)	3G – Geometry. Max – 50
4S_M19	Number	-	Monitoring Mathematics results (September 2019)	4S – Statistics. Max – 50
5M_M19	Number	-	Monitoring Mathematics results (September 2019)	5M – Mathematical modeling. Max – 50
1N_M20	Number	-	Monitoring Mathematics results (January 2020)	1N – Numbers. Max – 50
2A_M20	Number	-	Monitoring Mathematics results (January 2020)	2A – Algebra. Max – 50
3G_M20	Number	-	Monitoring Mathematics results (January 2020)	3G – Geometry. Max – 50
4S_M20	Number	-	Monitoring Mathematics results (January 2020)	4S – Statistics. Max – 50
5M_M20	Number	-	Monitoring Mathematics results (January 2020)	5M – Mathematical modeling. Max – 50

After careful exploration of the data provided, the research team decided that all data could be used, except for the CTY group level indication. This parameter was the only assessment-results-based parameter that was not expressed in continuous scale measure units, but rather in four distinct group labels.

Furthermore, the group classification was not based on a given formula or algorithm but on a combined judgment of two separate parameters: the QR score in the 2019 high stakes selection test and a Spatial reasoning (SR) score as result of a low stakes in-class administration of this subtest during the school year 2019-20.

Data with background variables of the students and data with social-emotional indicators, were not used in this 2020 research. The main goal of this validation research is to determine if the changes made to the selection test have significantly impacted its effectiveness and predictive validity. The 'predictive quality' of the test items and subtests should not be differential for specific background variables. In practice of testing, some individual test items might have different psychometric quality for certain sub-populations, like boys/girls, urban/rural or private school/public school. But there are two good reasons not to include such differences in the research model:

1: in this research the data used and the correlations that can be made with sufficient statistical significance, must be aggregated to the levels of subtests, complete test and subjects in grade 7.

2: research into differences in the performance of individual items, based on some background variables – called Differential Item Functioning – are already part of the yearly analysis of selection test results.

The method used, LISREL (LInear Structural RELations), is an example of a structural equation model (Igolkina & Meshcheryakov, 2020). Structural equation modeling (SEM) includes a diverse set of mathematical models, computer algorithms, and statistical methods that fit networks of constructs to data. Structural equation models are often used to assess unobservable 'latent' constructs. They often invoke a measurement model that defines latent variables using one or more observed variables, and a structural model that imputes relationships between latent variables. The links between constructs of a structural equation model may be estimated with independent regression equations or through more involved approaches such as those employed in LISREL (Lei & Wu, 2007; Davvetas et al., 2020).

Data used in the research. Based on the data as provided for the cohort grade 7 in 2019-20, the research team developed a 'grand research database' in the statistical program SPSS (Statistical Product and Service Solutions; IBM). From this database the following data were defined:

Table 3: *Latent variables*

1: 18 latent variables on individual student performance in NIS Selection and grade 7

SEL19	M19MATH	M20MATH	M19ENG	M19K2/R2		
ENG	BIO	WHIST	GEO	CS	ART	
KHIST	KLIT/RLIT*	KZ/RU*	MATH	K2/R2**	PHYS	CHEM

* each student will have either Kazakh or Russian as first language and also for the same language the subject of Literature

** language and literature for second language

The overall performance of each individual student in the 2019 selection test was taken as one latent variable. This 'SEL19' variable is an important parameter of the capacities of the student indicating his or her readiness for a successful career in NIS.

Two main sources were used to obtain the data on academic achievement of the grade 7 students:

A: Monitoring assessment administrations in September and January:
- Mathematics first measurement at the start of the year: M19MATH
- Mathematics second measurement halfway the year: M20MATH

- Second/foreign Languages first measurement at the start of the year: M19K2/R2 and M19ENG

Unfortunately, NIS was not able, due to the COVID19 restrictions, to administer the second monitoring moment for languages in April 2020. These data are missing in this research.

B: the other 13 latent variables are the cumulated term and period scores in each subject in the grade 7 calendar plan, for which NIS provided assessment data.

ENG = English / BIO = biology / WHIST = World History / GEO = Geography / CS = Computer Sciences / ART = Arts / KHIST = Kazakh history / KZ = Kazakh language / MATH

= Mathematics / RULIT = Russian Literature / PHYS = Physics / CHEM = Chemistry

2: in total 73 variables could be defined as parameters for students' achievements in all the available data. These 73 variables are the subcategories of one of the 18 latent variables. For example, the latent variable SEL19 can be subdivided in 5 subscores, for each of the five subtests:

Table 4: *Five subtests*

ko_math	Subtest Mathematics; max. 400
ko_qr	Subtest QR; max. 300
ko_kz	Subtest Kazakh language; max. 200
ko_ru	Subtest Russian language; max. 200
ko_en	Subtest English language; max. 200

For monitoring scores, the five domains of mathematics or the four skills in a language are defined as being the subcategories for these specific latent variables.

For the 13 subjects the subcategories were defined by the four periods in the academic year for which these were collected. An example for the four terms in Geography: GEO_I, GEO_II, GEO_III and GEO_IV.

Results. To get a first indication of possible correlations between sub scores, simple linear correlations between the 18 latent variables were calculated. All correlation results were separately analysed for the Kazakh stream and for the Russian stream.

Kazakh stream. Correlation coefficients vary from very high - >0.80 - to quite low - <20 or even negative. So, there might certainly be a relation betюween classroom performance for specific subjects and overall selection test performance. In other words, the results are supportive for a possible relation between selection test and some of the (subject) school results. In the table 3 we summarise the strongest and the weakest correlations.

Table 5: *Combinations of selection test result and school subjects with relatively high and relatively low correlations; Kazakh stream*

High correlation with SEL19 (more than 0.5)	Low correlation with SEL19 (less than 0.2)
Mathematics monitoring 7.1	Arts
Mathematics terms I - IV	Kazakh literature
Mathematics monitoring 7.2	Kazakh first language
	Kazakh history
	Geography
	English (0.18)

These results show a strong positive correlation between the overall selection test result and all Mathematics assessments in grade 7. More surprisingly might be the low correlation for the language subjects Kazakh and English and other subjects that are taught in Kazakh language. And also a correlation of just 0.19 for English language performance seems to be lower than one might expect.

Low correlation scores as such are not necessarily a 'bad sign'; in the case of some languages relative low correlations between SEL19 and the grade 7 results might be explained by:

1: the difference between what is assessed in SEL19 and what is taught, learned and assessed in grade 7 curriculum and practice. Selection test is only assessing reading comprehension, whereas in grade 7 the languages also teach and assess writing, listening and speaking;

2: the positive effect of learning progress that students make once they enter NIS grade 7.

These low correlation scores are seen with the Kazakh language subjects and less or on a less low level with the Russian language subjects.

This difference between correlation scores for both languages demands for further research, quantitative and qualitative (interviews, focus groups).

Russian stream. In Table 4, we provide a summary of the strongest and the weakest correlations for Russian stream.

Table 6. *Combinations of selection test result and school subjects with relatively high and relatively low correlations; Russian stream*

High correlation with SEL19 (more than 0.5)	Low correlation with SEL19 (less than 0.2)
Mathematics monitoring 7.1	Arts
Mathematics terms I - IV	Kazakh literature
Mathematics monitoring 7.2	Kazakh history
Physics terms I - IV	English (0.27)

In comparison to the Kazakh stream, the Russian stream shows a strong positive correlation between the overall selection test result and all mathematics assessments in grade 7. Also, not very surprisingly might be the very low correlation for the subjects that are closely related to Kazakh language. And even a correlation of just 0.27 for English language performance (0.19 it is for the Kazakh stream) seems to be lower than one might expect for a subject that partly decides on NIS entrance.

Discussions. The 2020 validation research confirmed that the NIS selection test, despite modifications in 2019, continues to show strong predictive validity, particularly in mathematics and quantitative reasoning. However, the moderate predictive accuracy in languages reflects a broader trend in education where language subtests often show weaker predictive power compared to mathematics (Dale & Sparks, 2024).

This trend aligns with findings by Jamali et al. (2023), who note a global focus on improving educational quality and identifying gifted students. A similar approach is observed in Denmark's educational policies, which aim to support talented students across all educational levels (Rasmussen & Lingard, 2018).

Despite these global efforts, many empirical studies overlook how various abilities in gifted students interact and affect their development, particularly the link between language proficiency and STEM learning (Boer & Rijnsoever, 2022). However, existing literature shows positive correlations between language proficiency and STEM learning, as demonstrated by MacGregor (1999), Vukovic (2013), Prediger (2013), and Hernandez (2013). Crossley (2018) further suggested that high mathematics scores could positively influence language test results.

The introduction of the natural sciences subtest in 2022 was also a logical step, stemming from the 2020 validation research findings. This new subtest, which includes 20 items covering Physics, Chemistry, Biology, and Geography, expanded the test's scope and reflects ongoing efforts to improve its predictive validity.

Nevertheless, the language subtest (Day 2 booklet) remains an area of concern, and both the 2015 and 2020 validation studies recommend further research into its predictive power.

Conclusions. What do these correlation results tell us about the possible answers on the two main research questions:

1: Have the suitable students be selected?

2: Are the students selected in the right way?

The answer to the first question can only partly be based on the correlation findings from the cohort 2019-2020 performances in Selection 2019 with their assessment results in grade 7. Successfulness of those learners who received a grant for studying at NIS can be measured by looking at their grade 7 results, but those who were not selected for grade 7 cannot be included in comparable research. We do not have data on their grade 7 results, as they did not participate. Some of them, especially those who were close to selection in the 2019 ranking, might have

been quite successful learners in NIS grade 7. This is a category that statisticians call 'the false negatives': candidates who would have had the ability to study successful in grade 7 at NIS but were not selected because their overall score on SEL19 was not high enough to be within the range of available vacant places.

The answer to the second question can partly be answered by looking at the outcomes of the correlation research. The highest correlations between score on selection test 2019 and marks achieved in grade 7 are realized for the subtests Mathematics and QR. These are also the two subtests for which the Selection scoring uses a minimum passing score. This pass score gives the subjects Mathematics and QR a relative greater power in the overall decision for student selection. These two subtests also contribute to more than 50% of the total overall score for selection test (400+300 out of 1300).

In general, we might state that, as far as correlation indices can be informative for answering this question, the selection test has proven to be effective in selecting the candidates for entering NIS grade 7 in a reliable and valid way.

References:

Boer, T., & Van Rijnsoever, F. (2022). In search of valid non-cognitive student selection criteria. Assessment & Evaluation in Higher Education, 47(5), 783-800. https://www.tandfonline.com/doi/epdf/10.1080/02602938.2021.1958142?needAccess=true

Center for Pedagogical Measurements (2023). Competitive selection. https://cpi-nis.kz/en/

Chomphuphra, P., Chaipidech, P., & Yuenyong, C. (2019). Trends and research issues of STEM education: A review of academic publications from 2007 to 2017. Journal of Physics: Conference Series (Vol. 1340, No. 1, p. 012069). IOP Publishing. https://iopscience.iop.org/article/10.1088/1742-6596/1340/1/012069/pdf

Crossley, S., Ocumpaugh, J., Labrum, M., Bradfield, F., Dascalu, M., & Baker, R. S. (2018). Modeling Math Identity and Math Success through Sentiment Analysis and Linguistic Features. International Educational Data Mining Society. https://files.eric.ed.gov/fulltext/ED593117.pdf

Dale, P. S., & Sparks, R. L. (2024). Mapping the predictive role of MLAT subtests for L2 achievement through regression commonality analysis. *Studies in Second Language Acquisition*, *46*(2), 453-477.

Davvetas, V., Diamantopoulos, A., Zaefarian, G., & Sichtmann, C. (2020). Ten basic questions about structural equations modeling you should know the answers to–But perhaps you don't. Industrial Marketing Management, 90, 252-263. https://www.sciencedirect.com/science/article/abs/pii/S0019850120302935?via%3Dihub

Hernandez, F. (2013). The Relationship Between Reading and Mathematics Achievement of Middle School Students as Measured by the Texas Assessment of Knowledge and Skills (Doctoral dissertation). https://uh-ir.tdl.org/items/45d2a1e2-6ba4-4dc5-81a4-99675dfd8d64

Igolkina, A. A., & Meshcheryakov, G. (2020). semopy: A python package for structural equation modeling. Structural Equation Modeling: A Multidisciplinary Journal, 27(6), 952-963. https://www.tandfonline.com/doi/full/10.1080/10705511.2019.1704289?scroll=top&needAccess=true

Jamali, S. M., Ale Ebrahim, N., & Jamali, F. (2023). The role of STEM Education in improving the quality of education: A bibliometric study. International Journal of Technology and Design Education, 33(3), 819-840. https://link.springer.com/article/10.1007/s10798-022-09762-1

Lei, P. W., & Wu, Q. (2007). Introduction to structural equation modeling: Issues and practical considerations. Educational Measurement: issues and practice, 26(3), 33-43. https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1745-3992.2007.00099.x

MacGregor, M., & Price, E. (1999). An exploration of aspects of language proficiency and algebra learning. Journal for Research in Mathematics Education, 30(4), 449-467. https://www.jstor.org/stable/749709?origin=crossref

Prediger, S., & Wessel, L. (2013). Fostering German-language learners' constructions of meanings for fractions—design and effects of a language-and mathematics-integrated intervention. Mathematics Education Research Journal, 25(3), 435-456. https://link.springer.com/article/10.1007/s13394-013-0079-2

Rasmussen, A., & Lingard, B. (2018). Excellence in education policies: Catering to the needs of gifted and talented or those of self-interest? European Educational Research Journal, 17(6), 877-897. https://journals.sagepub.com/doi/epub/10.1177/1474904118771466

Vukovic, R. K., & Lesaux, N. K. (2013). The relationship between linguistic skills and arithmetic knowledge. Learning and Individual Differences, 23, 87-91. https://www.sciencedirect.com/science/article/abs/pii/S1041608012001471

Назарбаев Интеллектуальные школы (2023). Критериальное оценивание. https://www.nis.edu.kz/en/kriterialnoe

Назарбаев Интеллектуальные школы (2023). Правила конкурсного отбора. https://www.nis.edu.kz/storage/app/media/konkursny%20otbor/pravila%20konkursnogo%20otbora/ministra-prosveshcheniya-rk-255.pdf

References:

Boer, T., & Van Rijnsoever, F. (2022). In search of valid non-cognitive student selection criteria. Assessment & Evaluation in Higher Education, 47(5), 783-800. https://www.tandfonline.com/doi/epdf/10.1080/02602938.2021.1958142?needAccess=true

Center for Pedagogical Measurements (2023). Competitive selection. https://cpi-nis.kz/en/

Chomphuphra, P., Chaipidech, P., & Yuenyong, C. (2019). Trends and research issues of STEM education: A review of academic publications from 2007 to 2017. Journal of Physics: Conference Series (Vol. 1340, No. 1, p. 012069). IOP Publishing. https://iopscience.iop.org/article/10.1088/1742-6596/1340/1/012069/pdf

Crossley, S., Ocumpaugh, J., Labrum, M., Bradfield, F., Dascalu, M., & Baker, R. S. (2018). Modeling Math Identity and Math Success through Sentiment Analysis and Linguistic Features. International Educational Data Mining Society. https://files.eric.ed.gov/fulltext/ED593117.pdf

Dale, P. S., & Sparks, R. L. (2024). Mapping the predictive role of MLAT subtests for L2 achievement through regression commonality analysis. *Studies in Second Language Acquisition*, *46*(2), 453-477.

Davvetas, V., Diamantopoulos, A., Zaefarian, G., & Sichtmann, C. (2020). Ten basic questions about structural equations modeling you should know the answers to–But perhaps you don't. Industrial Marketing Management, 90, 252-263. https://www.sciencedirect.com/science/article/abs/pii/S0019850120302935?via%3Dihub

Hernandez, F. (2013). The Relationship Between Reading and Mathematics Achievement of Middle School Students as Measured by the Texas Assessment of Knowledge and Skills (Doctoral dissertation). https://uh-ir.tdl.org/items/45d2a1e2-6ba4-4dc5-81a4-99675dfd8d64

Igolkina, A. A., & Meshcheryakov, G. (2020). semopy: A python package for structural equation modeling. Structural Equation Modeling: A Multidisciplinary Journal, 27(6), 952-963. https://www.tandfonline.com/doi/full/10.1080/10705511.2019.1704289?scroll=top&needAccess=true

Jamali, S. M., Ale Ebrahim, N., & Jamali, F. (2023). The role of STEM Education in improving the quality of education: A bibliometric study. International Journal of Technology and Design Education, 33(3), 819-840. https://link.springer.com/article/10.1007/s10798-022-09762-1

Lei, P. W., & Wu, Q. (2007). Introduction to structural equation modeling: Issues and practical considerations. Educational Measurement: issues and practice, 26(3), 33-43. https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1745-3992.2007.00099.x

MacGregor, M., & Price, E. (1999). An exploration of aspects of language proficiency and algebra learning. Journal for Research in Mathematics Education, 30(4), 449-467. https://www.jstor.org/stable/749709?origin=crossref

Prediger, S., & Wessel, L. (2013). Fostering German-language learners' constructions of meanings for fractions—design and effects of a language-and mathematics-integrated intervention. Mathematics Education Research Journal, 25(3), 435-456. https://link.springer.com/article/10.1007/s13394-013-0079-2

Rasmussen, A., & Lingard, B. (2018). Excellence in education policies: Catering to the needs of gifted and talented or those of self-interest? European Educational Research Journal, 17(6), 877-897. https://journals.sagepub.com/doi/epub/10.1177/1474904118771466

Vukovic, R. K., & Lesaux, N. K. (2013). The relationship between linguistic skills and arithmetic knowledge. Learning and Individual Differences, 23, 87-91. https://www.sciencedirect.com/science/article/abs/pii/S1041608012001471

Nazarbayev Intellectual schools (2023). Kriterial'noe otsenivanie [Criteria-based assessment]. https://www.nis.edu.kz/en/kriterialnoe [in Russian]

Nazarbayev Intellectual schools (2023). Pravila konkursnogo otbora [Rules of competitive selection]. https://www.nis.edu.kz/storage/app/media/konkursny%20otbor/pravila%20konkursnogo%20otbora/ministra-prosveshcheniya-rk-255.pdf [in Russian]

M. ISHKIBAYEVA[1]*, B. KABYLZHANOVA[1], ZH. ABDYKHALYKOVA[1], C. KEHINDE[1]

[1] *L. Gumilyov Eurasian National University (Astana, Kazakhstan)*
*e-mail: mmaratova575@gmail.com

BARRIERS OF PROFESSIONAL IDENTITY FORMATION: THE JUSTIFICATION FOR INCREASED TEACHER ATTRITION RATE

Abstract

This study delves into the barriers to forming teacher identity in Kazakhstan after a year of study and development. Early career teacher attrition is often seen as a problem related to personal or contextual factors. This research examined attrition as a process involving both individual and contextual elements. Based on semi-structured interviews with 38 school English teachers about their first professional career path, experiences, and expectations, the thematic analysis revealed 15 themes, which were then categorized into four main themes: higher salary expectations, status, lack of pre-teaching training, and bureaucracy. This article offers practical recommendations, including the development of programs for preserving cultural heritage and professional development, to contribute to the successful formation of teacher identity. Overall, this study discusses critical aspects of modern education in Kazakhstan, outlines the main conclusions, and explores prospects for improving the education system and supporting the development of professional identity among teachers, considering the peculiarities of national culture.

Keywords: teacher identity; educational barriers; cultural diversity; professional development; educational standards; socio-cultural challenges; traditional values; self-development; educational support.

Introduction. The purpose of this study is to identify and analyze the barriers that Kazakh teachers face in the process of forming their professional identity after a year of training and development. The scientific importance of this study lies in the acknowledgment that a teacher's identity formation significantly impacts the efficiency of the educational process, student education, and the establishment of a national educational environment. Kazakhstan, being a diverse state, encounters educational challenges linked to cultural and linguistic diversity. Examining the processes of a Kazakh teacher's identity formation in this context becomes a vital stride in understanding the mechanisms for ensuring high-quality and multi-level education.

The research aimed to offer valuable insights into the factors that impact the formation of professional identity among pre-service educators in a specific educational setting. The study focused on Kazakh teachers who had completed a year of training and professional development. This method is systematic and adaptable, aiding researchers in uncovering the significance and patterns present in the data.

More importantly, the result of the study serves not only as an evaluation tool but also as a basis for developing strategies to support the professional identity of Kazakhstan teachers along with lowering attrition rate. By understanding and addressing these practical barriers, educational institutions can adapt programs and development programs to include greater language skills, cultural understanding, and technology. Additionally, the information gained from this research provides opportunities for policymaking that promotes a more formal and inclusive education system and creates an environment conducive to teacher development as a whole.

There is an old Kazakh proverb: "a teacher shapes the future" (*ustaz keleshektiń ustasy*). Teaching is a profession of great significance and worth that serves as the foundation for all other professions. In 2022, due to a rapid increase in the birth rate, Kazakhstan experienced a shortage of 1906 teachers (Syzdykov, 2022). However, less than half of the graduates of

pedagogical specialties work in this specialty, and even fewer are permanently employed and stay there to work. Pedagogical activity in modern conditions is multidimensional and includes both a professional component and a methodological, a communicative-psychological, an organizational, a pedagogical and many others. It is the development of this multidimensionality that causes certain difficulties for a young teacher, but it is it that enables him to realize himself in different directions (aspects) of pedagogical activity.

The importance of examining the formation of a Kazakh teacher's identity after a year of training and development in the current educational environment is crucial and represents a pivotal area for the research of this issue (Beauchamp & Thomas, 2006). The continual and systematic changes taking place in both societal and educational realms, along with the pervasive impact of globalization, significantly shape the dynamics of educational institutions and the evolving path of teacher professionalism.

In the context of the rapidly evolving educational milieu, a nuanced comprehension of the multifaceted factors that contribute to the construction of a Kazakh teacher's identity and the subsequent delineation of their professional self-awareness becomes imperative. The modern educational space is not merely a static environment but a dynamic arena shaped by a confluence of internal and external forces (Beijaard et.al, 2000). As educators navigate through this complex landscape, they encounter diverse challenges that necessitate a comprehensive understanding of the intricate interplay between cultural, social, and pedagogical factors.

The shortage of teachers has been identified as a pivotal concern on a global scale (UNESCO, 2016). The worldwide demand for educators is propelled by factors such as the expansion of the school-age population and the escalating student-teacher ratio in classrooms across the globe. Teacher scarcity is a significant challenge faced by schools in Kazakhstan. Teacher recruitment is likewise considered a contributing factor to the shortage of teachers in Kazakhstan. The percentage of students who intend to

pursue a career in teaching after graduation is also significantly declining in Kazakhstan (Syzdykov, 2022). Overall, attracting the most proficient graduates to the teaching profession has become a global predicament (Klassen, 2021; Edwards & Secretary, 2021).

The development of a Kazakh teacher's identity is closely connected to the changing paradigms of education, cultural influences, and the requirements of a globalized world. Globalization, in particular, has led to a blending of cultural perspectives, teaching methods, and technological advancements, requiring educators to constantly adapt and evolve (Gaziel, 1995). The integration of traditional Kazakh educational values with modern global trends presents both opportunities and challenges for teachers, highlighting the need for a reflective and adaptive approach to their professional growth (Chan, 2002).

Moreover, the role of a teacher extends beyond the mere transmission of knowledge; it encompasses the cultivation of critical thinking, cultural awareness, and adaptability among students. As such, understanding the factors influencing the formation of a teacher's identity is pivotal for the effective execution of their roles in shaping the next generation of citizens in a rapidly changing world (Edwards & Secretary, 2021).

The purpose of the study is identify and analyze the primary barriers that Kazakhstani teachers face in the early phases of their careers which potentially hinder their professional identity development. By diagnosing these obstacles, the study aims to offer evidence-based recommendations for educational institutions and policymakers to develop targeted strategies.

Materials and methods. The study focused on a single pedagogical university in Kazakhstan, addressing two main research questions:

(a) What factors can influence pre-service teachers' attrition?

(b) What are the key implications for improving pre-service teacher education?

A total of 38 interviews were completed. In terms of gender, out of 38 participants, 32 were (84%) and 6 were men (16%). 33 respondents (86.8%) chose to interact in Russian, whereas 5 respondents (13.2%) spoke in Kazakh.

Participants were graduates with pedagogical majors from Astana (n=28), Almaty (n=8) and Karaganda (n=2). The interview is conducted orally, in a quiet, comfortable environment in the presence of two people – the interviewer and the interviewee. The university offered a diverse range of academic programs, exceeding 80 in number, covering education levels from college to Ph.D. degrees. This comprehensive scope aimed to cater to the varied educational needs and interests of the student population. The study aimed to provide valuable insights into the factors influencing pre-service teachers' professional identity within this specific educational context (Sagintayeva, 2022). The object of the study was Kazakh teachers who completed a year of training and development. Semi-structured interviews and focus groups, as well as quantitative methods including questionnaires, were used to collect data.

The semi-structured interview provides an opportunity to analyze the spheres of life of young teachers concerning the choice of profession. Thematic analysis is a qualitative research method used to identify, analyze, and report patterns or themes within a dataset, typically textual data. It is a systematic and flexible approach that helps researchers gain insights into the meaning and patterns within the data (Clarke & Braun, 2013).

All stages of the study, including preparation and development of the methodology, data collection and analysis, and discussion and interpretation of the results, were conducted with respect for ethical standards, including ensuring the confidentiality of data and obtaining consent from study participants.

Results and Discussion. The study on barriers to the formation of the identity of Kazakh teachers following a year of training and development elicits a multifaceted discussion, shedding light on critical issues that necessitate thorough consideration. One primary aspect deserving attention is the systemic barriers entrenched in the process of identity formation for teachers. The educational environment's heterogeneity, coupled with various factors like the linguistic context, nationally oriented educational programs, and the assimilation of modern teaching technologies, emerges as

pivotal points for discourse. Liu & Onwiegbuzie (2012) highlight similar issues, emphasizing the complex interplay between these factors in shaping teachers' professional identities.

Comparing our findings with existing literature, it is evident that the challenges faced by Kazakhstani teachers are not unique. For instance, Mynbayeva (2012) and Steinter-Khamsi (2007) discuss how performance pressure, inadequate pay, and low pay regard for the teaching profession contribute to the decline in professional identities of teachers, similar to the challenges identifies in our study. However, a distinct aspect in our findings is the specific structure of the teaching load and the concept of «stavka», which is unique to the post-Soviet context and adds a layer of complexity to the salary expectations and workload issues that teachers face.

Globalization processes constitute another significant dimension warranting discussion regarding their impact on the identity of Kazakh teachers. Examining how shifts in world culture and education influence professional identity and the structural frameworks of educational programs is imperative. This prompts considerations on the development of teaching approaches that align with global trends, ensuring the adaptability and relevance of Kazakh teachers in an ever-evolving educational landscape. Miles and Knipe (2018) suggest that personalized support programs are Essential in helping teachers navigate these global changes, a notion that aligns with our recommendations for more tailored support mechanisms.

Central to the discourse is the efficacy of support from educational institutions. Engaging in a dialogue surrounding this matter necessitates an exploration of the requirement for more personalized support programs. Additionally, understanding the roles of mentoring and community experiences in the intricate process of identity formation can uncover avenues for enhancing institutional support structures. Flores (2014) argue that effective mentoring and community engagement are critical in supporting novice teachers, which corroborates out findings and recommendations.

Within the realm of intercultural interaction, there emerges a critical question pertaining to

the management of diversity in educational organizations. Discussions in this sphere could encompass pedagogical strategies for teaching cultural diversity, effective interaction with parents and students from diverse backgrounds, and the formulation of recommendations for the seamless integration of Kazakh teachers into a multinational educational milieu. Similar concerns are raised by Harris-Van Keuren (2011), who emphasizes the importance of intercultural competence in teacher training programs.

In essence, a comprehensive and reflective discussion on these issues has the potential not only to deepen our understanding of the barriers obstructing the formation of a Kazakh teacher's identity but also to foster the development of concrete strategies for surmounting these hurdles. Such discourse can play a pivotal role in creating a more conducive and supportive educational environment that nurtures the identity formation of Kazakh teachers.

Developing a professional identity is a pivotal aspect of an individual's career journey. It encompasses the process of defining oneself within a chosen profession, forging a unique identity that reflects one's skills, values, and aspirations. However, this journey is not without its challenges. The thematic analysis helped us to develop 15 codes. The codes were structured into following themes: *higher salary expectations, status, pre-service teacher training, and bureaucracy* which are discussed in more details below.
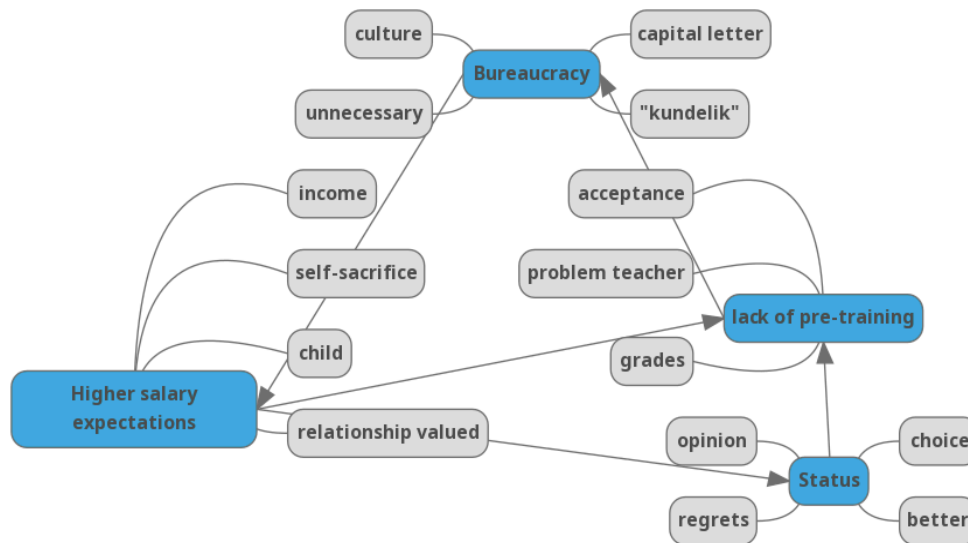

Figure 1: Thematic map, showing the main 4 themes

Understanding these obstacles is the first step towards overcoming them. It is imperative for individuals, educational institutions, and employers to recognize and address these challenges, fostering an environment where individuals can confidently shape their professional identities. As we delve into these barriers, it becomes evident that the journey of developing a professional identity is not merely a personal endeavor; it is a collective effort that requires support, resilience, and determination to navigate successfully.

Higher salary expectations were one of the codes under the theme of the barrier of Kazakh teacher's identity formation after a year of initial teaching. The participant D2 states that the salary is proportional to teaching hours.

My salary is proportional to my teaching hours, although I spend all 8 hours at work from 9am till 6 pm. Let's say I have classes from 9 am to 11 am and from 3 pm to 5 pm, besides this work time will not be counted for my stavka. I find it exhausting, because preparation time for classes is not included in my work hours. As a result, it is not encouraged in our system to focus on the preparation process and office hours for students.

According to the practical research carried out in Kazakhstan, as emphasized by Mynbayeva, the combination of performance pressure, inadequate pay, and the relatively low regard for the teaching profession has led to a decline in the professional identities of teachers (Mynbayeva, 2012). Consequently, the occupation is perceived as a part-time, unappealing, and unprofessional line of work (Steiner-Khamsi, 2007). A crucial distinction in the teaching load structure is that the base salary of teachers solely consists of the time they spend instructing in the classroom, whereas OECD teachers who adhere to a workload salary structure encompass teaching, meetings, and preparation time. In the five Central Asian countries, the specific Russian term "stavka" is implemented. This system, which originated from the Soviet era, provides teachers with a foundational salary solely for the duration of their teaching activities. The author highlights two essential characteristics of the stavka or teaching load structure: the base pay and a fragmented and variable salary structure. Therefore, reconsideration of teaching load also should be based on office hours and other teaching profession responsibilities.

The next code of the theme found in the research is the status of teachers. The teaching profession holds a very important place in Kazakh society, which is expected to provide its members with high status. However, many studies show that the status of teachers is getting low. Participant G12 claimed how the teaching profession in Kazakhstan is not highly esteemed as in other countries:

Every time I mention my profession of teaching, I feel ashamed and weird, seeing my friends and family find being a teacher at school something as not highly esteemed. I've been told that I could work in those countries, where this profession is highly valued and paid. I'm, if honestly, not sure of it, anyways, we will see what comes by in the near future.

In the Ministry of Education and Science's Strategic Plan for the years 2017-2021, it is reported that there has been a 10 percent growth in the number of teachers when compared to the 2013-2014 period. According to the State Programme for Education Development 2011-2020 (SPED), several initiatives are being pursued or planned with the aim of augmenting the status of teachers in Kazakhstan. These initiatives encompass the implementation of the "Teacher of the Year" and other competitive events, collaborative projects with mass media, as well as forums dedicated to teacher-innovations (Yakavets, 2014). For example, during the Presidential Address, it was emphasized that the 'Law on the Teacher's status' was accepted in Kazakhstan in 2019, with the intention of safeguarding teachers against excessive workload and clarifying their legal entitlements (Karabassova, 2020).

Lack of pre-service training is the third code of the theme. In Kazakhstan, the process of preparing teachers consists of three distinct stages. These stages include pre-service training, concurrent training, and in-service training. Pre-service training is administered at the collegiate or university level and typically requires a completion time of four years. Concurrent-service training is targeted towards non-certified educators, commonly referred to as para-teachers, who seek to acquire specialized knowledge in a specific subject area. In-service training aims to provide continuous professional development opportunities for teachers who are currently working in the field (Harris-Van Keuren, 2011).

In Kazakhstan, teachers receive their pre-service education through Pedagogic Institutes, involving a four-year full-time study program. This is evident in the acceptance of students with an average United National Test (UNT) score of 70 by the state national university, and a score of 50 by the state pedagogical institutions. The lack of prestige associated with the profession of teaching is also evident in the rates at which higher education scholarships are awarded by the Ministry of Education.

It is easier to enroll for a pedagogical university with full scholarship, rather than other professions. My family could not afford paying tuition, so the only way to study on full scholarship was becoming a teacher. I would not say I dreamed of being a teacher.

In fact, a significant proportion of students, ranging from 30% to 70%, who are enrolled in seven pre-service teaching universities, are classified as "contract students." These individuals possess the financial means to pay for their tuition fees but do not meet the

minimum academic requirements to gain admission into more esteemed degree programs. Consequently, these students contribute to the financial resources of the university while also incurring additional costs for the institution.

On the other hand, "budget students", who are recipients of government scholarships, are granted the opportunity to pursue higher education without any financial burden due to their exceptional academic accomplishments. It can be argued that these factors directly impact the professional status, standing, and reputation of teachers in Kazakhstan. Although the government of Kazakhstan aims to improve the socio-economic conditions of teachers, the process of selecting individuals for admission into teacher education programs should be regarded as an indicator of status. For instance, in Finland, candidates are required to successfully pass a written examination on pedagogy during the second stage of the selection process, as well as participate in a clinical activity that simulates a school setting and showcases their skills in social interaction, communication, and teaching attitudes and behaviors. Following this, the most exceptional candidates are interviewed and expected to provide an explanation for their decision to pursue a career in teaching.

As for the fourth code found in the research as bureaucracy, Kazakhstan's education system is characterized by a high degree of centralization, featuring thorough central planning and a comprehensive set of standards (OECD, 2020). Additionally, the system is marked by bureaucracy, primarily due to its administrative frameworks and accountability mechanisms. This has implications for how reforms are understood and put into practice, as well as the role that teachers assume within this context. The presence of bureaucracy, a top-down management approach, and limited resources and inadequate facilities acted as barriers to driving changes in these work environments. When graduates endeavored to implement their expertise and abilities in state agencies, institutions, and civil service organizations, they encountered substantial obstacles. The presence of bureaucratic systems, a management style based on hierarchy, and limited resources and inadequate facilities acted as obstacles to implementing changes within these professional environments.

The presence of a robust bureaucracy within the civil service sector, as well as national and state agencies, is a phenomenon that has been acknowledged as a systemic problem across various sectors. Former members of these organizations often described them as exemplifying a management style specific to Kazakhstan or a management culture inherited from the Soviet era, both of which had a demotivating effect on employees. These issues, for some individuals, resulted in a sense of indifference and a loss of hope in their ability to enact change (Jonbekova, 2024).

Conclusion. We must acknowledge that our data collection methods were constrained to just two primary qualitative methods. Consequently, it may be challenging to extrapolate our findings to a broader population. Nevertheless, we have succeeded in pinpointing significant concerns related to pre-service teachers. Therefore, further research can be carried out for a more diverse range of participants.

It was found that Kazakhstani teachers in their early career phase are experiencing various challenges, which in turn potentially might hinder their professional identity development. The results show that there are 4 main barriers of Kazakh teacher's identity formation after a year of initial teaching such as higher salary expectations, status, lack of pre-teaching training and bureaucracy. Thus, the recommendations are based on barriers found in this study: reconsideration of workload salary; introduction of process of selecting individuals for admission into teacher education programs and mentoring programs.

Importantly, these findings do not merely serve as a diagnostic tool but provide a foundation for the development of targeted strategies aimed at supporting the professional growth of Kazakh teachers. By understanding and addressing these systemic barriers, educational institutions can tailor training and development programs to encompass language proficiency enhancement, cross-cultural understanding, and technological proficiency. Furthermore, the insights garnered from this research contribute to the formulation of policies that promote a more standardized and cohesive educational framework, fostering an environment conducive to the holistic development of teachers.

Reference:

Beauchamp, C., & Thomas, L. (2006). Imagination and reflection in teacher education: The development of professional identity from student teaching to beginning practice. In Conference Proceedings from the 4th International Conference on Education and Imagination (pp. 12-15).

Beijaard, D., Verloop, N., & Vermunt, J. D. (2000). Teachers' perceptions of professional identity: An exploratory study from a personal knowledge perspective. Teaching and Teacher Education, 16(7), 749-764. DOI: https://doi.org/10.1016/S0742-051X(00)00023-8

Chan, D. W. (2002). Stress, self-efficacy, social support, and psychological distress among prospective Chinese teachers in Hong Kong. Educational Psychology, 22(5), 557-569. DOI: 10.1080/0144341022000023635.

Clarke, V., & Braun, V. (2013). Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. The Psychologist, 26(2), 120-123. Retrieved from https://uwe-repository.worktribe.com/preview/937606/Teaching%20.

Edwards, D., & Secretary, G. (2021). Recovery in education: The imperative to support and invest in the education workforce. In Demanding justice beyond rhetoric: Time to overcome contradictions and hypocrisy in the COVID-19 crisis (Spotlight on Sustainable Development 2021, pp. 50-51). Retrieved from https://www.2030spotlight.org/sites/default/files/download/_Spotlight_2021_web_specialContribution_1_9.pdf

Flores, M. A. (2014). Developing teacher identity in preservice education: Experiences and practices from Portugal. In International Teacher Education: Promising Pedagogies (Part A) (pp. 353-379). Emerald Group Publishing Limited. DOI:https://doi.org/10.1108/S1479-368720140000022021

Gaziel, H. H. (1995). Sabbatical leave, job burnout and turnover intentions among teachers. International Journal of Lifelong Education, 14(4), 331-338. DOI:https://doi.org/10.1080/0260137950140406

Harris-Van Keuren, C. (2011). Influencing the status of teaching in Central Asia. In Globalization on the Margins: Education and Postsocialist Transformations in Central Asia (pp. 173-201).

Jonbekova, D. (2024). Government scholarships for international higher education: Pathways for social change in Kazakhstan. Higher Education, 87(3), 761-777. DOI: https://doi.org/10.1007/s10734-023-01034-8.

Karabassova, L. (2020). Understanding trilingual education reform in Kazakhstan: Why is it stalled? In Education in Central Asia: A Kaleidoscope of Challenges and Opportunities (pp. 37-51). DOI: https://doi.org/10.1007/978-3-030-50127-3_3

Klassen, R. M., et al. (2021). Examining teacher recruitment strategies in England. Journal of Education for Teaching, 47(2), 163-185. doi: https://doi.org/10.1080/02607476.2021.1876501

Liu, S., & Onwuegbuzie, A. J. (2012). Chinese teachers' work stress and their turnover intention. International Journal of Educational Research, 53, 160-170. DOI: https://doi.org/10.1016/j.ijer.2012.03.006

Miles, R., & Knipe, S. (2018). 'I sorta felt like I was out in the middle of the ocean': Novice teachers' transition to the classroom. Australian Journal of Teacher Education, 43(6), 105-121. DOI: http://dx.doi.org/10.14221/ajte.2018v43n6.7

Mynbayeva, A. K., Anarbek, N., & Akhmetova, G. K. (2012). Diagnosis of pedagogical professional deformations: A view from Kazakhstan. Procedia-Social and Behavioral Sciences, 69, 1289-1294. DOI: doi: 10.1016/j.sbspro.2012.12.064.

OECD. (2020). Strengthening national examinations in Kazakhstan to achieve national goals. OECD Education Policy Perspectives, No. 24. Retrieved from https://www.oecd-ilibrary.org/education/strengthening-national-examinations-in-kazakhstan-to-achieve-national-goals_0bf8662b-en

Steiner-Khamsi, G., Mossayeb, S., & Ridge, N. (2007). Curriculum and student assessment, pre-service teacher training: An assessment in Tajikistan and Kyrgyzstan. Washington, DC: USAID. Retrieved from http://www.tc.columbia.edu/faculty/steiner-khamsi/_projects/USAIDkyrgyzTaj.pdf

UNESCO. (2016). The world needs almost 69 million new teachers to reach the 2030 education goals (UIS fact sheet, No. 39). Retrieved from https://uis.unesco.org/sites/default/files/documents/fs39-theworld-needs-almost-69-million-new-teachers-to-reach-the-2030-education-goals-2016-en.pdf

Yakavets, N. (2014). Educational reform in Kazakhstan: The first decade of independence. Educational Reform and Internationalisation: The Case of School Reform in Kazakhstan, 23(4), 1-27.

Сагинтаева, А., Камбатырова, А., Карабасова, Л., Канай, Г., & Алмухамбетова, А. (2022). Введение в образовательные исследования: Теория, методы и практики. Нур-Султан: Высшая школа образования, Назарбаев Университет. 232 стр.

Сыздыков, А. (2022). Как МОН будет привлекать учителей в регионы? Retrieved December 20, 2023, from https://bilimdinews.kz/?p=192842

Reference:

Beauchamp, C., & Thomas, L. (2006). Imagination and reflection in teacher education: The development of professional identity from student teaching to beginning practice. In Conference Proceedings from the 4th International Conference on Education and Imagination (pp. 12-15).

Beijaard, D., Verloop, N., & Vermunt, J. D. (2000). Teachers' perceptions of professional identity: An exploratory study from a personal knowledge perspective. Teaching and Teacher Education, 16(7), 749-764. DOI: https://doi.org/10.1016/S0742-051X(00)00023-8

Chan, D. W. (2002). Stress, self-efficacy, social support, and psychological distress among prospective Chinese teachers in Hong Kong. Educational Psychology, 22(5), 557-569. DOI: 10.1080/0144341022000023635.

Clarke, V., & Braun, V. (2013). Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. The Psychologist, 26(2), 120-123. Retrieved from https://uwe-repository.worktribe.com/preview/937606/Teaching%20.

Edwards, D., & Secretary, G. (2021). Recovery in education: The imperative to support and invest in the education workforce. In Demanding justice beyond rhetoric: Time to overcome contradictions and hypocrisy in the COVID-19 crisis (Spotlight on Sustainable Development 2021, pp. 50-51). Retrieved from https://www.2030spotlight.org/sites/default/files/download/_Spotlight_2021_web_specialContribution_1_9.pdf

Flores, M. A. (2014). Developing teacher identity in preservice education: Experiences and practices from Portugal. In International Teacher Education: Promising Pedagogies (Part A) (pp. 353-379). Emerald Group Publishing Limited. DOI:https://doi.org/10.1108/S1479-368720140000022021

Gaziel, H. H. (1995). Sabbatical leave, job burnout and turnover intentions among teachers. International Journal of Lifelong Education, 14(4), 331-338. DOI:https://doi.org/10.1080/0260137950140406

Harris-Van Keuren, C. (2011). Influencing the status of teaching in Central Asia. In Globalization on the Margins: Education and Postsocialist Transformations in Central Asia (pp. 173-201).

Jonbekova, D. (2024). Government scholarships for international higher education: Pathways for social change in Kazakhstan. Higher Education, 87(3), 761-777. DOI: https://doi.org/10.1007/s10734-023-01034-8.

Karabassova, L. (2020). Understanding trilingual education reform in Kazakhstan: Why is it stalled? In Education in Central Asia: A Kaleidoscope of Challenges and Opportunities (pp. 37-51). DOI: https://doi.org/10.1007/978-3-030-50127-3_3

Klassen, R. M., et al. (2021). Examining teacher recruitment strategies in England. Journal of Education for Teaching, 47(2), 163-185. doi: https://doi.org/10.1080/02607476.2021.1876501

Liu, S., & Onwuegbuzie, A. J. (2012). Chinese teachers' work stress and their turnover intention. International Journal of Educational Research, 53, 160-170. DOI: https://doi.org/10.1016/j.ijer.2012.03.006

Miles, R., & Knipe, S. (2018). 'I sorta felt like I was out in the middle of the ocean': Novice teachers' transition to the classroom. Australian Journal of Teacher Education, 43(6), 105-121. DOI: http://dx.doi.org/10.14221/ajte.2018v43n6.7

Mynbayeva, A. K., Anarbek, N., & Akhmetova, G. K. (2012). Diagnosis of pedagogical professional deformations: A view from Kazakhstan. Procedia-Social and Behavioral Sciences, 69, 1289-1294. DOI: doi: 10.1016/j.sbspro.2012.12.064.

OECD. (2020). Strengthening national examinations in Kazakhstan to achieve national goals. OECD Education Policy Perspectives, No. 24. Retrieved from https://www.oecd-ilibrary.org/education/strengthening-national-examinations-in-kazakhstan-to-achieve-national-goals_0bf8662b-en

Steiner-Khamsi, G., Mossayeb, S., & Ridge, N. (2007). Curriculum and student assessment, pre-service teacher training: An assessment in Tajikistan and Kyrgyzstan. Washington, DC: USAID. Retrieved from http://www.tc.columbia.edu/faculty/steiner-khamsi/_projects/USAIDkyrgyzTaj.pdf

UNESCO. (2016). The world needs almost 69 million new teachers to reach the 2030 education goals (UIS fact sheet, No. 39). Retrieved from https://uis.unesco.org/sites/default/files/documents/fs39-theworld-needs-almost-69-million-new-teachers-to-reach-the-2030-education-goals-2016-en.pdf

Yakavets, N. (2014). Educational reform in Kazakhstan: The first decade of independence. Educational Reform and Internationalisation: The Case of School Reform in Kazakhstan, 23(4), 1-27.

Sagintayeva, A., Kambatyrova, A., Karabasova, L., Kanay, G., & Almukhambetova, A. (2022). Vvedeniye v obrazovatel'nyye issledovaniya: Teoriya, metody i praktiki [Introduction to educational research: Theory, methods, and practices]. Nur-Sultan: Vysshaya shkola obrazovaniya, Nazarbayev Universitet. [in Russian]

Syzdykov, A. (2022). Kak MON budet privlekat' uchiteley v regiony? [How will the Ministry of Education attract teachers to the regions?]. Retrieved December 20, 2023, from https://bilimdinews.kz/?p=192842 [in Russian]

A.D. SYZDYKBAYEVA[1], Y.N. AGRANOVICH[1,] L.Y. AGEYEVA[1], V.D. TYAN[1]

[1]Kazakh National Women's Teacher Training University (Almaty, Kazakhstan)
[*]e-mail: syzdykbaeva.a@qyzpu.edu.kz

GLOBAL TRENDS IN CONTINUOUS PROFESSIONAL DEVELOPMENT OF TEACHERS: COMPARATIVE ANALYSIS

Abstract

This research presents a comparative analysis of Continuous Professional Development (CPD) models for teachers in several countries, including Singapore, Finland, Japan, China (Shanghai), Australia, Canada (Ontario), Estonia, and the Netherlands. Employing a qualitative approach and multiple case study methodology, the research identifies key features and trends in CPD. The results indicate that effective CPD models are characterized by individualized approaches, emphasis on collaborative learning, and connections to research activities. Despite variations in implementation, all models recognize the critical role of continuous teacher development in improving educational quality. Innovative approaches are highlighted, such as the Japanese Lesson Study model, the teacher rotation system in Shanghai, and personal learning budgets in the Netherlands. The study underscores the importance of creating flexible, adaptive CPD systems capable of addressing global challenges, including the digitalization of education and the development of 21st-century skills. The research findings can serve as a foundation for improving CPD systems in Kazakhstan, taking into account their unique context for detailing and enhancing the Professional Standard "Teacher".

Keywords: teacher, professional development, continuous learning, professional standard, teaching models.

Introduction. In the modern world, there is a significant shift from traditional models of professional development to the concept of continuous professional development of teachers (CPDT) (Kraft et al., 2018; Opfer et al., 2011). This transformation is driven by a number of interrelated factors reflecting profound changes in education, technology, and society as a whole (Srinivasan et al., 2023; Kennedy, 2016; Thurlings, 2017).

One of the key drivers of this shift is the rapid acceleration of technological progress in education. In the era of digitalization and automation, teachers' knowledge and skills quickly become obsolete, requiring constant updating of competencies (Symeonidis & Schwarz, 2023; Syzdykbayeva et al., 2021).

The traditional model of professional development, often including training once every few years, is no longer sufficient to meet this need (Darling-Hammond et al., 2017). At the same time, the development of information technology has made continuous education more accessible and flexible thanks to the emergence of online courses, webinars, and other forms of distance learning for teachers (Trust et al., 2016).

Globalization and increased competition in the global educational space also play a significant role in this transition. Educators are forced to constantly improve to remain competitive in the global education system (Schleicher, 2016). This is closely related to the changing nature of pedagogical work: the transition to a knowledge economy and the increase in intellectual labor require continuous development of teachers' cognitive and creative abilities (Voogt et al., 2015).

Changes in the educational paradigm from the "education for life" model to "lifelong learning" reflect fundamental transformations in understanding the role of learning in a teacher's life (Kools & Stoll, 2016). This shift is supported by the requirements of educational institutions, which increasingly value educators capable of continuous self-development and adaptation to change (Darling-Hammond et al., 2017).

It is important to note that continuous professional development contributes not only to the professional but also to the personal growth of educators, increasing job satisfaction and overall quality of life (Day, 2017). This is

particularly relevant in the context of the growing interdisciplinarity of modern educational challenges, which often require knowledge from related fields (Postholm, 2012).

The modern labor market in education is characterized by highly flexible career trajectories. Frequent changes in specializations and areas of activity throughout life are becoming the norm, requiring educators to engage in constant learning and retraining (Avalos, 2011).

Thus, the transition to a model of continuous professional development for educators is a response to a complex set of modern challenges in education. This model allows teachers to adapt to rapidly changing working conditions, remain in demand in the profession, and achieve professional and personal growth throughout their careers. CPD is becoming not just a desirable addition to basic teacher education but a necessary condition for successful professional activity of an educator in the 21st century (Darling-Hammond et al., 2017).

Materials and Methods. The research is based on a constructivist paradigm, as the study of CPDT models takes into account unique sociocultural factors influencing the formation and implementation of these models in different countries.

The methodological approach is qualitative, based on a multiple case study. Each national CPDT model is considered as a separate case.

Data collection methods: literature review (analysis of academic publications, research reports, and other secondary sources describing and analyzing CPDT models in the studied countries).

The target sample of countries included Singapore, Finland, Japan, China (Shanghai), Australia, Estonia, and the Netherlands, as these countries were selected based on their recognized successes in education and diversity of approaches to CPDT.

Data analysis: thematic analysis (identifying key themes and patterns in each CPDT model) and cross-case analysis (comparing themes and patterns across different national models).

Ensuring credibility: description of the context of each model to ensure transferability of results.

Ethical considerations: respectful approach to cultural differences in data interpretation.

Research limitations: limited number of countries studied, language barriers in literature review, complexity of accounting for all contextual factors affecting CPDT models.

Timeframe: the study was conducted over a period of 7 months, including stages of data collection, analysis, and report writing for publication.

There are several recognized models of continuous professional development of teachers in the world: Singaporean, Finnish, Japanese, Shanghai, Estonian, Dutch (Table 1).

Table 1. *Models of Continuous Professional Development of Teachers*

CPDT Model	Key Features
Singaporean model of continuous professional development of teachers/ Ng Eng Hen, former Minister of Education of Singapore (2008-2011)	1. Each teacher is provided with 100 hours of paid professional development per year (courses, seminars, conferences, or self-education). 2. The system is based on reflective practice. Teachers are encouraged to constantly analyze their work and seek ways to improve. 3. A well-developed system of mentoring and coaching exists. Experienced educators help young colleagues, ensuring the transfer of experience and support. 4. There are three career tracks for teachers: teaching, leadership, and specialization, allowing educators to develop in their chosen direction. 5. Emphasis is placed on collaborative learning. Teachers often work in teams, sharing experiences and ideas. 6. Professional development is closely linked to the needs of the school and the national education system. 7. Modern technologies and online platforms are used for learning.
Finnish model of continuous	1. High teacher autonomy: teachers have significant freedom in choosing teaching methods and course content within the national curriculum.

professional development of teachers / Pasi Sahlberg, Finnish educator and researcher	2. Emphasis on research activities: teachers are encouraged to conduct pedagogical research and apply its results in their practice. 3. Close collaboration between schools and universities: many schools are «university schools» where students undergo internships, and experienced teachers participate in research. 4. Regular pedagogical experiments: teachers are encouraged to implement innovative teaching methods and evaluate their effectiveness. 5. Collaborative learning: teachers often work in teams, exchanging experiences and ideas. 6. Individual development plans: each teacher develops their own professional growth plan based on personal goals and school needs. 7. Continuous education: teachers regularly participate in professional development courses, seminars, and conferences. 8. Focus on student well-being: teachers' professional development is directly linked to improving educational outcomes and student well-being.
Japanese Model of Continuous Professional Development of Teachers: Lesson Study Roots trace back to the Meiji era (late 19th century) Modern researchers: Catherine Lewis, an American researcher who contributed to the spread of the method beyond Japan	1. Collaborative Planning: A group of teachers jointly develops a detailed lesson plan, focusing on a specific educational goal. 2. Lesson Observation: One teacher conducts the planned lesson, while other group members observe and collect data on students' learning and behavior. 3. Post-lesson Discussion: After the lesson, the group analyzes the collected data, discusses the effectiveness of teaching methods, and suggests improvements. 4. Revision and Repetition: Based on the discussion, the lesson plan is revised, and the process is repeated, often with a different teacher conducting the improved lesson. 5. Open Lessons: Open lessons are regularly conducted, inviting teachers from other schools to observe and discuss. 6. Emphasis on Continuous Improvement: The model is based on the idea of constant improvement of teaching practice. 7. Focus on Student Learning: The main attention is paid to how students perceive and assimilate the material, not just the teacher's actions. 8. Integration of Theory and Practice: Teachers apply pedagogical theories in practice and reflect on their effectiveness.
Australian Model of Continuous Professional Development of Teachers John Hattie, Chairman of the Board of AITSL (2014-2022)	1. National Professional Standards developed by the Australian Institute for Teaching and School Leadership (AITSL), defining expectations for teachers at different career stages. 2. Professional Proficiency Levels: Graduate, Proficient Teacher, Highly Accomplished Teacher, and Lead Teacher. 3. Personalized Professional Development Plans: Each teacher develops an individual plan based on self-assessment and career growth goals. 4. Teacher Accreditation: Regular process of evaluating and confirming teachers' compliance with national standards. 5. Diversity of Professional Development Forms: Courses, seminars, online learning, coaching, mentoring, and professional learning communities. 6. Connection to Research: The use of pedagogical research results in teaching practice is encouraged. 7. Reflective Practice: Teachers are encouraged to regularly analyze their work and seek ways to improve. 8. Effectiveness Evaluation: Regular assessment of the impact of professional development on student learning outcomes. 9. Educational Leadership: Special attention is paid to developing leadership qualities in teachers at all levels.

Shanghai Model of Continuous Professional Development for Teachers by Zhang Minxuan, former president of Shanghai Institute of Education	1. Teacher ranking system: Teachers progress through several levels of professional mastery, from novice to expert, which stimulates continuous development. 2. Regular demonstration lessons: Experienced teachers regularly conduct open lessons for colleagues, demonstrating effective teaching methods. 3. Teacher research groups: Educators form groups for collaborative study and problem-solving in teaching and learning. 4. Teacher rotation between schools: Experienced teachers are temporarily transferred to low-performing schools to improve the quality of education. 5. Mentoring: Experienced teachers act as mentors for young professionals, ensuring the transfer of experience. 6. Emphasis on subject knowledge: Great attention is paid to deepening teachers' knowledge in the subjects they teach. 7. Connection with universities: Schools closely cooperate with pedagogical universities to provide continuous education for teachers. 8. Publication of research: Teachers are encouraged to publish the results of their pedagogical research and innovations.
Canadian Model (Ontario) of Continuous Professional Development for Teachers / Michael Fullan, Canadian educator and researcher	1. Individualized growth plans: Each teacher develops their own professional development plan, taking into account personal goals and school needs. 2. Mentoring for new teachers: The New Teacher Induction Program provides mentorship and support during the first years of teaching. 3. Professional learning communities: Teachers regularly meet in groups to discuss teaching practices, analyze student performance data, and plan improvements. 4. Connection to school and district goals: Teachers' professional development is closely linked to school and educational district development priorities. 5. Diverse learning formats: Workshops, online courses, conferences, collaborative learning, and independent research. 6. Emphasis on practical application: Application of new knowledge and skills directly in the classroom is encouraged. 7. Continuous assessment and reflection: Teachers regularly evaluate the effectiveness of their professional development and its impact on student learning. 8. Support for teacher leadership: The model encourages teachers to take on leadership roles in the school and share experiences with colleagues.
Estonian Model of Continuous Professional Development for Teachers / Mailis Reps, former Minister of Education and Research of Estonia	1. Estonian Model of Continuous Professional Development for Teachers / Mailis Reps, former Minister of Education and Research of Estonia 2. Digital teacher portfolios: Each educator maintains an electronic portfolio reflecting their professional development, achievements, and competencies. 3. Emphasis on digital competencies: Great attention is paid to developing skills in using digital technologies in the educational process. 4. Strong connection with universities: Pedagogical higher education institutions actively participate in teacher professional development programs, ensuring a link between theory and practice. 5. Flexible professional development pathways: Teachers have the opportunity to choose various forms and directions of professional growth. 6. Professional standards system: Competencies required for teachers at different career stages are clearly defined. 7. Mentoring and coaching: Experienced educators support young professionals, contributing to their professional growth. 8. International cooperation: Participation in international educational projects and experience exchanges is actively encouraged. 9. Integration of formal and informal learning: The importance of both official professional development courses and self-education is recognized.
Dutch Model of Continuous	1. Personal budgets: Teachers receive individual budgets for professional development, which they can use at their discretion for courses, conferences, or other forms of learning.

Professional Development for Teachers	2. Strong role of professional associations: Teachers' associations play an important role in defining professional development standards and providing learning opportunities.
	3. Emphasis on innovation and experimentation: Teachers are encouraged to implement new teaching methods and conduct pedagogical experiments.
	4. Collaboration between schools: A system for exchanging experiences and best practices between different educational institutions is well-developed. 5.Integration with higher education: Close cooperation between schools and universities in research and teacher training.
	6. Focus on digital competencies: Special attention is paid to developing skills in using digital technologies in education.
	7. Reflective practice: Teachers are encouraged to regularly analyze their work and plan professional development based on this analysis.
	8. Flexible career development paths: The system allows teachers to specialize in various areas of education.

Result. Based on the presented models of continuous professional development of teachers (CPDT), key themes and patterns have been identified and cross-case analysis (Tables 2,3):

Table 2. *Results of thematic analysis*

Themes	Patterns	Country of CPDT model
Individualization and personalization	Individual development plans	Finland, Australia, Canada
	Personal training budgets	Netherlands
	Digital Portfolios	Estonia
Collaborative learning	Professional learning communities	Canada
	Teacher research groups	Shanghai
	Lesson Study System	Japan
Connection with research and higher education	Cooperation between schools and universities	Finland, Shanghai, Estonia
	Emphasis on conducting pedagogical research	Finland, Australia
A structured system of professional growth	Professional skill levels	Australia
	The system of teacher ranks	Shanghai
	Career tracks	Singapore
Mentoring and coaching	Support for new teachers	Canada, Singapore
	The mentoring system	Shanghai, Estonia
Focus on digital competencies	Developing digital technology skills	Estonia, Netherlands
Reflexive practice	Continuous analysis and improvement of your work	Singapore, Australia, Netherlands
Flexibility and autonomy	Freedom of choice of teaching methods	Finland
	Flexible ways of professional development	Estonia, Netherlands

Table 3. *Cross-case analysis*

Common features	All models emphasize the importance of continuous professional development of teachers. Most models include elements of collaborative learning and the exchange of experience between teachers. Many models focus on the relationship between theory and practice, often through collaboration with universities.

Differences	The degree of structuring ranges from highly structured systems with clear levels (Australia, Shanghai) to more flexible approaches (Finland, the Netherlands). The focus on digital technologies (Estonia, the Netherlands) pay special attention to this, while other models do not single it out as a separate priority. The role of the state: from centrally managed systems (Singapore) to more decentralized approaches (the Netherlands).
Unique features	Japanese Lesson Study model stands out for its focus on detailed planning and analysis of individual lessons. Shanghai model is unique in its system of teacher rotation between schools. Dutch model is distinguished by providing personal budgets to teachers for professional development.
Cultural influences	Asian models (Singapore, Japan, Shanghai) tend to have a more structured approach and a clear hierarchy. European models (Finland, Estonia, the Netherlands) often emphasize teacher autonomy and flexibility in choosing development paths.
Evolution of models	Many models are developing towards greater personalization and taking into account the individual needs of teachers. There is a tendency towards the integration of formal and non-formal education, the recognition of various forms of professional development.

The analysis shows that despite differences in approaches, there are common trends in CPDT worldwide aimed at improving the quality of education through continuous teacher improvement.

Discussion. Examining models of continuous professional development of teachers (CPDT) in Singapore, Finland, Japan, Shanghai, Australia, Estonia, and the Netherlands reveals common trends and unique approaches reflecting diverse educational systems and cultural contexts (Darling-Hammond et al., 2017). All models recognize the critical importance of continuous professional growth for teachers in improving education quality, viewing CPDT as an ongoing process rather than isolated events (Gore et al., 2021). Each model encourages reflective practice and continuous improvement of pedagogical skills, consistent with the findings on effective professional development characteristics (Desimone & Garet, 2015).

Implementation approaches vary significantly. Singapore's structured model, providing 100 hours of paid annual professional development, contrasts with Finland's emphasis on teacher autonomy. This difference aligns with research arguing that both structured and autonomous models can be effective, depending on the cultural context (Nguyen & Hunter, 2018).

Japan's "Lesson Study" model, focusing on collective planning, observation, and lesson analysis, creates a culture of continuous improvement through teacher collaboration (Takahashi & McDougal, 2018). The Shanghai model's system of teacher ranks and inter-school rotation supports findings on the benefits of peer learning and experience exchange (Pang & Wang, 2016).

Australia's national professional standards and accreditation system echo research on the impact of clear professional benchmarks on teacher development (Clinton et al., 2017). Estonia's emphasis on digital competencies reflects a growing trend in integrating technology into teacher professional development (Taimalu & Luik, 2019). The Dutch model's focus on individualization and innovation, providing personal budgets for professional development, aligns with research on tailoring professional development to individual teacher needs (Louws et al., 2017).

The role of external institutions in CPDT varies across models. The collaboration between schools and universities in Finland, Estonia, and the Netherlands supports findings on integrating research into teacher development (Cochran-Smith & Lytle, 2009). Conversely, the centralized approaches in Singapore and Australia align with research on national-level CPDT initiatives (Bautista & Ortega-Ruiz, 2015).

Despite differences, all models demonstrate flexibility and adaptability, supporting the assertion that effective CPDT systems must be

dynamic (Opfer & Pedder, 2011). While each model offers valuable insights, it's crucial to consider Kazakhstan's specific context when adapting these practices, aligning with findings on contextualizing educational reforms in Kazakhstan (Yakavets et al., 2017).

Conclusion. The analysis of models of continuous professional development of teachers in various countries around the world reveals both common trends and unique approaches, conditioned by cultural, historical, and socio-economic factors.

The main findings of the study show that effective CPDT systems are characterized by individualization of approaches, emphasis on collaborative learning, and close connection with research activities. Important components include structured systems of professional growth, mentoring, and reflective practice.

Despite differences in implementation, all the models considered recognize the critical role of continuous teacher development in improving the quality of education. There is a general trend towards integrating formal and informal learning, as well as recognizing diverse forms of professional development.

The Japanese Lesson Study model, the teacher rotation system in Shanghai, and personal learning budgets in the Netherlands deserve special attention as unique practices and sources of inspiration for improving CPDT systems in Kazakhstan.

In the context of global challenges, including the digitalization of education and the need to develop 21st-century skills, CPDT systems continue to evolve, incorporating even greater personalization, enhanced international cooperation, and integration of digital technologies into the process of professional development of teachers. The study emphasizes the importance of creating flexible, adaptive CPDT systems capable of responding to the changing needs of both individual teachers and the educational system as a whole.

References:

Avalos, B. (2011). Teacher professional development in Teaching and Teacher Education over ten years. Teaching and Teacher Education, 27(1), 10-20

Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). Effective teacher professional development. Learning Policy Institute

Day, C. (2017). Teachers' worlds and work: Understanding complexity, building quality. Routledge

Gore, J., Miller, A., Fray, L., Harris, J., & Prieto, E. (2021). Improving student achievement through professional development: Results from a randomised controlled trial of Quality Teaching Rounds. Teaching and Teacher Education, 101, 103297

Kennedy, M. M. (2016). How Does Professional Development Improve Teaching? Review of Educational Research, 86(4), 945-980. https://doi.org/10.3102/0034654315626800

Nguyen, H. T. M., & Hunter, S. (2018). Towards an understanding of quality in higher education: A case study of Australia and Vietnam. Journal of Applied Research in Higher Education, 10(4), 456-474

Opfer, V. D., & Pedder, D. (2011). Conceptualizing Teacher Professional Learning. Review of Educational Research, 81(3), 376-407. https://doi.org/10.3102/0034654311413609

Pang, N. S. K., & Wang, T. (2016). Professional learning communities: Research and practices across six educational systems in the Asia-Pacific region. Asia Pacific Journal of Education, 36(2), 193-201

Postholm, M. B. (2012). Teachers' professional development: a theoretical review. Educational Research, 54(4), 405-429

Schleicher, A. (2016). Teaching excellence through professional learning and policy reform: Lessons from around the world. OECD Publishing

Srinivasan, R., Lal, A., & Nayak, S. (2023). Continuous Professional Development (CPD) for Teachers: A Global Perspective. Education Sciences, 13(5), 478. https://doi.org/10.3390/educsci13050478

Symeonidis, V., & Schwarz, J. F. (2023). Enhancing Teachers' Professional Development in the Digital Age: A Systematic Literature Review. Education Sciences, 13(2), 181. https://doi.org/10.3390/educsci13020181

Syzdykbayeva, A., Baikulova, A., & Kerimbayeva, R. (2021, April). Introduction of artificial intelligence as the basis of modern online education on the example of higher education. In *2021 IEEE International Conference on Smart Information Systems and Technologies (SIST)* (pp. 1-8). IEEE

Taimalu, M., & Luik, P. (2019). The impact of beliefs and knowledge on the integration of technology among teacher educators: A path analysis. Teaching and Teacher Education, 79, 101-110

Takahashi, A., & McDougal, T. (2018). Collaborative lesson research: maximizing the impact of lesson study. ZDM, 50(3), 277-289

Thurlings, M., & den Brok, P. (2017). Learning outcomes of teacher professional development activities: a meta-study. Educational Review, 69(5), 554-576. https://doi.org/10.1080/00131911.2017.1281226

Trust, T., Krutka, D. G., & Carpenter, J. P. (2016). «Together we are better»: Professional learning networks for teachers. Computers & Education, 102, 15-34.

Voogt, J., Erstad, O., Dede, C., & Mishra, P. (2013). Challenges to learning and schooling in the digital networked world of the 21st century. Journal of Computer Assisted Learning, 29(5), 403-413

L.M. ILYASSOVA[1], G.K. SHOLPANKULOVA[1], G.K. KOSMAGANBETOVA[1]

L.N. Gumilyov Eurasian National University (Astana, Kazakhstan)
*e-mail: lira.lira.8282@mail.ru

ACMEOLOGICAL COMPETENCE OF FUTURE SOCIAL EDUCATORS: CURRENT STATE

Abstract

Acmeological competence is an important issue for future social educators. This competence contributes to developing their skills to implement their professional activities, adjusting to changing circumstances, and being adaptable in professional endeavors in a rapidly changing world. This paper explores the current situation of future social educators' acmeological competence. The aim of this research is to define the current state of acmeological competence of future social educators and give recommendations to improve the situation. To collect the data a survey related to social educators' acmeological competence has been employed. The conducted survey revealed that approximately half of the future social educators are unfamiliar with the term. However, despite their unfamiliarity with "acmeology", they understand the importance of professional development. The authors of the research believe that incorporating acmeological competence components into the social education curricula and developing initiatives aimed at enhancing acmeological competence will increase future social educators' acmeological awareness and skills.

Keywords: competence, formation, acmeology, social educators, students, self-development.

Introduction. Acmeological competence is necessary for social educators to carry out their professional responsibilities. Acmeological competent social educators are able to effectively solve the problems and issues related to their profession. Research studies related to acmeological competence of social educators allows determining the present level, knowledge, skills of social educators' acmeological competence. Moreover, the research on this topic helps to identify the weakest and strongest points of the acmeological competence. The results of our research point out that a lot of work regarding to future social educators' acmeological competence should be conducted to improve their activities and benefit from their work.

At present time, the profession of social educators, which is faced with many social problems and challenges, is of great importance. Their job is essential in supporting children, teenagers, students, staff and any spheres, in which they are involved. Society benefits a lot from social educators' activities: in education they assist students to overcome educational, psychological and emotional obstacles, they

help people and children with special needs in integrating into society, people in crisis situations frequently receive primary psychological treatment from social educators. Their activities contribute to improve social environment, reduce crime rates, aid underprivileged groups, and cultivate an atmosphere that promotes the peaceful and prosperous development of all parts of society.

However, to achieve the highest accomplishments in their job social educators should put a lot of effort into their studies, work on their self-development and self-reflection. Moreover, the modern world demands high professionalism from social educators regarding their professional and personal qualities. They must grow and evolve in order to recognize and overcome obstacles as well as adapt to new challenges. Success of their work depends on their abilities and competences. Social educators' competencies form the cornerstone of their professional activity and have a direct bearing on the caliber and efficacy of the aid rendered.

One of the key competencies that are necessary for social educators in their job is acmeological competence. Acmeological competence is a significant aspect of personal and professional growth; it encompasses the aptitudes and competencies required to reach the pinnacles of both professional success and individual self-realization. This competence contributes to achieve successful career, to advance in the workplace, and to enhance well-being of the individual as a whole. Acmeological competence influences the ability to grow personally, to achieve a high degree of self-reflection, to address challenging work-related challenges successfully, and to adjust to changing circumstances. It assumes not only the possession of specialized knowledge and abilities in a certain field but also the development of character traits like self-organization, perseverance, reflection and stability. Therefore, this competence plays a crucial role in terms of other competences as it assists social educators to constantly advance in their profession.

Acmeological competence is a subset of their general professional and pedagogical competence, which reflects the dynamic unity of their individual professional and pedagogical orientation as well as their knowledge, values, and pedagogical thought activity methods. This allows to effectively grow both personally and professionally in both the sociocultural context and the classroom (Koshman, 2015).

Formation of acmeological competence of social educators is necessary for them to be able to adapt to the conditions of professional activities, to develop actively, and to strive for professional excellence and personal improvement. In this regard, it is significant to integrate acmeological competence into the process of social educators' preparation as this competence makes it possible to be capable of demonstrating adaptability and innovation, performing successfully in the face of dynamic changes, and enhancing their professional abilities continuously. In addition, acmeological competence offers a fresh viewpoint on achievement by viewing people as dynamic systems that aspire to perfection (Sydorchuk, 2022).

Moreover, integration of acmeological competence into teaching process of social educators enables the establishment of circumstances that support their ongoing professional growth and enhances the standard of social and educational support. Acmeological competence, as a collection of traits and attributes intended to reach one's professional and personal pinnacle, is increasingly important to social educators' ability to do their jobs well. Research on this subject makes it possible to build more efficient techniques and technological tools for future social educators' development as well as to have a greater grasp of the conditions and mechanisms that support their professional development and self-realization.

The study of social educators' acmeological competence is an important and pertinent field that advances both the overall social welfare and the professional quality of teachers. In the end, this research will lay the groundwork for the creation of fresh theoretical and applied perspectives in the fields of acmeology and education, which will be extremely advantageous to both specialized practitioners and society at large. The aim of this research

is to define the current state of acmeological competence of future social educators and give recommendations to improve the situation

Materials and Methods. The role of social educators in the society is becoming more significant since they provide support for all in places where they are involved. To carry out their work successfully a social educator needs to possess a wide range of competencies, including professional knowledge, abilities, and personal traits.

A lot of research studies have been written regarding to the activities and competences of social educators in the scientific literature. Training of social educators for adolescents has been considered in the article written by Alieva L.V. and others. They emphasized the role of socio-educational training as the children's public association organizer which is based on the advancements of pedagogical science in the field of upbringing and teaching. Their research focuses on the theoretical and methodological issues of the social educator's training, confirms the novelty and necessity of social educators in the modern world (Alieva, 2017).

The place and mission of the social educator in the sphere of education was considered in O.Chuiko's research. His study was devoted to defining the role of a social educator in the educational space. He concludes that a social educator impacts on the child's personality greatly and his actions ought to be directed toward a child's success and growth in general (Chuiko, 2019).

A researcher Calvo-Sastre discussed the problems of teaching social educators with and through groups in their article. His research was based on the teaching methodology used to train social educators. Through his study the researcher offers the model of teaching social educators. This model encourages group learning and yields excellent outcomes that can be applied to other disciplines in higher education in the social sector in Spain and other international contexts, in addition to offering an educational and training paradigm in social education with groups (Calvo-Sastre, 2019).

Social educators' competencies are necessary for the successful implementation of their work. The goals of social educators' competencies are to guarantee children and adolescents' complete social and academic development, support the creation of a positive social environment, and enhance their quality of life. S. Stanley and G Mettilda investigated the professional competencies of future social educators in terms of their emotional intelligence and reflective abilities (Stanley, Mettlida, 2021)

Researchers A. Magauova et.al. continue the study of the previous authors and considered the enhancement of professional competence of social pedagogy students in Kazakhstan and Lithuania. Their research revealed that both countries understand that social educators are successful in meeting the requirements of various students in inclusive environments and it is important to concentrate on their professional competencies (Magauova, Makhambetova, 2022).

Views on the social educator's figure in rural settings have been explored by Maria Garcia-Garrido and other scholars. They emphasize the value of institutional and social support in closing the need to integrate and elevate the role of the social educator as the primary facilitator of social intervention (García-Garrido et.al., 2023).

The acmeological competence that we are considering in this research is a key factor of professional success and efficacy of a social educator. It is evident that a social educator's acmeological competence has an impact on the quality of support they provide to children and young people for improving their well-being.

Acmeological competence is strongly related to acmeology, the study of the laws and processes governing human development at the mature stage and attaining the pinnacles of many pursuits. The term "acmeology" is derived from words "acme" which means the highest point and "logos" which means study. Acmeology studies the mechanics, patterns, and phenomenology of human growth at the point of his career (Pedagogical Dictionary, 2000).

A key component of professional development that aims to achieve the highest standards of professionalism and personal development is acmeological competence. The review of literature around the acmeological competence allowed us to observe that this term

is widely used in the research studies conducted by scholars of CIS countries. From existing studies we found out that a researcher L.V. Abdalina considers acmeological competence as an effective use of self-development technology to ensure the teacher's professional and personal development (Abdalina, 2009). N.A. Filonova admits that acmeological competence is the highest level of methods and ways of personal-professional development of a teacher and it is not sufficiently studied in the scientific world yet (Filonova, 2009).

Some investigations have been conducted on formation of acmeological competence of teachers of different disciplines in secondary schools as well as universities. For example, E.A. Kostina and others' research focused on the issues of foreign languages teachers' acmeological competence formation. They conclude that prospective foreign language teachers are not aware of acmeological competence at all, however they are able to make decisions and solve problems related to their professional activities and this ability positively impact on the enhancement of their professional knowledge and skills (Kostina et al., 2021). M. Kalashnyk considered the assessment characteristics of acmeological competence of shipping navigators. In his research the author defined the components of acmeological competence such as motivational, cognitive, praxeological and personal. Moreover, he recommended that future navigators should achieve the level of real "acme" in their personal and professional enhancement (Kalashnyk, 2021).

Enhancement of acmeological competence of social educators has been discussed in the research study conducted by K. Yessenamanova and other scholars. These authors' investigation revealed that acmeological competence is needed in order to enhance professionalism and boost the process of learning (Yessenamanova et al., 2022). O.A. Rudakova claimed that acmeological competence contributes to the professional capacity and personal growth of a social educator (Rudakova, 2019). According to B. Koldasbayeva et al. acmeological competence means the acquisition of moral growth, social recognition, a high degree of emotional intelligence, physical development, and lifetime maintenance of health and mental activity (Koldasbayeva, 2021).

Foreign scholars consider acmeological competence as a self-awareness, self-development and self-actualization. Pham Ha Linh and Thi Thanh Thuy considered social work students' professional development which was carried out through their self-directed learning. Their self-development programme included knowledge, awareness, their intervention abilities and professional demeanor. The research of these scholars revealed that social educators' self-development abilities are weak, the authors offer to enhance their abilities providing an individual plan for them (Linh & Thuy, 2022).

Maria Pallisera and other authors offer to develop social educators' self-knowledge via reflective learning based on their practical work experience (Pallisera, 2013). Julie Drolet et al. discussed teaching and learning strategies intended to promote wellbeing and self-development of social educators (Drolet et al., 2017). The review of literature on the researched topic made it possible to conclude that study of acmeological competence of social educators is of great importance. Studies on social educators' acmeological competence have been conducted in Kazakhstan and other CIS countries, in the foreign literature it is considered as self-development and self-realization. Several research studies have been done in development of acmeological competence of teachers and social educators. However, existed research studies do not solve the issues related to formation, development of this competence of future social educators. The authors think that examining the acmeological competency of social educators is a crucial step toward enhancing their professionalism, raising the standard of instruction, and ensuring the wellbeing and personal development of the educators. Therefore, the research question of this study is: To what extent are future social educators are aware of acmeological competence and its importance in their professional activities?

Results and discussions. Research materials were the data collected through the empirical

research method. The authors conducted the survey, which consisted questions related to acmeological competence of respondents.

Participants. The respondents were students majoring in Social Pedagogy (future social educators) of different years of study (n-52). Future social educators are enrolled in different universities of Kazakhstan. The aim of the survey was to define the current state of acmeological competence among future social educators. We divided the questions into three parts:

1. General information.
2. Competence awareness.
3. Acmeology related questions.

The questions were submitted through Google form and the link was disseminated among future social educators.

For general information we collected the information about future social educators' age, year of study, university they are enrolled. The second part was devoted to students' knowledge about the competence in general. The third part revealed future social educators' thoughts about acmeological competence. The questions were related to the term, importance, reasons and challenges in acmeological competence formation.

The research was conducted off line in one university with the participation of the respondents. In other universities the survey was conducted online.

The first part of the survey consisted of questions related the respondents' age, their year of studying and university they are studying.

The following table demonstrates the information about the age of respondents.

Table 1. *Age of respondents*

16-17	18	19	20	21	22-more
6	13	13	16	3	1

The table shows that respondents' age is different; they are 16-22 years old. This is because the survey involved from the first-year to the fourth year students.

The next table shows the information of their year of study (Table 2).

Table 2. *The year of study of respondents*

1st year	2nd year	3rd year	4th year
14	7	25	6

From this table one can observe that our respondents are from different years of study. Most of them are on their third year.

The next table demonstrates the information about universities where students are enrolled. (Table 3)

Table 3. *Respondents' universities*

University	Number
L.N. Gumilyov Eurasian National University	16
Abai Kazakh National Pedagogical University	7
Kazakh National Women's Teacher Training University	24
Al-Farabi Kazakh National University	4

Most respondents were studying at L.N. Gumilyov Eurasian National University (16) and Kazakh National Women's Teacher Training University (24). Only 4 students participated from Al-Farabi Kazakh National University.

The second part of the survey revealed information about future social educators' awareness of competence in general. The following figure contains respondents' replies. (Figure 1).
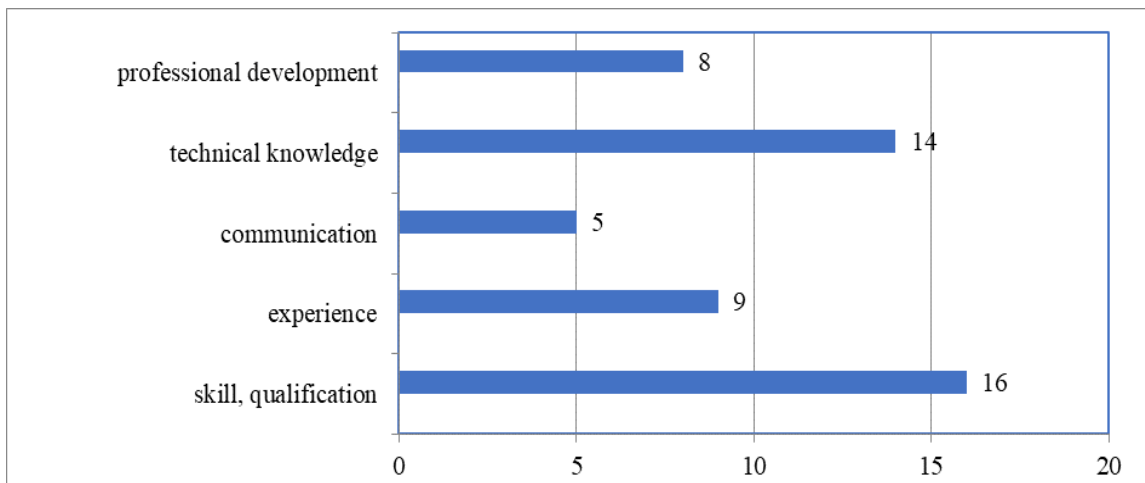
Figure 1: What is competence for you?

The figure illustrates that a majority of respondents (16) perceive competence as a skill or qualification. 14 students think that competence is related to technical knowledge. Almost similar number of students thinks that competence is professional knowledge (8) and experience (9). These data make it possible to conclude that respondents are aware of the term; however, there are some inaccuracies in their answers.

The answers to the question "Which of competence types do you think is important in your professional activities?" are as follows.
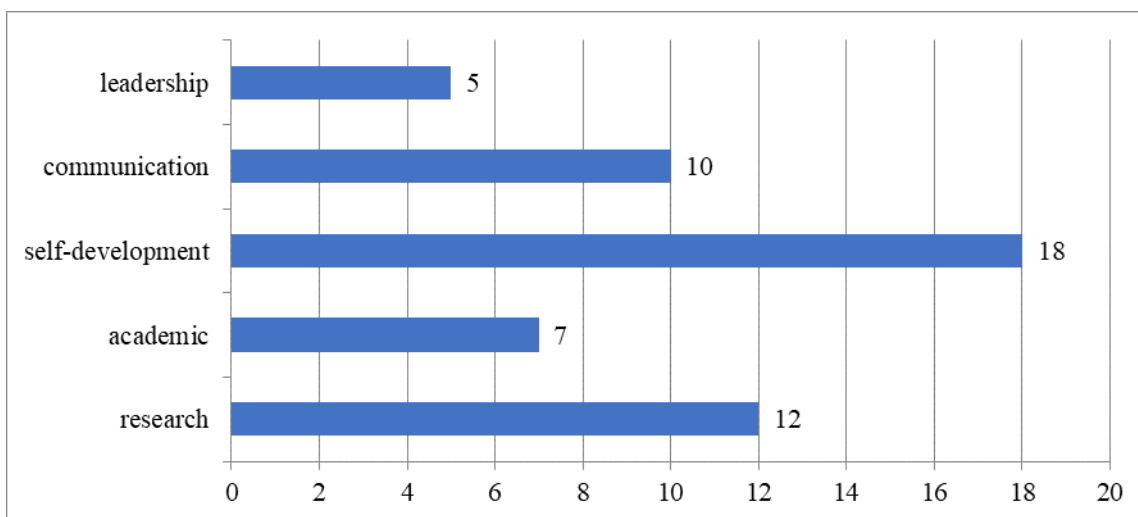

Figure 2: Respondents' answers

The data indicate that most respondents believe that self-development is crucial in their activities (18), in the second place research (12) and communication (10). Only 5 students think that they need leadership competence. These data show that respondents understand the importance of self-development in their activities as the majority of them are focused on developing their skills.

The third part of the survey covered the questions related to respondents' knowledge, skills and attitude to acmeological competence.

The following table demonstrates respondents' answers to the questions about acmeology, the importance of acmeological competence for social educators and their practice with acmeological competence. (Table 4)

The third part of the survey was dedicated to acmeology related questions. This information demonstrates that most respondents (22) are not familiar with the term «acmeology», only two respondents know about it and 23 students have heard or read about it.

Table 4. *Acmeology related answers*

	Questions	Variants of answers			
1	Are you aware of the term "Acmeology"?	not familiar at all	s o m e w h a t familiar	a little familiar	very familiar
		22	12	11	7
2	How important is acmeological com-petence for social educa-tors?	not important at all	not so important	a little important	very important
		21	15	8	8
3	To what extent do you integrate acmeological principles into your studying activities?	never	seldom	sometimes	always
		20	10	14	8

21 respondents think that acmeological competence for social educators is not important at all.

We think that these were respondents, who answered that they are not aware of the term «acmeology». 8 respondents believe that acmeological competence is significant for social educators. We observed that 20 students never incorporate acmeological competence into their studying, whereas 24 students do it rarely or sometimes. Only 8 students answered that they do it regularly. We think that most students are not aware of the term acmeology, in fact they all somehow are involved in acmeological competence.

The purpose of the next question was to identify respondents' opinion about what skills of social educators will develop if their acmeological competence is formed. Their answers were diverse and we tried to list the most frequent and important ones. (Table 5)

Table 5. *Respondents' answers*

№	Topics	The most frequent answers
1	Communication	with students, communication skills, interpersonal communication
2	Qualification	Professional development, new technologies, problem solving, being ready for challenges, a lot of skills will be developed, skills needed for work, quality of education, work experience
3	Responsibility	For classes, social activities, for his job, for activities
4	Skills	social, professional and creative skills, scientific, research, leadership
5	Development	Self-development, understanding live values, self-correction, self-reflection, self-management, personal and professional development

Moreover, there were some answers such as I don't know, yes, of course, well, don't know exactly but I know that it is connected to development, I am not familiar.

The following figure demonstrates the difficulties that future social educators could face when acmeological competence is integrated into teaching process. The answers are classified in the following figure (Figure 3).

As can be seen from the figure respondents' answers contain real difficulties, however many of them are not familiar with the term, they don't know what difficulties can happen when acmeological competence is integrated into teaching process of social educators.

This table lists the difficulties that respondents mentioned in the survey (Table 6).

This survey revealed the information about the current state of acmeological competence (their knowledge, understanding, skills and others) of future social educators.

Figure 3: Respondents' answers

Table 6. *Respondents' difficulties*

Difficulties
Misunderstanding the importance of the job
Lack of reliability
Problems with adaptation
During the practice
In the future profession
Compexity
Not having a clear objective for what you are doing and not fully understanding the trade
During work with students
Small obstacles to learning new things.
There are no more paid courses available.

The results indicate that future social educators are not fully aware of the term acmeology, therefore they could not explain benefits of acmeological competence for social educators and they were not able to define the importance of acmeological competence for them. Most respondents do not know what skills they can develop if their acmeological competence is formed. However, respondents who are familiar with this term, tried to identify which skill they will be enhanced with acmeological competence. In addition, they could list the problems they might have if acmeological competence is incorporated into teaching process.

Analysing research results on acmeological competence of future social educators the authors discovered several crucial difficulties that demand particular attention. First of all, approximately half of future social educators, who participated in the survey, are not familiar with the term «acmeology». The study conducted by E.A. Kostina et.al. revealed the similar results that students lack sufficient knowledge of acmeological competence, and that the development of acmeological competence, which is required to ensure the personal and professional growth of a future teacher, remains a task that is not always addressed during the university training process (Kostina et.al. 2021).

Secondly, as they do not know what the term means they were not able to give proper answers to the survey questions. Thirdly, even though some of our respondents understand the term and dealt with acmeological competence, they could not fully develop the theme. Nevertheless, despite the lack of skills and knowledge in acmeological competence, future social educators tried to answer all questions given in the survey. Their attempts demonstrate

their motivation and desire for self-development and contribution to the improvement of social educators' activities. These findings were indicated in the research results conducted by Yessenamanova et. al. that acmeological competence of social educators should be improved in order to accomplish personal enhancement and increase motivation of these students to study (Yessenamanova et. al.,2022).

The current situation in the development of acmeological competency among future social educators needs considerable modifications and improvements. Updating educational programs, enhancing practice-oriented training, developing students' personal traits, and upgrading methods are all critical steps toward obtaining a high degree of professionalism. Implementing these improvements will enable future social educators to efficiently address professional challenges while also contributing significantly to the growth of the social sphere.

Conclusion. The conducted survey research, the review of existed scientific literature revealed the information about the current state of social educators' acmeological competence. The study demonstrates that acmeological competence of social educators is the foundation of their willingness to always work on improving themselves and their professional activity. The research showed that nearly half of the future social educators are not aware of the term, many of them have lack of knowledge and consequently, they do not know how to form and develop this competence.

Therefore, the authors of this study give such recommendations to improve future social educators' acmeological competence: to introduce elements of acmeological competence into the content of existing disciplines of social educators; to create programs designed to advance acmeological competency in all its facets; to monitor and evaluate social educators' acmeological competence, if possible, to quickly pinpoint and address problem areas.

References

Alieva, L. V., Belyaev, G. Y., & Kruglov, V. V. (2017). Training of social educator as organizer of social activity of adolescents. Education Environment for the Information Age, European Proceedings of Social and Behavioural Science. 8. 70-77 https://doi.org/10.15405/epsbs.2017.08.9

Calvo-Sastre, A. (2019). Teaching social education with and through groups. Social Work With Groups, 43(3), 227–240. https://doi.org/10.1080/01609513.2019.1593918

Chuiko, O. (2019). The mission and role of the social educator in the development of the educational environment of the educational institution. Taras Shevcheko National University Bulletin. 1 (5) doi: https://doi.org/10.17721/2616-7786.2019/5-1/9.

Julie, Drolet., Patricia, L., Samson., Sherri, Tanchak., Linda, Kreitzer., Leeann, Hilsen. (2017). Self-care and Well-being in Social Work Education: Creating New Spaces for Learning. The Journal of Educational Thought, 50. 200-215. https://www.jstor.org/stable/26372404

Kalashnyk, M. (2021). Features of assessment of levels of acmeological competence among future of learning activities. Social and Humanities. 2. 38-45 doi:10.21303/2504-5571.2021.001755

Koldasbayeva, B., Doshybekov, A., Bobyreva, M., Khakimova, Z., and Satbayev,Y. (2021). Quantitative study of the level of Acmeological potential of risingphysical education specialists. Physical Educational. Sport 21, 2492–2500. https://doi.org10.7752/jpes.2021.05335.

Makhambetova, Z., Magauova, A. (2022) Pre-Service Social Educators' Professional Competences: An Inclusive Education Context Al-Farabi Kazakh National University, Education and self-education, 17 (2) 129-143. https://doi.org 10.26907/esd.17.2.12

María García-Garrido, Teresa Amezcua-Aguilar, Samuel P. León. (2023) Perception of the Figure of the Social Educator in Rural Contexts in Spain. Education sciences. 13. 332. https:// doi.org/10.3390/educsci13040332

Maria, Pallisera., Judit, Fullana., Josep-Miquel, Palaudarias., Mercè, Badosa. (2013). Personal and Professional Development (or Use of Self) in Social Educator Training. An Experience Based on Reflective Learning. Social Work Education, https://doi.org 10.1080/02615479.2012.701278

Ninel, Sydorchuk. (2022). Acmeological principles of professional training of future teachers. Zhytomyr Ivan Franko state university journal. Pedagogical sciences, 200-214. https://doi: 10.35433/pedagogy.3(110).2022.200-214

Pham Ha Linh, Thi Thanh Thuy. (2022) Situation of Professional Development via Self-Directed Learning of Social Work Students in Hanoi National University of Education. International Journal of Current Science Research and Review 05. 1566-1574. https://doi.org/10.47191/ijcsrr/V5-i5-19

Stanley S., Mettilda. G., (2021) Professional competencies in social work students: emotional intelligence, reflective ability and empathy-a comparative and longitudinal analysis. Social Work Education 40 (7) 827-842 https://doi.org/10.1080/02615479.2020.1724933

Yessenamanova K., Arinova B., Zhambylkyzy M., Rakhimbayeva R., Zhunussova D. (2022) Development of Acmeological Competence in Rising Social Teachers. Frontiers in Education. 7. https://doi.org 10.3389/feduc.2022.901050

Абдалина Л.В. (2009) Акмеологическая компетенция преподавателя колледжа: структура и содержание. Вестник Томского государственного университета. 2 (70). 249–251.

Костина, Е.А., Тлеужанова, Г.К., Джолданова Д.К., (2021). Вопросы формирования акмеологической компетенции будущих учителей иностранных языков в условиях вуза. Вестник Карагандинского университета. 1(101) https://doi.org 10.31489/2021Ped1/73-78

Кошман Д.М. (2015). Акмеологическая компетентность будущего учителя: сущность, структура и содержание. Акмеология, 3 (55), 94-95. URL: https://cyberleninka.ru/article/n/akmeologicheskaya-kompetentnost-buduschego-uchitelya-suschnost-struktura-i-soderzhanie

Педагогический словарь. https://pedagogical_dictionary.academic.ru

Рудакова, О. А. (2019). Акмеологическое развитие личности будущего психолога как основа профессиональной компетентности. Материалы VII Всероссийской научно-практической конференции по психологии развития. 63, 469–472. file:///C:/Users/User/Downloads/akmeologicheskoe-razvitie-lichnosti-buduschego-psihologa-kak-osnova-professionalnoy-kompetentnosti.pdf

Филонова, Н.А. (2009). Экспериментальное исследование особенностей развития акмеологической компетентности преподавателей профессионального колледжа. Молодой ученый, 3 (3), 202–204. URL: https://moluch.ru/archive/3/241/

References

Alieva, L. V., Belyaev, G. Y., & Kruglov, V. V. (2017). Training of social educator as organizer of social activity of adolescents. Education Environment for the Information Age, European Proceedings of Social and Behavioural Science. 8. 70-77 https://doi.org/10.15405/epsbs.2017.08.9

Calvo-Sastre, A. (2019). Teaching social education with and through groups. Social Work With Groups, 43(3), 227–240. https://doi.org/10.1080/01609513.2019.1593918

Chuiko, O. (2019). The mission and role of the social educator in the development of the educational environment of the educational institution. Taras Shevcheko National University Bulletin. 1 (5) doi: https://doi.org/10.17721/2616-7786.2019/5-1/9.

Julie, Drolet., Patricia, L., Samson., Sherri, Tanchak., Linda, Kreitzer., Leeann, Hilsen. (2017). Self-care and Well-being in Social Work Education: Creating New Spaces for Learning. The Journal of Educational Thought, 50. 200-215. https://www.jstor.org/stable/26372404

Kalashnyk, M. (2021). Features of assessment of levels of acmeological competence among future of learning activities. Social and Humanities. 2. 38-45 doi:10.21303/2504-5571.2021.001755

Koldasbayeva, B., Doshybekov, A., Bobyreva, M., Khakimova, Z., and Satbayev,Y. (2021). Quantitative study of the level of Acmeological potential of risingphysical education specialists. Physical Educational. Sport 21, 2492–2500. https://doi.org10.7752/jpes.2021.05335.

Makhambetova, Z., Magauova, A. (2022) Pre-Service Social Educators' Professional Competences: An Inclusive Education Context Al-Farabi Kazakh National University, Education and self-education, 17 (2) 129-143. https://doi.org 10.26907/esd.17.2.12

María García-Garrido, Teresa Amezcua-Aguilar, Samuel P. León. (2023) Perception of the Figure of the Social Educator in Rural Contexts in Spain. Education sciences. 13. 332. https:// doi.org/10.3390/educsci13040332

Maria, Pallisera., Judit, Fullana., Josep-Miquel, Palaudarias., Mercè, Badosa. (2013). Personal and Professional Development (or Use of Self) in Social Educator Training. An Experience Based on Reflective Learning. Social Work Education, https://doi.org 10.1080/02615479.2012.701278

Ninel, Sydorchuk. (2022). Acmeological principles of professional training of future teachers. Zhytomyr Ivan Franko state university journal. Pedagogical sciences, 200-214. https://doi: 10.35433/pedagogy.3(110).2022.200-214

Pham Ha Linh, Thi Thanh Thuy. (2022) Situation of Professional Development via Self-Directed Learning of Social Work Students in Hanoi National University of Education. International Journal of Current Science Research and Review 05. 1566-1574. https://doi.org/10.47191/ijcsrr/V5-i5-19

Stanley S., Mettilda. G., (2021) Professional competencies in social work students: emotional intelligence, reflective ability and empathy-a comparative and longitudinal analysis. Social Work Education 40 (7) 827-842 https://doi.org/10.1080/02615479.2020.1724933

Yessenamanova K., Arinova B., Zhambylkyzy M., Rakhimbayeva R., Zhunussova D. (2022) Development of Acmeological Competence in Rising Social Teachers. Frontiers in Education. 7. https://doi.org 10.3389/feduc.2022.901050

Abdalina, L.V. (2009). Akmeologicheskaya kompetentsiya prepodavatelya kolledzha: struktura i soderzhaniye [Acmeological competence of a college teacher: structure and content]. Vestnik Tomskogo gosudarstvennogo universiteta - Bulletin of Tomsk State University, 2(70), 249-251. [in Russian]

Kostina, E.A., Tleuzhanova, G.K., & Dzholdanova, D.K. (2021). Voprosy formirovaniya akmeologicheskoy kompetentsii budushchikh uchiteley inostrannykh yazykov v usloviyakh vuza [Issues of forming acmeological competence of future foreign language teachers in university conditions]. Vestnik Karagandinskogo universiteta - Bulletin of Karaganda University, 1(101). https://doi.org/10.31489/2021Ped1/73-78 [in Russian]

Koshman, D.M. (2015). Akmeologicheskaya kompetentnost' budushchego uchitelya: sushchnost', struktura i soderzhaniye [Acmeological competence of a future teacher: essence, structure and content]. Akmeologiya - Acmeology, 3(55), 94-95. [in Russian]

Pedagogicheskiy slovar' [Pedagogical dictionary]. (n.d.). https://pedagogical_dictionary.academic.ru [in Russian]

Rudakova, O.A. (2019). Akmeologicheskoye razvitiye lichnosti budushchego psikhologa kak osnova professional'noy kompetentnosti [Acmeological development of the personality of a future psychologist as the basis of professional competence]. Materialy VII Vserossiyskoy nauchno-prakticheskoy konferentsii po psikhologii razvitiya - Materials of the VII All-Russian Scientific and Practical Conference on Developmental Psychology, 63, 469-472. [in Russian]

Filonova, N.A. (2009). Eksperimental'noye issledovaniye osobennostey razvitiya akmeologicheskoy kompetentnosti prepodavateley professional'nogo kolledzha [Experimental study of the peculiarities of the development of acmeological competence of professional college teachers]. Molodoy uchenyy - Young Scientist, 3(3), 202-204. [in Russian]

S.A. ZHAUKINA[1]*, V.V. BEZHINA[1], N.A. SOLOVYOVA[3], S.U. ABENOVA[2], A.A. KONVISAR[3]

[1]*A. Baitursynuly Kostanay Regional University (Kostanay, Kazakhstan)*
[2]*L.N. Gumilyov Eurasian National University (Astana, Kazakhstan)*
[3]*Sh. Kabylbayev Kostanay Academy of the Ministry of Internal Affairs of the Republic of Kazakhstan (Kostanay, Kazakhstan)*
*e-mail: saulekab86@mail.ru

ECOLOGICALLY-ORIENTED TEACHING OF ENGLISH TO STUDENTS OF PEDAGOGICAL SPECIALITIES

Abstract

The relevance of the study in this paper is due to the problems of ecology in the modern world and the formation of ecological culture among the younger generation within the framework of the educational process to introduce them the ecological values in their future professional activities to preserve and restore the ecosystem of the planet. The purpose of the study is to form a model for the didactic foundations of ecologically-oriented teaching of English to students of pedagogical specialities. The leading method for the study of this issue is the a survey using the M. Rokich test for diagnosing personal value orientations, which makes it possible to determine social values, psychological aspirations by identifying the existing self-tasks of the person under survey, features of his or her self-determination and self-regulation of behaviour within the framework of ecological culture. The study presents didactic foundations of ecologically-oriented teaching of English to students of pedagogical specialities with formation of value orientations including value-motivational, cognitive-informational and modeling of creative ecological-cognitive professional activity on the basis of which the level of ecological culture of students can be created. The formed didactic foundations model of ecologically-oriented teaching of English to students of pedagogical specialties enables to create ecological culture with value standards of careful attitude to the environment and all levels of nature, which will allow them to introduce it in the educational process in their future professional activity to educate students about high ecological culture and creative behavior concerning natural objects and the whole ecosystem of life in general, which has practical significance for the education system and well-being of society.

Keywords: ecological culture, didactic foundations, ecologically-oriented teaching, education, pedagogy.

Introduction. Important aspects of the modern world affect different areas of life, including education, and this dictates the importance of training personnel with the already formed competencies of teaching specialists who will be able to develop the necessary values in their future students (Demikhova & Chebotareva, 2018). Given the numerous problems in the world associated with ecology, currently there is an urgent need to introduce an ecologically-oriented approach in the educational process at all levels, to form an ecological culture at the level of psychological perception of this model with motivational and value behaviour in relation to the entire ecosystem at the cognitive and informational levels to apply in their life activities implemented ecologically-saving behaviour models with a formed value-based ecological culture with creative approach for restoration and conservation of nature and ecology in the world, importance of this was repeatedly proved in the studies by professor M.N. Sarybekov, and his associates G.K. Dlimbetova and E.N. Dzyatkovskaya (Dzyatkovskaya et al., 2020). They believe that the introduction of ecologically-oriented education should begin at the level of teaching students, which in the future will enable the creation of a fundamental approach to the methodology of the information educational environment to create a value-motivational, environmentally important integrative-personal attitude of students to the very process of education itself, in which issues of respect for the environment will stand as the norm in the education and presentation of information with the implementation of such an attitude in the life of both specialists and their students with a clear positive personal example that will reinforce this positive perception to form an environmental culture of students at all educational levels, which will make the most important contribution to the well-being of life and the preservation of a healthy ecosystem on the planet.

Thus, when introducing an ecologically-oriented education at the level of training specialists of the educational sphere, there will be created an educational and pedagogical system providing profound informational value of the concepts related to ecology and all its components which include all natural objects forming all levels of the ecosystem, since only with their natural interaction can the ecosystem exist at the standard level, which will guarantee good ecology and thus will solve many issues and problems of modernity related to this area (Butt et al., 2016). Thus, when introducing ecologically-oriented education into practical education, an ecological culture will be formed among the young generation and this will provide them with a valuable motivation and future actions within any sphere of their life activities in the future, which will allow to preserve and restore ecology and the environmental balance of the planet, by inculcating a valuable ecological awareness and behaviour among students, which will be presented to them within different disciplines, including the foreign language in the form of special knowledge, skills and abilities, as well as models of environmental-saving behaviour (Widodo & Rozak, 2016).

Research conducted by Kong Lingdan has shed light on the benefits of integrating ecological perspectives into the English language instruction within the information educational environment. This approach not only enhances language learning but also fosters environmental awareness, sustainability, and global citizenship among students. In this study the author explored the role of multimedia resources, educational apps, and online platforms in incorporating ecological themes into English language teaching. By leveraging these tools, educators can expose students to a diverse range of content related to environmental issues, thus enriching their educational experience and deepening their understanding of ecological concepts (Kong, 2024).

The contemporary educational paradigm increasingly emphasizes the need for integrating ecological consciousness into various disciplines. This shift is particularly relevant in the field of language education, where English language teaching (ELT) can play a pivotal role in fostering ecological awareness among future educators. Ecologically-oriented teaching of English to students of pedagogical specialties is not merely an addition to the curriculum but

a transformative approach that aligns with the broader goals of sustainable development and environmental stewardship.

The integration of ecological perspectives in ELT necessitates a comprehensive theoretical framework that incorporates value orientations essential for fostering a deep-seated ecological consciousness. This framework encompasses three core dimensions: value-motivational, cognitive-informational, and the modeling of creative ecological-cognitive professional activity.

Value-motivational orientation is foundational in shaping students' attitudes and commitment to ecological principles. This dimension focuses on cultivating intrinsic values such as respect for nature, responsibility towards the environment, and a sense of stewardship. Researchers such as Richard Kahn (Kahn, 2013) emphasizes the importance of embedding these values within the ELT curriculum to inspire students to adopt and advocate for sustainable practices both within their professional roles and personal lives.

The cognitive-informational dimension involves equipping students with the necessary knowledge about ecological issues and sustainable practices. This includes understanding the impact of human activities on the environment, recognizing the interdependence between ecosystems, and appreciating the importance of biodiversity. As Fritjof Capra (Capra, 2021) highlight the role of education in fostering ecological literacy. English language instruction can incorporate ecological content through thematic units, authentic texts, and project-based learning activities that highlight global environmental issues and solutions.

Modeling creative ecological-cognitive professional activity involves practical application and problem-solving within real-world contexts. This dimension encourages students to engage in experiential learning, critical thinking, and innovative practices that address ecological challenges. For instance, students might participate in projects that require them to design sustainable lesson plans, conduct environmental awareness campaigns, or develop educational materials that promote ecological literacy.

Motivation to preserve ecology will be presented as an element of education, which will be taken for granted by students and all this will create a whole ecological education and training, in which any educated person will understand his or her responsibility for their livelihood, on which directly depends part of the ecosystem, biosphere, which only by a set of factors can be healthy and harmonious, depending in turn on the welfare of human life, and all life in general on the planet (Saito & Akiyama, 2018). Such training will enable students to take a conscious approach to the conservation of the biosphere, to make ecologically friendly adjustments in the relationship between humans and nature, thinking about and designing new developments in all areas of life within the framework of the conservation of natural health and well-being of the entire ecosystem and the biosphere (Cella et al., 2016).

So, the *purpose* of this study is to investigate the effectiveness of an ecologically-oriented approach to teaching English to students of pedagogical specialties, focusing on the formation of value orientations. *Objectives* are as follows:

1. To assess the impact of value-motivational orientation on students' attitudes towards ecological issues.

2. To evaluate the effectiveness of cognitive-informational orientation in increasing students' ecological knowledge and awareness.

3. To analyze the role of creative ecological-cognitive professional activity in developing students' problem-solving skills related to ecological challenges.

4. To identify the most effective teaching methodologies for integrating ecological themes into ELT for pedagogical students.

5. To measure the overall enhancement in ecological consciousness among students as a result of the ecologically-oriented ELT approach using M. Rokich value-oriented test.

The *hypothesis* of this study is that an ecologically-oriented approach to teaching English, which incorporates value-motivational, cognitive-informational, and creative ecological-cognitive professional activity orientations, will significantly enhance the ecological consciousness and teaching readiness of students in pedagogical specialties.

Materials and Methods. The present study employed a detailed methodological approach to examine value orientations impacting the psychological functioning of individuals, using the M. Rokich test. This methodological choice was motivated by its capacity to assess personal attitudes towards the world, nature, and the biosphere as indicators of life manifestations. The research methodology encompassed several distinct components, as outlined below.

The research model was structured around the M. Rokich test, designed to evaluate value orientations crucial to understanding individual motivations and life directions.

The study involved 120 students from Akhmet Baitursynuly Kostanay Regional University and L.N. Gumilyov Eurasian National University. Participants were selected from 2nd to 4th year students studying pedagogical specialties, comprising 84 females and 36 males aged between 19 to 23 years.

Data collection relied on the M. Rokich test, a diagnostic instrument featuring two lists of values with 18 parameters each, total in 36 values. Participants were instructed to rank these values based on their perceived importance, providing insights into cultural-psychological behavioural manifestations.

The data collection process involved administering the M. Rokich test to participants, followed by systematic recording and analysis of their responses. This process was critical for determining the intensity and quality of value hierarchies, thereby elucidating participants' attitudes towards the environment and ecological culture.

The qualitative nature of the test results necessitated a meticulous analysis of value hierarchies, focusing on content characteristics such as specific objectives, abstract values, professional fulfilment, and ethical considerations. This analysis provided a comprehensive view of participants' psychological inclinations towards environmental preservation and altruistic values.

Quantitative analysis of the collected data employed standard mathematical calculations and graphical representations to derive meaningful insights into participants' psychological orientations and their predisposition towards environmental conservation.

The study proceeded through three distinct stages:

1. Theoretical phase that involved a comprehensive review of methodological approaches in relevant literature, culminating in the formulation of research objectives and the experimental plan.

2. Experimental phase that is aimed at participants' active taking part in the M. Rokich test, with a focus on developing a model for ecologically-oriented teaching of English within pedagogical specialties resulting in obtaining the findings that were rigorously analyzed to refine the research model.

3. Final phase encompassing the synthesis of theoretical and practical conclusions drawn from the experimental data, resulting in the systematic organization and interpretation of findings.

In summary, the methodological framework adopted in this study facilitated a nuanced examination of cultural-psychological aspirations relevant to environmental preservation. The integration of theoretical insights with empirical findings underscored the robustness and validity of the research outcomes, thereby informing the development of didactic foundations for ecologically-oriented English teaching in pedagogical contexts.

Results. Based on the systematic-activity approach, a detailed analysis of the obtained test data on the selected method of students studying pedagogical specialities was carried out, taking into account the elements reflecting the respondents' personality indicators: motivational, performance and structural. Through a detailed analysis of their personality characteristics including a hierarchically ordered set of values it is possible to conclude about their psychological qualities, which are reflected in their social life, and as a result affect their attitude towards nature, ecology within the framework of creative ecological conservation based on the intellectual, behavioural and emotional properties of the personality. This fact relates to the motivation-target direction, and is within the necessary formation of the psychological ecological conservation culture, being one of the main indicators that will guide and coordinate the actions, and behavioural

reactions of future specialists in pedagogy within the ecological education process when teaching subjects, including English to students based on their own attitude to nature (Edwards et al., 2019).

Professional activity is a very multi-dimensional and multi-level system and the result of actions in which lies the multi-dimensionality of personal qualities, properties, special and systemic reproduction of personal emotions, and associations that motivate the specialist to act in relation to the surrounding world, an integral part of which are all levels of the biosphere including plants and animals that constitute the ecosystem, and on whose well-being the ecology directly depends (Botterell et al., 2020). Thus it has been found that the personal motivational function will be determined by individual thinking, which is transformed into certain actions, and therefore cognition of the individual should be focused on a detailed analysis of their aspirations, motivational values, visions of the future world and future life in general. Considering that ecological issues cannot be local, it is an interconnected harmonious sphere of life on the planet, which depends on each constituent member and any structure of the planet, hence the issues of ecology, its conservation must necessarily be considered as a set of unique, inimitable, individual features of life of each nature structure with its preservation and necessary restoration (Klippel et al., 2019). Therefore, the qualities of students, future specialists of pedagogical specialities should be within the framework of psychological culture of ecological conservation, nature conservation, which will determine their ability to teach this important area of the educational process in the field of ecologically-oriented education in their professional activity to educate in their students the culture of psychological ecological conservation, aimed at restoration and conservation of nature within its health. Thus, a detailed analysis of the test enables the identification and prediction of further results regarding students' personal perceptions of the ecological education process and the culture of ecological conservation, as has been revealed by the content component of the test analysis.

Attention was also drawn to analysing the consistency and comparisons of responses within the framework of the importance of value concepts to the student's personality. These sequential actions reflect the future pattern of perception and actions in possible situations arising in life or during the learning process in relation to the nature of the planet, which was reflected in the resulting component of the analysis of the obtained test results and pedagogical observation. This allows for further correction, identifying the levels of formation of motivational reactions towards the preservation of ecology and the well-being of nature, as well as subsequent skills in this area, expressed in actions based on the highlighted criteria and indicators. These research components in interaction reveal the organisation of the formation process of the didactic foundations model for ecologically-oriented teaching of English to students studying pedagogical specialities on the basis of indicators for psychological ecologically-friendly culture.

The result of the functioning of the study under consideration is understood as a certain level of ecological criteria, which allows forming a model of didactic foundations for ecologically-oriented teaching English to students of pedagogical specialties. Implementing a structured model of outcome analysis involved conducting the following stages of the research work:

1. Determination of the initial indicators and criteria for forming the level of psychological ecological conservation culture of students studying pedagogical specialties using testing methods, pedagogical observation and statistical processing of the research results.

2. Development and implementation of the didactic foundations model for ecologically-oriented teaching of English to students of pedagogical specialties, promoting the formation of the psychological ecological conservation culture for the conservation and restoration of the ecosystem based on the research results analysis for their subsequent implementation in the field of practical education.

3. Determination of the effectiveness of the developed didactic foundations model for ecologically-oriented teaching of English to students of pedagogical specialities.

The study covered a total of 120 students studying pedagogical specialities. The analysis of the results of diagnostic testing and clarifying dialogue led to the conclusion that only a third of future pedagogical specialists have the psychological prerequisites to preserve and restore ecology, the biosphere with its structural units and a caring attitude towards nature. Since everything is inherently interdependent and cannot exist within the framework of health separately, this parameter was considered as a set of mutually important structural units of the planet's biosphere with a focus on ecological conservation. Thus only 37 (30.8%) of the students demonstrated value indicators of careful attitude towards nature and society as a whole as biosphere and ecosystem; another 32 (26.6%) of the students did not understand that the ecological condition of the planet depends on their actions and they did not see any sense in careful attitude towards nature; and 57 (47.5%) of the students showed negligent indifference to the state of the environment (Figure 1).
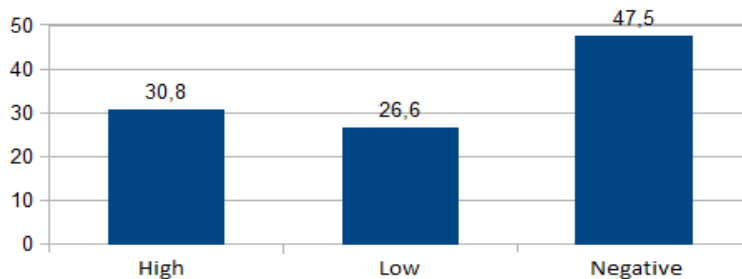

Figure 1: Distribution of pedagogy students by ecological conservation attitudes

A detailed analysis of the test results showed the following distribution of values among the students of teacher training institutions: active working life (54 (45%)), life wisdom (48 (40%)), health (69 (57.5%)), interesting work (86 (71.6%)), the beauty of nature (37 (30.8%)), the beauty of art (34 (28.3%)), love (46 (38.3%)), material wealth 120 (100%), having good friends (72 (60%)), social recognition (54 (45%)), acquisition of knowledge (69 (57.5%)), self-actualisation (54 (45%)), self-development (54 (45%)), freedom (120 (100%)) , happy family life (46 (38,3%)), happiness of people around or society (29 (24%)), creativity (62 (51%)), self-confidence (72 (60%)), personal pleasure (120 (100%)), the features of which were clarified during individual interviews (Figure 2).
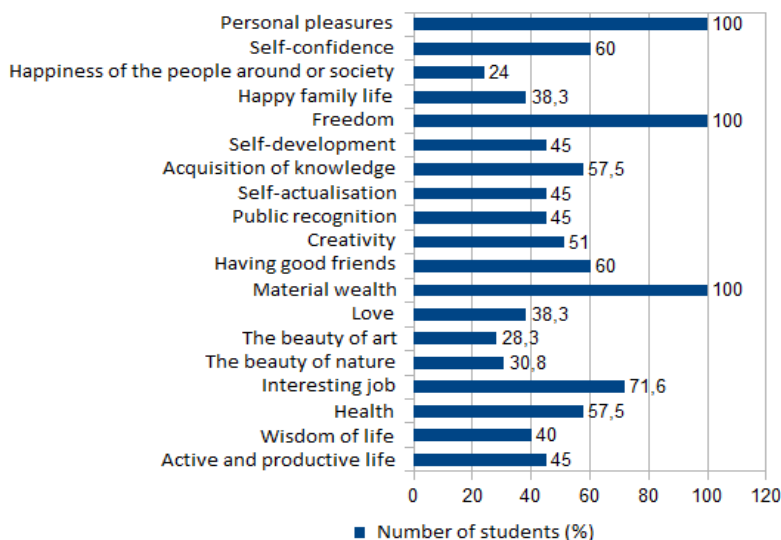

Figure 2: Distribution of students according to core life values based on test data

During the conversation with the respondents in order to clarify their attitude towards nature, living with the focus on well-being and public health, it was revealed that personal pleasures, which were one of the important values of all those surveyed according to the majority (73

(60.8%)) should be realised, despite the fact that they can harm the health of both personal and other people, nature and the environment, creating conditions for deterioration of the environmental component (Figure 3).
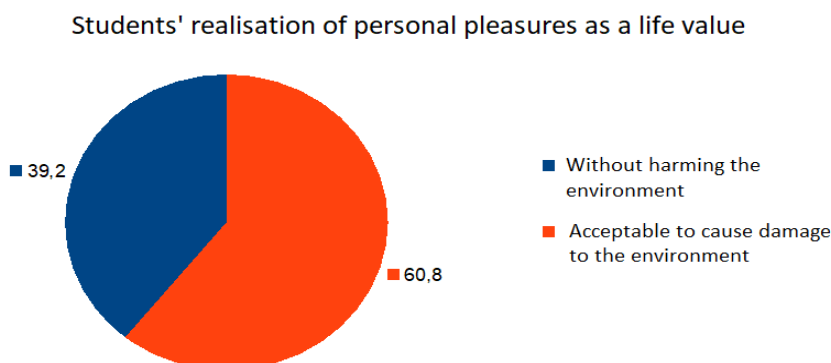
Students' realisation of personal pleasures as a life value

Figure 3: Students' Harm Distribution in Pursuit of Pleasure (Test Data)

The analysis revealed that only 30.8% of those surveyed have a sufficient level of ecological conservation culture and are able to make a positive contribution to the educational process by having and forming among students a respectful attitude towards nature and the ecosystem. Considering that students at this stage of education in the information environment of pedagogical universities do not have true values within the framework of ecological conservation, this determines the relevance and value of this study for forming a model of didactic foundations of ecological-oriented education for its further implementation in the field of practical education.

The implementation of the research conditions in the process of developing the model of didactic foundations of ecologically-oriented teaching of English to students of pedagogical specialities on the basis of psychological ecological conservation culture indicators required methodological work on the obtained data in the course of the research. A step-by-step analysis of the results made it possible to distinguish the main components of this process and identify the main ones depending on the level of formation of the environmental conservation culture to form a respectful attitude towards nature and ecology for its preservation and restoration.

Also, given the basic values necessary for forming the culture of psychological ecological conservation, creating, on the basis of the teaching and educational process, forms of understanding and knowledge of the importance of conserving nature, ecology, and in general the entire ecosystem, in which humans are one of the structural units, and whose well-being depends on the health of all other structural units of the biosphere, which include all natural factors, flora and fauna, with the understanding that any human activity can affect the level of ecosystem well-being, and especially given that students of pedagogy will be involved in the educational work of the younger generation, they simply need to have an established level of ecological conservation (Silva & Topf, 2020).

Considering all the details of the study and the aforesaid, the model of didactic foundations of ecologically-oriented teaching of English to students of pedagogical specialties with formation of value orientations including value-motivational, cognitive-informational and modeling of creative ecological-cognitive professional activity on the basis of which the future specialists will have a level of ecological culture has been developed.

At the control stage of the study, the developed model of didactic foundations of ecologically-oriented teaching of English to students studying

pedagogical specialties with formation of value orientations, which will allow future educators to form the level of culture of psychological ecological conservation, was tested.

Thus the findings of the second survey of 120 students led to the conclusion that it was successful and effective. This is because after the interview, the lessons, using ecologically-oriented education in the subject of English, which is an international language, and within it the importance of all structures of the biosphere, ecology, caring attitude towards nature, its flora and fauna is presented on a global level of the whole planet, which can affect any part of it, and in this way orienting and enabling the student to understand the importance of preserving the ecological healthy life balance of all the structural units of the planet ecosystem, to maintain a prosperous life on earth of all its inhabitants, as structural units of the entire ecosystem, which is also dependent on all factors of human activity at any level (Tagliolatt et al., 2020).

Thus, after the implementation of the formed didactic foundations of ecologically-oriented teaching of English, the majority of students (93 (77.5%)) noted that their level of understanding and awareness of the importance to care for nature and the whole ecosystem was realised at the level of their single important value to preserve well-being in the world, which is an international priority in life, and includes all major forms of life activities of the whole ecosystem. And 16 (13.4%) students expressed their thought about the consequences of their life activities and said that they would try to deepen their cognitive sphere to create a model of proper environmental-friendly behavior and 11 (9.1%) students expressed their indifference to life in general, and in their opinion, they do not care whether life on earth stops or continues, which indicates their low moral level and professional unsuitability for teaching work, which has an educational, creative function (Figure 4).
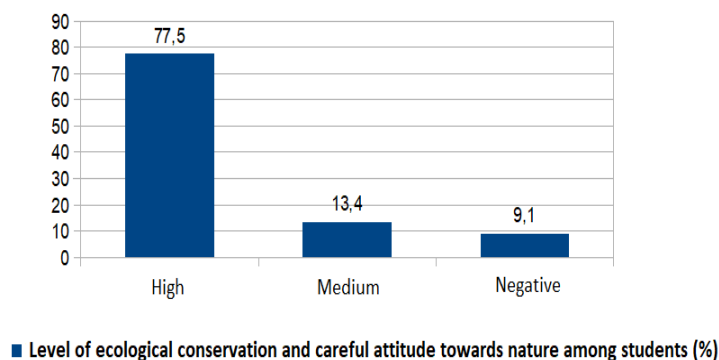

Figure 4: Distribution of Pedagogy Students' Attitudes Towards Ecological Preservation After Implementing English Curriculum Model

The data of repeated testing and interviews revealed the effectiveness of this didactic foundations model for ecologically-oriented teaching of English to students of pedagogical specialities. The study's appropriateness was ensured by the fact that the characteristics and data parameters of the test and the developed didactic foundations were correctly comparable during the study. The analysis of the research results enabled to determine that the developed didactic foundations model of ecologically-oriented teaching of English to students of pedagogical specialities includes value-motivational, cognitive-informational aspects and modelling of creative ecological-cognitive professional activity makes it possible to form values-based attitude to conservation and restoration of nature and ecosystem to improve ecology on earth.

Discussion. Modern education emphasises the importance of training specialists with professional competences in the field of education with a highly developed culture of ecological conservation, which will create a fundamental approach to the methodology of the educational environment for the application

of integrative-personal attitude towards students in the formation process of their professional qualities at all levels of knowledge acquisition for the importance of respectful attitude towards nature and the entire ecosystem. This will preserve healthy life on the planet, improve the ecological state in the world, and make life healthy, prosperous at all its levels, both physical, psycho-emotional, and social, because human health depends directly on the state of ecology, and thus on all the factors and structural units of the ecosystem, which include all components of the biosphere, natural factors, flora and fauna, and only their well-being can create a healthy atmosphere for a thriving, healthy human life (Souza et al., 2019).

Introduction in the information environment of the educational process of the didactic foundations of ecologically-oriented teaching of any kind within the framework of the subject including English, which has a number of advantages over others, such as the possibility to address the level of ecology, and the nature of the whole world, any place, for a deeper presentation of knowledge about natural aspects of the planet with the advantage of building model examples of ecology conservation in various human activities to form the culture of ecological conservation among the students of pedagogical universities, and further considering their personal example, and contribution to the education sphere in their professional activity, as a teaching staff performing the function of teaching and education in training the future generation, which will be responsible for the conservation and restoration of the planet's ecosystem, the role of the formed didactic foundations model in the form of teaching English with a motivational and value-based approach to caring, respecting the life of nature, as a living organism including flora and fauna, which is the basis for a prosperous human life, and at the same time has a direct link of its own well-being from any human activity (Cella et al., 2016). In addition to creating a motivational and value orientation in the direction of environmental culture, it is important to understand the significance of proper knowledge based on which the healthy functioning of nature is maintained (Barboza et al., 2018). And they include an understanding of plant and animal life norms against a background of natural habitat, only in which natural health can be maintained and it is the maintenance of natural health that ensures the ecological harmony of the ecological environment and the whole ecosystem (Gryaznova et al., 2020).

Understanding the depth of this issue and the facts that go along with it should be presented to students as part of a foreign language subject. From a didactic point of view, it is important to go from the general to the particular for proper learning (Lambert et al., 2017). Only if knowledge is presented from a common understanding of the structure of life on earth of all the biosphere's components in mutual interaction to maintain the health of nature, in which humans take a leading role considering that any product of their life activity, both domestic and professional, affects the health factor of nature and thereby the global understanding of ecology (Yeldham, 2016). Ecology itself should also be presented as a holistic structure, which includes the main parameters important for life, and it should be made clear to students that only the maintenance of health norms and functions in nature can ensure the maintenance of a healthy ecology and the entire ecosystem, in which human being is one of the structural elements, but on which the health of all others depends (Thornton et al., 2019).

Only an integrated understanding of this fact will make it possible to grasp the importance of preserving natural objects or plant and animal structures as separate ecosystem subjects. After forming a values-based attitude towards the health of nature from a common understanding on the whole planet, a culture on the psychological level will be created in the individual, as a student of the educational process at the level of ecological conservation, which will be the basis for recreating the elements of human life activity, as a person aware of the importance to preserve and restore ecology in order to maintain and prolong healthy life of the human being on the planet. Considering that every centimetre of the planet contains the life of one or another structural unit of the ecosystem, the biosphere, on the health of which depends the well-being and health of life itself, in all its

manifestations on earth, both as structural units of the ecosystem and as individual units with their personal life (Baranova, 2019).

And after forming this fundamental provision, it is already possible to study the personal life of nature, its flora and fauna with the peculiarities of their life, and life activities to show respect and care for their living, thus enabling them to keep their health from communicating with humans in any way, taking into account the manifestation by humans themselves of all the processes associated with their life activities, as a result of the influence on the life of all the components of the surrounding world, with consideration of the individual natural life of the nature itself, as well as flora and fauna (Gazina, 2017). And it is precisely the personal knowledge of the natural environmental conditions of animals, plants, natural factors of the world in the field of preserving their health and caring for them, with clarification of all the features of personal healthy life, that will enable the individual to realise the importance of each, every structural unit of the surrounding world, in which he or she depends on each of them, or rather his or her health and well-being depends on the health and well-being of each of them. Therefore, personal knowledge will help one to understand and appreciate any natural phenomenon in the world, plant and animal life, as factors for respectful attitude towards them, for the preservation of their natural well-being and life. In this way, the detailed knowledge that each student will acquire in the subject of English, as is possible in any subject under a certain environmentally-friendly approach, will enable the student to learn and acquire skills for constructive environmental behaviour aimed at the well-being of nature and all the factors associated with it (Hamilton et al., 2021). In fact, this problem lies in the cognition for the prevention related to the communication of the different structural units of the ecosystem, and how, in the framework under consideration, it is synonymous with nature.

Preventive measures for environmental conservation on the above-described level would include, for example, understanding that one should not grab a baby animal by chance encountered in a field where many people may walk at some time in their lives, presenting the depth of knowledge will be preventive in nature by understanding that one has entered the habitat of an animal, and a cub walking in a field making its natural sounds communicates with the world around it as well as it is at home and just walking around not far from its home. Such knowledge and motivation direction will convey the value of understanding the personal life of the natural realm and all its inhabitants. And thus, formed purposeful behavioural tactics to maintain a healthy ecology, as well as its conservation and care, will allow the person with knowledge to respect the personal life of any structural units of the ecosystem without disturbing their natural course. At the same time, this form of interaction will enable humans to live in harmony with the surrounding world, and remain healthy through the healthy results of their own activities, which will be aimed at the conservation and restoration, as well as in the future to care for nature in order to preserve the overall harmonious health of the entire biosphere, the ecosystem and basically life on the planet. In this way, the conditions for learning and acquiring knowledge about nature, and precisely what is important its natural environment and health, will enable humans to remain healthy, and to create for themselves a healthy living environment in harmony with healthy nature. This is how the planet's ecology will be restored and preserved. It is important to present this knowledge properly when educating the younger generation and to shape these values among them for the well-being of the future of the whole society (Philp & Duchesne, 2016).

Any specialist in education must set an example of their life to their future students. Therefore, such a process of ecologically-oriented education with the developed didactic foundations model of cognition of nature's health value in the most important function for healthy life activity, as ecology at the level of the whole ecosystem will enable to form a culture of ecological conservation at all levels among future specialists of education sphere, which they will then teach in their professional activity to their students by forming in them a psychological ecological culture (Barrios-Garrido et al., 2019). And modelling creative

ecological-cognitive professional activity in turn will have among the rising generation a formed creative, careful attitude to life in general, and to each of its structural units, restoring the ecological balance on the planet, creating conditions for the restoration of ecology, and further for its maintenance in life. Any person, who has developed a culture of psychological ecological conservation will understand that any result of his or her professional or domestic activity depends on the balance of health norms of all the ecosystem structures and the human being as one of the structures. Therefore a person will consciously think and treat the result of his or her life activity at all levels, creating only that product, which will be within the framework of ecological conservation, both for life in general, and for each structural unit.

In order to realise the aforementioned, it is certainly necessary to introduce model examples of ecologically friendly living and the products of its activity within the framework of an ecological culture into the information environment of the educational process. More precisely, the developed model implies the application of the didactic foundations in the form of presenting a ready-made model as a demonstration example of ecological conservation, taking into account the level of health conservation in education and life, giving every practical problem, example, text to read or study, or even the theoretical part of a mathematical problem in the form of a creative, positive example of ecological conservation, i.e. describing an example of careful attitude to nature, flora and fauna, any natural phenomenon, respectful attitude towards natural life, any of its structural units in the form of creative ecologically friendly behaviour on the part of humans, and their any form of life activity, including in professional activities, production and everything that is connected with human life (Metruk, 2018). All the examples should have a semantic background that corresponds to the essence of the didactic framework, as a modelling of a creative ecological-cognitive professional activity. That is, any case described in the textbook in any form, or narrated by the teacher should be based on a proper, healthy, environmentally friendly semantic background,

and on the basis of applying such a didactic framework as giving an example of health saving and environmentally friendly behaviour patterns, example of action, production, text and more, which will enable students to acquire skills regarding the conservation of ecology in the whole ecosystem at the level of natural health. It should be noted that only natural health is the most valuable and important thing in human life, which is reflected in all the basic laws at the global level, and there is no doubt about it, and the issue of the necessity of its preservation and restoration in this case within the framework of the considered problem at the global level of ecology of the entire planet ecosystem with health conservation of each structural unit of biosphere, nature, and thus the ecosystem (Oga-Baldwin, 2019).

By providing the necessary information within the framework of the subject specialisation, based on the focus of ecologically-oriented education, by creating examples and tasks based on situations of respectful attitude towards nature, the flora and fauna, and the entire ecosystem, the students at all levels will form a high level of culture of psychological ecological conservation, and thus the educational process will be ecologically-oriented and will be implemented in practical education. "Nature also wants to be healthy" and most importantly nature has to be healthy so that people can preserve their health and this is important to understand, as well as that health-saving conditions can only be fulfilled if the conditions for ecological conservation, as discussed above, are met.

Thus, the developed model of didactic foundations of ecologically-oriented teaching of English to students studying pedagogical specialities includes value-motivational, cognitive-informational aspects and modelling of creative ecological-cognitive professional activity has proved to be effective and forms a values-based attitude towards preservation and restoration of nature and ecosystem for the improvement of ecology on earth, and can be used in practice within the framework of teaching and learning process.

Conclusion. It has been established that forming a high level of values-based attitude

towards nature, each of its structural units considering the flora and fauna, natural phenomena and other ecosystem structures, enables to form a culture of ecological conservation at the psychological level, which will create conditions for prosperous and healthy development of life on the planet. The formation of a values-based attitude towards nature and the health of the conservation ecosystem is possible at the level of the teaching and learning process in any educational institution, at any age, using ecologically-oriented education in the information environment within all subjects and specialities.

The developed didactic foundations model for ecologically-oriented education includes the main provisions that will enable the formation of a culture of ecological preservation and values-based attitude towards nature. And it consists of parameters that integrate everything that needs to be taught to the student in order to understand, know from the right perspective, from the norms of ecological culture and respect for the personal life of each structural unit of the biosphere, the ecosystem within the framework of restoring and preserving its health. These include the inculcation of value-motivational, cognitive and informative criteria and aspects as well as the modelling of creative eco-cognitive professional activity, as a fundamental basis for giving all specialist knowledge within the subject on the basis of which they will be dealt with, including teaching English. And given that it is an international language and makes it possible within its framework to learn all the concepts of ecology and ecosystems described above at the level of the entire world, and given that English is the universal language of conversation for the population of any country and is learned as early as secondary education.

The application of the developed didactic foundations model in the teaching and educational work of the students studying at pedagogical universities will enable the formation of a values-based attitude towards the conservation and restoration of nature, and the ecosystem to improve the ecology on earth. In turn, future specialists in the education field will be able to instil these values by their own example and by fulfilling their professional responsibilities with the introduction of environmentally-oriented education into the realm of practical education at all levels. Only with this systematic approach will the population, the society develop a culture of careful attitude towards nature and ecological conservation at the psychological level, which will enable them to build their professional activities and any processes of life activity within the framework of restoration and conservation of nature and the ecosystem. This in turn will improve the ecological situation on the planet, and will create the conditions for health preservation of human life at a profound level, keeping his or her life at a high quality level with good health on all three levels, as physical, psycho-emotional and social, and thus a person will safely live in harmony with a healthy nature and good ecology.

The materials in this study are useful for those working in the field of education and can be applied in practice in order to improve and implement an ecologically friendly environment and ecologically-oriented education in all educational institutions.

References

Barboza, R. S. L., Santos, C. N., Di Paolo, D. F., & Saraiva, L. J. C. (2018). Social representations about sea turtles of artisanal fishermen from Ajuruteua. Amazonica-Revista de Antropologia, 9(1), 458-480.

Barrios-Garrido, H., Wildermann, N., Diedrich, A., & Hamann, M. (2019). Conflicts and solutions related marine turtle conservation initiatives in the Caribbean basin: Identifying new challenges. Ocean and Coastal Management, 171, 19–27.

Botterell, Z. L., Beaumont, N., Cole, M., Hopkins, F. E., Steinke, M., Thompson, R. C., & Lindeque, P. K. (2020). Bioavailability of microplastics to marine zooplankton: Effect of shape and infochemicals. Environmental Science and Technology, 54(19), 12024–12033.

Butt, N., Whiting, S., & Dethmers, K. (2016). Identifying future sea turtle conservation areas under climate change. Biological Conservation, 204, 189–196.

Capra, F. (2021). Patterns of connection: Essential essays from five decades. University of New Mexico Press.

Cella, E. L., Parsons, E. C. M., & Rockwood, L. L. (2016). Nongovernmental organizations and government agencies lead in cultivating positive sea turtle conservation attitudes. Human Dimensions of Wildlife, 21(5), 391– 402.

Edwards, B. I., Bielawski, K. S., Prada, R., & Cheok, A. D. (2019). Haptic virtual reality and immersive learning for enhanced organic chemistry instruction. Virtual Reality, 23, 363–373.

Hamilton, D., McKechnie, J., Edgerton, E., & Wilson, C. (2021). Immersive virtual reality as a pedagogical tool in education: A systematic literature review of quantitative learning outcomes and experimental design. Journal of Computers in Education, 8, 1–32.

Kahn, R. V. (2013). Critical pedagogy, ecoliteracy, and planetary crisis: The ecopedagogy movement (p. 359).

Klippel, A., Zhao, J., Oprean, D., Wallgrün, J. O., Stubbs, C., & La Femina, P. (2019). The value of being there: Toward a science of immersive virtual field trips. Virtual Reality, 24, 753–770.

Kong, L. (2024). A study on the application of ecological linguistics to English teaching. Pacific International Journal, 6, 81-84. https://doi.org/10.55014/pij.v6i4.480

Lambert, C., Philp, J., & Nakamura, S. (2017). Learner-generated content and engagement in second language task performance. Language Teaching Research, 21, 665–680.

Metruk, R. (2018). Extensive listening practice of EFL learners with authentic English videos. Teaching English with Technology, 18(4), 3–19.

Oga-Baldwin, W. L. Q. (2019). Acting, thinking, feeling, making the engagement process in language education. System, 86, 102–120.

Philp, J., & Duchesne, S. (2016). Exploring engagement in tasks in the language classroom. Annual Review of Applied Linguistics, 36, 50–72.

Saito, K., & Akiyama, Y. (2018). Effects of video-based interaction on the development of second language listening comprehension ability: A longitudinal study. TESOL Quarterly, 52(1), 163–176.

Silva, J., & Topf, J. (2020). Conservation and development: A cross-disciplinary overview. Environmental Conservation, 47(4), 234-242.

Souza, J. R., Alves, L. M., Fontenelle Filho, A. P., Oliveira, C. S. P., & Oliveira, M. G. P. (2019). Visit of banisters and merchants on the environmental scenario da Praia de Ponta Negra, Natal-RN. Geoconexoes, 2, 41-50.

Tagliolatto, A. B., Goldberg, D. W., Godfrey, M. H., & Monteiro-Neto, C. (2020). Spatio-temporal distribution of sea turtle stranding has and factors contributing to their mortality in South-Eastern Brazil. Aquatic Conservation: Marine and Freshwater Ecosystems, 30(2), 331–350.

Thornton, S., Graham, M., & Burgh, G. (2019). Reflecting on place: Environmental education as decolonization. Australian Journal of Environmental Education, 35(3), 239-249.

Widodo, H. P., & Rozak, R. R. (2016). Engaging student teachers in collaborative and reflective online video-assisted extensive listening in an Indonesian initial teacher education context. Electronic Journal of Foreign Language Teaching, 13(2), 229-244.

Yeldham, M. (2016). Second language listening instruction: Comparing a strategies-based approach with an interactive, strategies bottom-up skills approach. TESOL Quarterly, 50(2), 394-420.

Баранова, Н. В. (2019). Непрерывное экологическое образование как элемент концепции устойчивого развития. Актуальные проблемы профессионального образования, 2(15), 9-13.

Газина, О. М. (2017). Изучение проблемы экологического образования дошкольников в МПГУ. Педагогическое образование и наука, 6, 128-131.

Грязнова, Е. В., Треушников, И. А., & Гончарук, А. Г. (2020). Роль информационной культуры в формировании культурного идеала. Перспективы науки и образования, 1(43), 379-388.

Демихова, Л. Ю., & Чеботарева, И. В. (2018). Современные проблемы экологического образования дошкольников. Региональное образование: современные тенденции, 1(34), 101-105.

Дзятковская, Е. Н., Длимбетова, Г. К., & Захлебный, А. Н. (2020). Ключевые вопросы подготовки концепций экологического образования. Ценности и смыслы, 4(68), 141-155.

References

Barboza, R. S. L., Santos, C. N., Di Paolo, D. F., & Saraiva, L. J. C. (2018). Social representations about sea turtles of artisanal fishermen from Ajuruteua. Amazonica-Revista de Antropologia, 9(1), 458-480.

Barrios-Garrido, H., Wildermann, N., Diedrich, A., & Hamann, M. (2019). Conflicts and solutions related marine turtle conservation initiatives in the Caribbean basin: Identifying new challenges. Ocean and Coastal Management, 171, 19–27.

Botterell, Z. L., Beaumont, N., Cole, M., Hopkins, F. E., Steinke, M., Thompson, R. C., & Lindeque, P. K. (2020). Bioavailability of microplastics to marine zooplankton: Effect of shape and infochemicals. Environmental Science and Technology, 54(19), 12024–12033.

Butt, N., Whiting, S., & Dethmers, K. (2016). Identifying future sea turtle conservation areas under climate change. Biological Conservation, 204, 189–196.

Capra, F. (2021). Patterns of connection: Essential essays from five decades. University of New Mexico Press.

Cella, E. L., Parsons, E. C. M., & Rockwood, L. L. (2016). Nongovernmental organizations and government agencies lead in cultivating positive sea turtle conservation attitudes. Human Dimensions of Wildlife, 21(5), 391–402.

Edwards, B. I., Bielawski, K. S., Prada, R., & Cheok, A. D. (2019). Haptic virtual reality and immersive learning for enhanced organic chemistry instruction. Virtual Reality, 23, 363–373.

Hamilton, D., McKechnie, J., Edgerton, E., & Wilson, C. (2021). Immersive virtual reality as a pedagogical tool in education: A systematic literature review of quantitative learning outcomes and experimental design. Journal of Computers in Education, 8, 1–32.

Kahn, R. V. (2013). Critical pedagogy, ecoliteracy, and planetary crisis: The ecopedagogy movement (p. 359).

Klippel, A., Zhao, J., Oprean, D., Wallgrün, J. O., Stubbs, C., & La Femina, P. (2019). The value of being there: Toward a science of immersive virtual field trips. Virtual Reality, 24, 753–770.

Kong, L. (2024). A study on the application of ecological linguistics to English teaching. Pacific International Journal, 6, 81-84. https://doi.org/10.55014/pij.v6i4.480

Lambert, C., Philp, J., & Nakamura, S. (2017). Learner-generated content and engagement in second language task performance. Language Teaching Research, 21, 665–680.

Metruk, R. (2018). Extensive listening practice of EFL learners with authentic English videos. Teaching English with Technology, 18(4), 3–19.

Oga-Baldwin, W. L. Q. (2019). Acting, thinking, feeling, making the engagement process in language education. System, 86, 102–120.

Philp, J., & Duchesne, S. (2016). Exploring engagement in tasks in the language classroom. Annual Review of Applied Linguistics, 36, 50–72.

Saito, K., & Akiyama, Y. (2018). Effects of video-based interaction on the development of second language listening comprehension ability: A longitudinal study. TESOL Quarterly, 52(1), 163–176.

Silva, J., & Topf, J. (2020). Conservation and development: A cross-disciplinary overview. Environmental Conservation, 47(4), 234-242.

Souza, J. R., Alves, L. M., Fontenelle Filho, A. P., Oliveira, C. S. P., & Oliveira, M. G. P. (2019). Visit of banisters and merchants on the environmental scenario da Praia de Ponta Negra, Natal-RN. Geoconexoes, 2, 41-50.

Tagliolatto, A. B., Goldberg, D. W., Godfrey, M. H., & Monteiro-Neto, C. (2020). Spatio-temporal distribution of sea turtle stranding has and factors contributing to their mortality in South-Eastern Brazil. Aquatic Conservation: Marine and Freshwater Ecosystems, 30(2), 331–350.

Thornton, S., Graham, M., & Burgh, G. (2019). Reflecting on place: Environmental education as decolonization. Australian Journal of Environmental Education, 35(3), 239-249.

Widodo, H. P., & Rozak, R. R. (2016). Engaging student teachers in collaborative and reflective online video-assisted extensive listening in an Indonesian initial teacher education context. Electronic Journal of Foreign Language Teaching, 13(2), 229-244.

Yeldham, M. (2016). Second language listening instruction: Comparing a strategies-based approach with an interactive, strategies bottom-up skills approach. TESOL Quarterly, 50(2), 394-420.

Baranova, N. V. (2019). Nepreryvnoye ekologicheskoye obrazovaniye kak element kontseptsii ustoychivogo razvitiya [Continuous environmental education as an element of the concept of sustainable development]. Aktual'nyye problemy professional'nogo obrazovaniya - Actual Problems of Vocational Education, 2(15), 9-13. [in Russian]

Gazina, O. M. (2017). Izucheniye problemy ekologicheskogo obrazovaniya doshkol'nikov v MPGU [Study of the problem of environmental education of preschoolers at Moscow State Pedagogical University]. Pedagogicheskoye obrazovaniye i nauka - Pedagogical Education and Science, 6, 128-131. [in Russian]

Gryaznova, E. V., Treushnikov, I. A., & Goncharuk, A. G. (2020). Rol' informatsionnoy kul'tury v formirovanii kul'turnogo ideala [The role of information culture in the formation of a cultural ideal]. Perspektivy nauki i obrazovaniya - Perspectives of Science and Education, 1(43), 379-388. [in Russian]

Demikhova, L. Yu., & Chebotareva, I. V. (2018). Sovremennyye problemy ekologicheskogo obrazovaniya doshkol'nikov [Modern problems of ecological education of preschoolers]. Regional'noye obrazovaniye: sovremennyye tendentsii - Regional Education: Modern Trends, 1(34), 101-105. [in Russian]

Dzyatkovskaya, E. N., Dlimbetova, G. K., & Zakhlebny, A. N. (2020). Klyuchevyye voprosy podgotovki kontseptsiy ekologicheskogo obrazovaniya [Key issues of preparing concepts of environmental education]. Tsennosti i smysly - Values and Meanings, 4(68), 141-155. [in Russian]

E.A. IBRAGIMOVA¹*, N.R. KHEGAY¹

¹Korkyt Ata Kyzyloda University (Kyzylorda, Kazakhstan)
*e-mail: ibragimova_elmira@mail.ru

IMPROVING STUDENTS'RESEARCH COMPETENCE IN TEACHING THE KAZAKH LANGUAGE

Abstract

The article discusses the enhancement of students' research competence within the context of teaching the Kazakh language. Developing learners' research skills is becoming a significant factor in higher education system. This research seeks to undertake a detailed examination of students' attitudes toward the Kazakh language, identify existing obstacles, and design effective strategies to assist the development of research competency within the context of Kazakh language and culture studies. This study examines both foreign and local studies to provide a methodology for teaching languages and culture. It also attempts to promote a successful integration of research approaches into the learning process for Kazakh language acquisition. This study paper applies a qualitative method, using semi-structured interviews, to collect thorough data on students' opinions and experiences with developing research abilities while learning the Kazakh language. The methodology intends to explore the many features of competence, language acquisition issues, and the significance of research activities in improving students' language proficiency.

Keywords: Kazakh language, research competence, cultural awareness, language acquisition, motivation, integration, student interviews.

Introduction. The present educational framework requires language learning students to gain not only language abilities but also a thorough awareness of the cultural aspects of the country involved with language study. Studying the Kazakh language, in particular, requires students to have not only linguistic abilities but also to be aware of Kazakhstan's cultural surroundings. In this setting, developing research skills is critical, as it allows students to delve deeper into language and cultural studies while also effectively interacting with the local community (Emmelhainz, 2019).

Several educational studies emphasize the significance of incorporating critical thinking and research skills into the learning process for efficient foreign language acquisition. However, further in-depth research on the impact of such strategies on Kazakh language learners is required, taking into account Kazakhstan's unique cultural setting. Furthermore, it is vital to consider the motivational factors that influence language acquisition advancement and the cultivation of students' research competencies (Din, 2020).

This study aims to conduct a thorough study of students' opinions of the Kazakh language, identify current challenges, and devise effective techniques to support the development of research competency within the framework of Kazakh language and culture studies. This study analyzes foreign and local research to establish a methodology for teaching languages and culture. It also aims to encourage the efficient implementation of research methodologies in the educational process for Kazakh language learning.

The aim of this research is to investigate the dynamics of research competence development in the context of Kazakh language learning, with a specific focus on understanding students' perceptions, identifying challenges, and exploring effective strategies for enhancing research skills within the domain of the Kazakh language.

The objectives of the research:

-To analyze students' perceptions of research competence and its significance in the context of learning the Kazakh language.

-To explore the knowledge and skills gaps that students face in writing research topics related to the Kazakh language and culture.

-To investigate the strategies and interventions necessary for fostering the development of research competence among students studying the Kazakh language.

-To assess the impact of research activities on students' language proficiency, critical thinking, and cultural awareness within the context of Kazakh language learning.

Modern literature on science emphasizes the value of improving students' research competence during the process of learning foreign languages, particularly when considering the cultural peculiarities of the nation. According to Huang et al.'s (2022) study, mastering languages like Kazakh requires both critical thinking and research abilities. They emphasize that increasing research competency leads not only to a thorough comprehension of the language but also to active participation in the country's cultural setting, which is a crucial feature of the learning process.

Additionally, studies such as Sinha's work (2021) indicate key methods for efficiently incorporating research methodologies into the classroom. The author argues that using a problem-solving method and multimedia tools enables students to get more involved in the study of cultural components of language. This is especially crucial when studying languages like Kazakh, where cultural settings are significant.

Furthermore, native authors' work, such as Bobomurodova's (2023) study, underlines the relevance of student motivation in successful language acquisition and the advancement of research competence. She emphasizes the need to establish a stimulating educational atmosphere that fosters the formation of a favorable attitude toward the study of the Kazakh language and culture, which contributes to the more successful implementation of research methodologies in education.

Thus, modern scientific research emphasizes the importance of incorporating research methodologies into the process of teaching the language and culture, with a focus on both pedagogical strategies and motivational aspects required for students' successful development of research competencies (Bottcher-Oschmann, 2021).

Currently, there are various gaps and ongoing challenges regarding the advancement of research skills when learning Kazakh. The first is connected with lack of research on the Kazakh language: There is a scarcity of in-depth research dedicated solely to the development of research abilities in the context of learning Kazakh. This necessitates a more in-depth investigation of the specific issues encountered by students learning this language in the context of research assignments and activities (Ezeanolue, 2018).

The second is based on lack of an integrated approach to developing research competence: Existing research frequently focuses on individual aspects of research skills, such as critical thinking or cultural awareness, when there is a need to develop an integrated approach that considers the interrelationships of all aspects of developing research competence (Ledder, 2022).

The third is focused on the quality of pedagogical techniques. It is critical to conduct further research on the impact of various pedagogical strategies employed in the process of teaching the language in terms of research skill development (Maraza-Quispe et al., 2023). This includes an examination of instructional methods, the use of technology, and the impact of motivating variables on learning outcomes and the development of research competencies.

In the context of Kazakh language study, it is critical to analyze how cultural awareness affects the development of students' research competence. This includes a discussion of how cultural background influences language analysis and interpretation, as well as how people perceive research tasks and activities.

Kazakh language learning presents a unique opportunity for students to immerse themselves not only in linguistic intricacies but also in the rich cultural heritage of Kazakhstan. As students engage with the complexities of the language, they simultaneously delve into the cultural nuances embedded within it. This dynamic relationship between language learning and cultural exploration lays the foundation for the development of research competence among students (Hall, 2013).

Research competence within the context of Kazakh language learning encompasses

the acquisition of critical thinking skills, the ability to conduct thorough investigations, and the proficiency to effectively communicate findings within the cultural context. As students navigate the intricacies of the language, they are encouraged to explore various cultural aspects, historical nuances, and societal intricacies that shape the language's evolution. This exploration forms the basis for the development of critical analytical skills, enabling students to critically assess and interpret linguistic and cultural phenomena (Chhatre, 2020).

Furthermore, the integration of research activities within the Kazakh language curriculum facilitates a holistic understanding of the language, encouraging students to engage actively with real-world issues and cultural contexts. Through research projects, language learners are prompted to formulate complex research questions, critically analyze diverse sources, and synthesize information coherently, thereby fostering their research competence (Skorinko, 2019).

The development of research competence in the context of Kazakh language learning also underscores the significance of effective communication within diverse cultural settings. By fostering an understanding of the cultural intricacies embedded within the language, students are better equipped to engage with the local community, interpret cultural norms, and effectively communicate their research findings in a culturally sensitive manner.

Overall, the relationship between Kazakh language learning and research competence development highlights the interconnected nature of language, culture, and research. By integrating research-driven methodologies into the language curriculum, educators can empower students to become proficient language users with a deep appreciation for the cultural nuances and a well-developed set of research skills, preparing them for effective engagement in the globalized world (Kuzhabekova, 2017).

Materials and methods. This research paper utilizes a qualitative method, employing semi-structured interviews to gather detailed data on students' perceptions and experiences with developing research skills in the context of learning the Kazakh language. The methodology aims to explore the characteristics of competence, challenges in language acquisition, and the importance of research activities in enhancing students' language proficiency. The following stages summarize the methods used in conducting the study:

Participants in the study are undergraduate students majoring in the Kazakh language. A targeted sampling strategy is utilized to select participants from diverse backgrounds and levels of Kazakh language proficiency. The study comprises interviews with 20 students.

The research focuses on the following questions:

1. How do language students in Kazakhstan perceive and utilize the term "competence" when studying and using a language?

2. What particular language skills present obstacles for human beings learning Kazakh, and how do these challenges affect their general linguistic success?

3. What remarkable accomplishments or outcomes have been found among those conducting language learning and acquisition studies?

4. How can educators encourage language learners to participate in and succeed in the study of Kazakh, and how do these motivating tactics affect the learners' development and outcomes?

Semi-structured interviews are conducted with each participant, emphasizing their understanding of the term "competence", perceived language learning obstacles, existing constraints in writing research topics, and approaches that promote research competence.

The interviews also delve into the participants' research accomplishments, the motivational reasons provided by their instructors, their future professional goals, and their perspectives on the successful application of the research story technique in teamwork.

Thematic analysis is utilized to identify and categorize frequent patterns and themes within the interview material.

The data analysis process involves identifying key concepts related to competence, language learning challenges, research skills, and the perceived impact of research activities on academic and professional development.

The analysis of data focused on generating value from responses. Qualitative methodology scholars (Merriam, 2015) preserve that the gathering and analyzing data in the qualitative method are inseparable and collaboratively represented. Therefore, adaptable, well-designed qualitative investigations should combine data collection with analysis. Consequently, we constantly analyzed the responses from the start of the study. We regularly mentioned the gathered data and formed structured written notes from the interviews that captivated the participants' understanding (Creswell, 2016). We categorized the data into distinct themes, established and evaluated thoughts and interactions among the thoughts, and connected ideas to the themes that emerged (Merriam, 2015). We mainly listened to all audio recordings for the interview data and made detailed notes. Afterwards, we coded the data using. We used a devised coding system to separate the research topics as guidance. Next, we organized the replies into common themes, patterns, and concepts corresponding to the research questions. We anticipated misinterpretation because we had to translate statements from Kazakh to English. Data analysis included transcribing, sending the data to an interpreter, coding, categorizing, and emphasizing different indicators from the information gathered.

All participants provided informed consent, outlining the purpose and scope of the research while ensuring the anonymity and confidentiality of the responses they provide.

The researchers maintained a reflexive journal to record personal reflections, presumptions, and preconceptions that could impact the data collection and analysis process. Reflection contributes to the openness and reliability of study findings by identifying and correcting any researcher limitations.

Member checking is performed to ensure the quality and reliability of data gathered during interviews, enabling participants to review and confirm the information they provided. A detailed record of the research process, including the interview papers, coding procedures, and data analysis techniques, is maintained to ensure the reliability and replicability of the study.

This qualitative methodology offers a comprehensive understanding of the students' perspectives on competence, language learning challenges, and the significance of research activities in their academic and professional development within the context of learning the Kazakh language.

Results. The majority of participants defined competence as a combination of language proficiency, cultural understanding, and effective communication skills within the context of the Kazakh language. Student 5 defined competence as the follows:

"Competence, to me, means more than just language proficiency. It's about understanding the cultural nuances, being able to effectively communicate in different contexts, and demonstrating a deep appreciation for the intricacies of the Kazakh language and culture".

Some participants emphasized the importance of both linguistic and cultural competence in fostering meaningful interactions and integration within the Kazakh-speaking community. Participants commonly reported difficulties in speaking fluently and understanding colloquial expressions in the Kazakh language. Student 8 and 19 gave thoughts about speaking skills in the following way:

*Student 8: "Developing competence in the Kazakh language and culture will open up various professional opportunities, especially in cross-cultural communication, language education, and cultural research. It will enable me to engage with diverse communities effectively, contribute to language preservation efforts, and c*ultivate a broader knowledge of Kazakhstan's rich cultural legacy".

Student 19: "I often find speaking fluently and understanding colloquial expressions quite challenging. Additionally, constructing coherent and well-structured written content remains a significant hurdle for me, especially when trying to convey complex ideas or arguments in the Kazakh language".

Most students answered about writing as a challenging skill. They mentioned that it is challenging to construct passages linked with each other in writing a research work. Student 1 emphasized his opinion on writing from the researcher's point of view:

Writing is a recognized demanding skill,

particularly when developing meaningful study subjects that successfully convey complicated ideas and arguments. We pay attention to the word count in writing; in most cases, we do not think about the connection of passages and, as a result, make many mistakes in the writing process.

Many participants expressed a lack of proficiency in conducting thorough literature reviews, formulating research questions, and organizing research findings in a coherent manner.

The following responses identify the meaning of the passage:

Student 14: *"I often struggle with conducting comprehensive literature reviews and selecting appropriate research methodologies for my topics. Additionally, organizing and presenting my research findings in a coherent and structured manner remains a challenge, particularly when aiming to convey complex linguistic and cultural concepts effectively".*

Student 7: "In my recent research project exploring traditional Kazakh folklore, I conducted in-depth interviews with local storytellers and analysed their narratives to uncover deeper cultural meanings. This research not only enhanced my language skills but also provided valuable insights into the rich cultural heritage of Kazakhstan. I could write systematically an introduction and literature review, but in writing the methodology part I faced difficulties in formulating research questions, analyzing the data, how to interpret them".

Several participants highlighted the need for guidance in utilizing appropriate research methodologies and effectively analyzing research data. The content of this passage is characterized by the given response of student 12:

Writing good research work requires continuous guidance from the supervisor. If a student is given guidelines for conducting research, that will help prepare a good research project or work.

Participants emphasized the importance of engaging in research activities, attending workshops, and seeking mentorship to enhance their research competence. They highlighted the significance of continuous practice, active participation in research projects, and seeking feedback from experienced researchers and language educators. The answers of students three and seven could characterize the meaning stated above.

Student 3: "Absolutely, research activity is crucial as it helps us delve deeper into the intricacies of the Kazakh language and culture. It enhances our language proficiency and fosters critical thinking abilities, which are relevant for understanding the cultural context and effectively communicating with native speakers".

Student 6: "My teachers often organize interactive language workshops and cultural immersion activities that make learning the Kazakh language more engaging and relevant. They also provide constructive feedback on our language proficiency and encourage us to participate in language competitions and cultural events, which boosts our continuous participation in research contests".

Some participants shared their achievements in conducting small-scale research projects, which helped them, develop critical thinking skills, improve their language proficiency, and gain a deeper understanding of the Kazakh culture and society. The given responses of students show the importance of advancements in conducting research at the university.

Student 2: *"I participated in a Republican research competition last year and was awarded third place. Twenty-six students from different universities took part in it. It is an excellent success for me to become a winner".*

Student 10: "We wrote projects during the course "Writing a research article. We worked in pairs and groups, discussed course topics, shared ideas, critically analyzed world literature, and presented our findings. It helped us develop not only writing skills but also speaking skills".

Student 15: "Enhancing research competence in Kazakh language and culture will lead to various professional prospects, particularly in intercultural interaction, language education, and cultural research." It will allow me to interact with different groups successfully, contribute to language-preserving attempts,

and foster a better knowledge of Kazakhstan's rich cultural history".

Student 17: "I believe the research story strategy can significantly enhance collaborative learning and improve research competence among students. A sharing research narrative within a group not only fosters a deeper understanding of complex linguistic concepts but also encourages critical thinking, effective communication, and a collective exploration of the Kazakh language and culture".

Discussion. The discussion highlights the multifaceted nature of competence, emphasizing the interplay between linguistic proficiency, cultural awareness, and effective communication skills in the context of language learning and research activities.

It also emphasizes the need for tailored language learning interventions that focus on enhancing speaking, reading, listening, and writing skills in the Kazakh language, thereby facilitating a more comprehensive development of language competence among students. These findings are in line with the research studies conducted by Zhumasheva Et al (2023) and Yeshengazina (2018). The inquiry underscores the importance of integrating research activities into language learning curricula to facilitate the development of research competence among students. They emphasized the role of research story strategies in promoting collaborative learning and fostering a deeper understanding of the language, culture, and society.

The argument demonstrate the crucial role of educators in motivating and guiding students to actively engage in research activities and develop essential research skills necessary for their future academic and professional endeavors.

The findings of this research are consistent with research conducted by Kyaw (2021), Chakraborty and Biswas (2019), Kistnasamy (2014), Zhanqiang (2023), Sileo et al. (1998) who highlighted the significant role of educators in enhancing research skills of students.

The argument demonstrates the importance of teachers encouraging and mentoring students to actively participate in research activities, as this will be critical to their success in their academic and professional futures (Kyaw, 2021). Through

a variety of engaging instructional techniques and learning environments, educators can encourage and foster students' interest in research (Chakraborty & Biswas, 2019).

Research-based instruction is a powerful tool for developing students' critical thinking abilities and stimulating their creative ideas (Chakraborty & Biswas, 2019). Higher education institutions are essential in motivating students to use research-based instructional techniques since they can significantly enhance research activities and learning patterns.

When students succeed in academic endeavours, a never-ending cycle of reflection, interaction, confidence, and high self-esteem is initiated (Kistnasamy, 2014). Educators at higher educational institutions need to establish a welcoming atmosphere that encourages growth and offers a secure setting for education and personal development. Though intrinsic motivation should be the primary source, committed educators can improve students' excitement and learning by utilizing a range of teaching, learning, and assessment strategies (Kistnasamy, 2014; Zhanqiang, 2023).

Research skills development and engagement culture can benefit significantly from strategies that enable future educators to participate actively in their undergraduate studies. These include simulated, spectator, exploratory, analytical, and generative experiences (Sileo et al., 1998). To further contribute to the creation of successful and efficient pedagogy, educators in education also read research-related materials, share and discuss ideas with colleagues, and implement their newly acquired knowledge in their teaching practices.

The debate explores the potential implications of developing research competence in the Kazakh language for students' future professional prospects, emphasizing the importance of language proficiency and research skills in fostering successful careers in academia, research, and cross-cultural communication.

Conclusion. The researchers looked into the mechanisms associated with research proficiency advancement in the context of Kazakh language learning, with a particular emphasis on understanding students' perceptions,

identifying challenges, and exploring effective strategies for improving research skills within the Kazakh language field of study. To achieve the goal, the contributors evaluated the students' opinions concerning research competency and its relevance in the context of learning the Kazakh language, researched the gaps in understanding and abilities that students face in researching areas associated with the Kazakh language and culture, reviewed the strategies and interventions necessary for fostering the development of research competence among students studying the Kazakh language, and assessed the impact of research activities.

The researchers found that learners had difficulties in completing comprehensive literature reviews, developing research topics, and organizing study findings coherently. Several participants emphasized the need for advice in selecting relevant research approaches and properly assessing research results. Participants stressed the value of participating in research activities, attending workshops, and seeking mentorship to improve their research skills. They emphasized the importance of ongoing practice, active participation in research projects, and soliciting feedback from experienced researchers and language educators. Some participants discussed their experiences conducting small-scale research projects, which helped them, develop critical thinking skills, increase their language ability, and obtain a better grasp of Kazakh culture and society.

To address these issues, the following recommendations are suggested:

-to educate students about participating in research activities and seminars, which can help participants improve their research abilities and keep up with the newest methodologies and trends in their profession.

-to seek mentorship and comments that can help learners manage research difficulties and provide personalized suggestions to improve the quality of their work.

-to stress the importance of students' active participation in research initiatives, which is essential for their research skill development and professional growth.

References

Bobomurodova, G. (2023). Theoretical framework for the development of motivation for learning in Turkmen and Russian students. *Science and innovation*, *2*(B10), 478-482. https://cyberleninka.ru/article/n/theoretical-framework-for-the-development-of-motivation-for-learning-in-turkmen-and-russian-students/viewer.

Bottcher-Oschmann, F., Grob Ophoff, J., & Thiel, F. (2021, March). Preparing teacher training students for evidence-based practice promoting students' research competencies in research-learning projects. *Frontiers in Education* 6. 642107. https://doi.org/10.3389/feduc.2021.642107.

Chakraborty, D., & Biswas, W. (2020). Motivating factors in a teacher's research and developmental activities and their impact on effective quality teaching in higher education institutions. *Journal of Applied Research in Higher Education*, *12*(4), 609-632. https://doi.org/10.1108/JARHE-07-2018-0161

Chhatre, V. E. (2020). Some modest and practical advice for undergraduate researchers. *The Bulletin of the Ecological Society of America*, *101*(4), e01745. https://doi.org/10.1002/bes2.1745.

Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.

Din, M. (2020). Evaluating university students' critical thinking ability as reflected in their critical reading skill: A study at bachelor level in Pakistan. *Thinking Skills and Creativity*, *35*, https://doi.org/10.1016/j.tsc.2020.100627.

Emmelhainz, C. (2019). Supporting student research in Kazakhstan. *Slavic & East European Information Resources*, *20*(3-4), 162-175. https://doi.org/10.1080/15228886.2019.1694374.

Ezeanolue, E. E., Menson, W. N. A., Patel, D., Aarons, G., Olutola, A., Obiefune, M., ... & Nigeria Implementation Science Alliance. (2018). Gaps and strategies in developing health research capacity: experience from the Nigeria Implementation Science Alliance. *Health research policy and systems*, *16*, 1-6. https://doi.org/10.1186/s12961-018-0289-x.

Hall, J. K. (2013). *Teaching and researching: Language and culture*. Routledge.

Huang, J., Li, J., Shu, T., & Zhang, Y. (2022). A mixed-methods national study investigating key challenges in learning English as a foreign language: A Chinese college student perspective. *Frontiers in Psychology*, *13*, 1035819. https://doi.org/10.3389/fpsyg.2022.1035819.

Kistnasamy, E. J. (2014). The power of extrinsic motivation in tertiary education. *American journal of educational research (Online)*. https://doi.org/10.12691/education-2-6-9

Kuzhabekova, A., & Mukhamejanova, D. (2017). Productive researchers in countries with limited research capacity: Researchers as agents in post-Soviet Kazakhstan. *Studies in Graduate and Postdoctoral Education*, *8*(1), 30-47. https://doi.org/10.1108/SGPE-08-2016-0018.

Kyaw, M. T. (2021). Factors influencing teacher educators' research engagement in the reform process of teacher education institutions in Myanmar. *Sage Open*, *11*(4), https://doi.org/10.1177/21582440211061349.

Ledder, G. (2022). Mentoring Undergraduate Research in Mathematical Modeling. *Bulletin of Mathematical Biology*, *84*(8), 77. https://doi.org/10.1007/s11538-022-01040-4.

Maraza-Quispe, B., Torres-Loayza, J. L., Reymer-Morales, G. T., Aguilar-Gonzales, J. L., Angulo-Silva, E. W., & Huaracha-Condori, D. A. (2023). Towards the development of research skills of physics students through the use of simulators: A case study. Int. J. Inf. Educ. Technol, 13(7), 1062-1069.

Merriam, S. B., & Tisdell, E. J. (2015). *Qualitative research: A guide to design and implementation*. John Wiley & Sons.

Sileo, T. W., Prater, M. A., Luckner, J. L., Rhine, B., & Rude, H. A. (1998). Strategies to facilitate preservice teachers' active involvement in learning. *Teacher Education and Special Education*, *21*(3), 187-204. https://dx.doi.org/10.25236/FER.2023.061911

Sinha, T., & Kapur, M. (2021). When problem solving followed by instruction works: Evidence for productive failure. *Review of Educational Research*, *91*(5), 761-798. https://doi.org/10.3102/00346543211019105.

Skorinko, J. L. (2019). Looking back at undergraduate research experiences to promote the engagement of undergraduates in publishable research at an R2 institution. *Frontiers in Psychology*, *10*, 445803. https://doi.org/10.3389/fpsyg.2019.01316.

Yeshengazina, S. (2018). Teaching English for special purposes in Kazakhstan: content or skills. *Asia Pacific Institute of Advanced Research (APIAR)*, 8-18.

Zhanqiang, M. (2023). Strategies for Cultivating Creative Thinking Ability of Students Majoring in Educational Technology. *nature*, *6*(19), 62-66.

Zhumashova, Z., Aksholakova, A., Omirbekova, A., & Kulbekova, B. (2023). Challenges and recommendations for teaching and learning Kazakh as a second language. *International Journal of Society, Culture & Language*, *11*(2 (Themed Issue on Language, Discourse, and Society)), 119-131.

G.R. ASPANOVA¹*, B.A. TURGUNBAEVA², SH.SH. KHAMZINA¹, O.B. BOTALOVA¹, A.T. ZHANDILOVA¹

¹Alkey Margulan Pavlodar Pedagogical University (Pavlodar, Kazakhstan)
²Abai Kazakh National Pedagogical University (Almaty, Kazakhstan)
*e-mail: gulmiraramazanovna@bk.ru

THE IMPACT OF SOFT SKILLS ON THE DEVELOPMENT OF A TEACHER'S PERSONAL BRAND

Abstract

The competition in the modern education system is growing every year. Nowadays, to gain confidence in the professional field, it is important for teachers to express themselves by developing their personal brand. We understand the teacher's personal brand as the habit of being popular among colleagues and creating one's own professional and personal identity. In recent decades, the issue of the necessity for teachers to possess flexible skills in order to perform their professional duties has become increasingly pertinent. The research article examines the role of soft skills in shaping a teacher's personal brand, which has become a crucial aspect in contemporary professional settings. This study is based on theoretical frameworks of personal brand formation, complemented by practical observations and analysis of current demands placed on teachers. The authors posit that the identification of the structural components of soft skills, which are critical for the development of a teacher's personal brand, will facilitate this process by considering the specific attributes of the phenomenon

and the particularities of teachers' professional activities. The article identifies and delineates the structural components of soft skills, including self-presentation, emotional intelligence, fairness, creativity, leadership. To validate the proposed hypothesis, a survey was conducted using the digital platform Google Forms. The survey consisted of two stages: at the first stage, we surveyed respondents who were not teachers; they were asked 8 questions; At the second stage, teachers were interviewed and asked 5 questions. The analysis of the results indicates that the development of the identified soft skills contributes to the formation of a positive image of the teacher and significantly influences the enhancement of professional status, as well as the quality and efficiency of the educational process.

Keywords: personal brand development; Soft skills; teacher's personal brand; teacher; personal qualities; structure; Soft skills structure.

Introduction. The life of modern man is quite different from the life of the previous generation. Thus, the modern world has acquired a rapid pace of development, globalization and chaos: every day in the world scientific discoveries are made, technologies are changing, borders between states are increasingly erased, cultures are mixing, with superfast changes in the surrounding reality a person experiences anxiety and confusion. That is why it is very important nowadays for a person to possess soft skills that allow him to interact effectively with other people, to have leadership skills, to work successfully in the global society and to adapt to the dynamically changing conditions of both the world in general and the labor market in particular.

Therefore, the purpose of this research article is to identify the qualities of Soft skills that are important in the development of teacher's personal brand.

Based on the analysis of scientific literature, it should be noted that the topic of the research is currently not well studied. There are separate researches of both local and foreign scientists on the development of teacher's personal brand (Shklyaeva, 2023) and on the problem of Soft skills in professional activity (Ivonina et al., 2017). The results of our survey, however, will make it possible to understand which qualities and skills related to Soft skills are significant for the development of a teacher's personal brand.

The obtained results can be useful not only for the existing and future teachers, but also for educational institutions that can use them to improve the professional training of students and develop their own staff.

Materials and methods. In order to achieve the set goal, let us dwell on the definition of the essence of the concept of «teacher's personal brand».

In contemporary circumstances of modernized changes in the educational space of all levels, the tendency to create a competitive environment becomes important. In this case, it is meant the relationship between people, characterized by the state of explicit or implicit struggle for power, love, prestige, recognition, material prosperity, and the realization of a person's inner potential.

The modern era puts new demands for the teacher to think about his success and competitiveness. In the transition to market relations, the teacher's personal position should change from the status of an ordinary passive performer, waiting for attention to his professional competencies, to the position of an active subject in the market of educational services, able to best manage his professional capital and find the most profitable areas of its application.

The situation in the educational environment itself determines the need to develop a personal brand in teachers. Unfortunately, modern teacher has to solve this problem alone, as neither the school, where his professional activity is realized, nor the educational institutions that provide his professional training are ready to solve this problem.

It is important to note that the specific approach to research methodology may vary depending on the specifics of the research itself and the subject area. The article should provide a detailed description of each of these stages with the indication of research methods and techniques.

Within the framework of this article we focus on one of the factors influencing the development of personal brand, Soft skills, assuming that knowledge about specific Soft skills will increase the effectiveness of the process of personal brand development in a teacher.

Speaking about the concept of Soft skills, it should be noted that it is a consequence of a dynamically changing world. Despite its relevance, there is no universally accepted definition in science yet. In translation from English Soft skills mean «soft», or, in another way, «flexible» skills. The Oxford Dictionary defines soft skills as «personal qualities that enable effective and harmonious interaction with other people» (Oxford English Dictionary, 2010).

Following the scientists, we believe that Soft skills are a set of non-specialized, career-important supraprofessional skills that are responsible for successful participation in the work process, high performance and are cross-cutting, i.e., not related to a specific subject area (Lippman et al., 2019).

The problem of soft skills development was studied by many scientists at different times, who considered and defined the concept of «soft skills» in different ways, which can be explained by the peculiarities of perception and the sphere of scientific interests of each of them. It should be noted that all existing definitions of the concept are partially interrelated and interdependent, and some of them are closely intertwined with each other.

The work of scientists, who substantiated the four-stage process of Soft skills transition from unconscious incompetence to conscious competence in the system of postgraduate education, is quite interesting. We consider it is important, when studying the relationship between soft skills and the development of teacher's personal brand, to identify the following levels of competence development: «unconscious incompetence, conscious incompetence, unconscious competence, conscious competence», which will allow us to talk about the level of development of teacher's personal brand. In our survey we take «unconscious incompetence, conscious incompetence» as a low level, «unconscious competence» as a medium level, and «conscious competence» as a high level (Sultanova et al., 2020).

Based on the research, we hypothesize that based on the flexible skills identified in our research that are relevant to the personal brand

development process, we can further develop a model of teacher's personal brand development (Blessing et al., 2022).

As for the specifics of the activity process, and in our study, it is the development of personal brand, it is necessary to identify which Soft Skills are important for the development of teacher's personal brand.

Since the professional activity of a teacher represents the presence of professional competence of the teacher (teacher's product), learners and their parents (target audience) and colleagues (competitors), a personal brand will help the teacher to stand out in the modern competitive educational environment. Specific features of a teacher's personal brand is the ability to stand out among colleagues (competitors) and create an image that allows to cause trust and respect for his/her professional activity (product) among both the target audience and competitors (target audience). If competence in professional activity is skills related in a general sense to Hard skills, then flexible skills will include the skills to stand out, create an image, and possess skills of self-presentation.

Self-presentation (Latin *praesentantis* – presenting) is «the process of presenting oneself, one's qualities to other people in order to learn their opinion about oneself and to form one or another attitude towards oneself from others». Self-presentation is an important communication skill used by people of different status to form a certain image in the minds of others (Kalennikova & Borisevich, 2013).

The self-presentation of a teacher in pedagogical activity has been considered at various times by scientists who believe that in the process of implementing the discursive practice in self-presentation the ability to present oneself, to reveal one's personal qualities and characteristics is most clearly manifested, which allows to bring the real «self-concept» closer to the ideal one (Komina & Malysheva, 2014). In other words, self-presentation is one of the most important Soft skills that are significant in the development of teacher's personal brand.

In addition to professional merits, social significance of the results of pedagogical activity, the teacher's moral and personal

qualities are no less important skills for the development of teacher's personal brand. As the analysis of scientific literature shows, significant for the professional activity of a teacher, based on its characteristics, are such as: emotional intelligence (Pishghadam & et al., 2021), fairness (Upadhyay, 2016), creativity (Sorokina, 2022), leadership (Turgunbaeva & et al., 2016).

The study was conducted using a qualitative research method, which included two main stages: a survey of parents of students and a survey of teachers who possess a personal brand. The research model aimed to identify the importance of soft skills such as self-presentation, emotional intelligence, fairness, creativity, and leadership in the development of a teacher's personal brand.

The research model was designed to identify significant soft skills that contribute to the development of a teacher's personal brand and included two main stages.

Stage 1: Survey of Parents of Students

In the first stage of the study, a survey was conducted among the parents of students to determine whether the teachers, whom the parents perceive as having a personal brand, possess soft skills such as self-presentation, emotional intelligence, fairness, creativity, and leadership. To this end, 60 parents responded to 8 survey questions, which were hosted on the digital platform Google Forms. The survey allowed us to identify parents' perceptions of the importance of these soft skills for a successful teacher's personal brand.

Stage 2: Survey of Teachers with a Personal Brand

In the second stage, 15 teachers, identified by parents as possessing a personal brand, were surveyed. The survey consisted of 6 questions and aimed to determine the extent to which teachers themselves are aware of and develop the soft skills that contribute to their personal brand.

This two-stage approach not only allowed for an analysis of the significance of soft skills from the parents' perspective but also provided insights into how teachers perceive and develop these skills. The results obtained enabled a comparative analysis and allowed conclusions to be drawn about the importance of these soft skills in the formation and maintenance of a teacher's personal brand.

The study involved 75 participants: 60 parents of students and 15 teachers who possess a personal brand. The parents' ages ranged from 29 to 47 years, with 48 women (80%) and 12 men (20%). The teachers' ages ranged from 33 to 51 years, with 14 women (93%) and 1 man (7%).

Data collection was conducted through surveys using the digital platform Google Forms. The survey for parents consisted of 8 questions, while the survey for teachers included 6 questions. The surveys allowed for the identification of the perception and importance of soft skills such as self-presentation, emotional intelligence, fairness, creativity, and leadership from both the parents' and teachers' perspectives.

In the first stage of the study, respondents (parents of students) were selected randomly. The aim of the survey was to determine whether the teachers mentioned by the parents possessed soft skills such as self-presentation, emotional intelligence, fairness, creativity, and leadership. In the second stage, the survey was conducted among the teachers identified by parents as possessing a personal brand. The goal of this stage was to understand how teachers recognize and develop these skills in the context of creating and maintaining their personal brand.

The comparison of data obtained from parents and teachers allowed for the analysis of the perception and significance of specific soft skills in the development of a teacher's personal brand. Agreement between the opinions of respondents from both groups confirmed the hypothesis regarding the importance of the identified soft skills.

All participants in the study were guaranteed confidentiality, as well as the protection of their rights and interests. Prior to the start of the study, a briefing was conducted with participants, informing them about the research process.

The results obtained were compared with the hypothesis and research questions. If the opinions of parents and teachers coincided, this confirmed the significance of certain soft skills in the development of a teacher's personal brand.

In the case of discrepancies, the hypothesis could be revised in light of new data.

Results. Analysis of the first survey responses showed that 56 people gave the correct answer to the question «Choose the right definition of the concept «teacher's personal brand», which is 93.3%, respectively, 4 people gave the wrong answer, which is 6.7% (Figure 1).
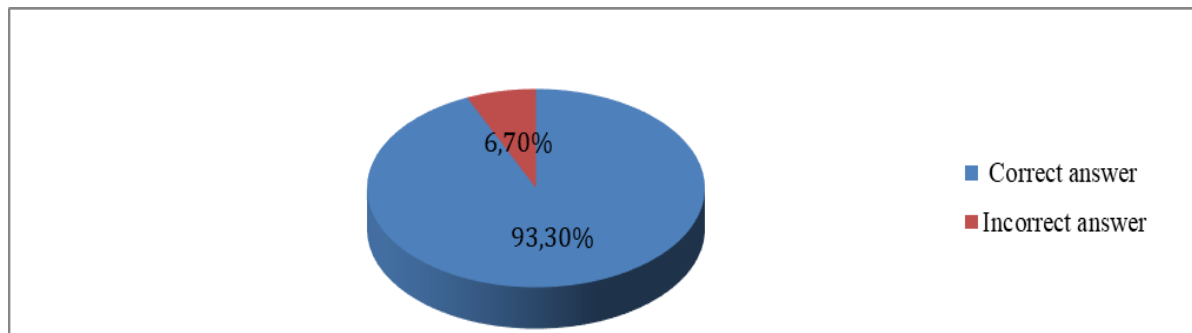

Figure 1: Respondents' understanding of the term «Teacher's personal brand»

Thus, we can conclude that respondents understand the term «teacher's personal brand».

The second and third questions of the questionnaire provided us with information about teachers who, in the respondents' opinion, have a personal brand. At the second stage, we contacted these teachers, interviewed them, and took their consent to participate in the experiment.

The analysis of respondents' answers to the fourth question showed that 52 (86.7%) respondents believe that the teacher they mentioned possesses self-presentation skills, «do not possess» - 3 respondents (5%), «difficult to answer» - 5 respondents (8.3%).

The analysis of respondents' answers to the fifth question: «In your opinion, does your teacher possess emotional intelligence» showed that 56 respondents (93.4%) answered «yes», 1 respondent (1.6%) answered «no», and 3 respondents (5%) answered «difficult to answer».

Respondents' answers to question 6: «In your opinion, does the teacher you mentioned possess justice» gave the following results: «yes» - 51 respondents (85%), «no» - 2 respondents (3.4%), «difficult to answer» - 7 respondents (11.6%).

Respondents' answers to the seventh question: «yes» - 55 (91.6%), «no» - 1 (1.6%), «difficult to answer» - 4 (6.8%).

Respondents' answers to the last question: «yes» - 53 (88.4%), «no» - 1 (1.6%), «difficult to answer» - 6 (10%).

Thus, the results of the first stage of the survey confirm the validity of the Soft skills qualities and skills we have highlighted, which are important for the development of teacher's personal brand.
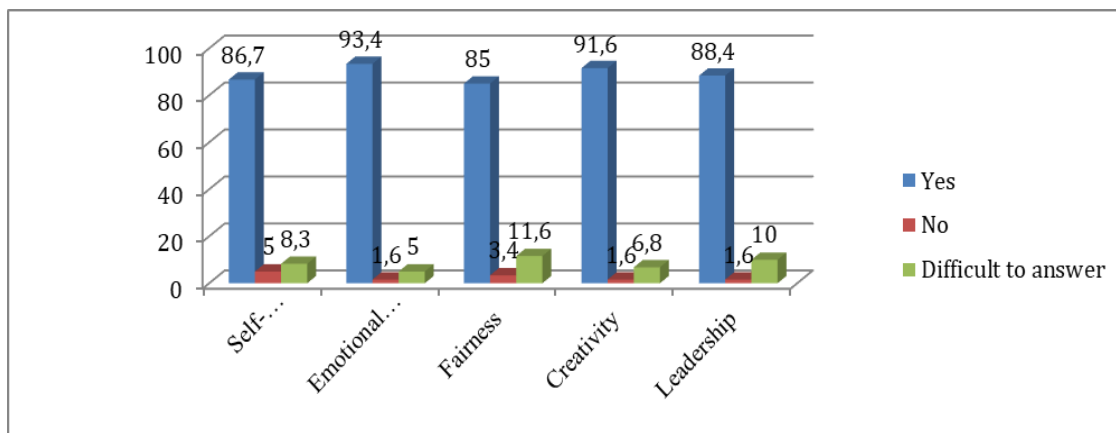
The results are presented in Figure 2.

Figure 2: The degree of the intensity of Soft skills and qualities we have identified in teachers with personal brand

The second phase of the survey included the teachers who had been identified by the respondents in the first phase. They were asked to answer questions numbered 1,4,5,6,7,8, designed in a new questionnaire, also prepared with the help of Google Forms.

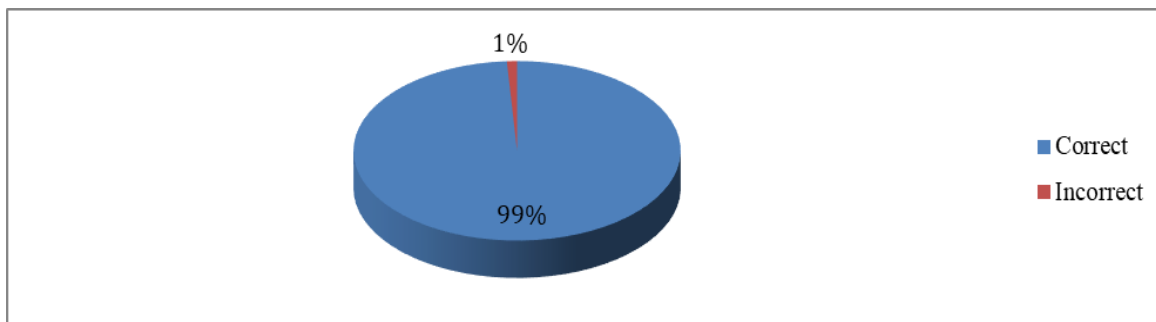The first question was answered correctly by 99% and incorrectly by 1% (Figure 3).

Figure 3: Respondents' (teachers') understanding of the term «teacher's personal brand»

To the question «In your opinion, do you possess self-presentation skills»: «yes» -13 (86.7%), «no» - no answers (0%), «difficult to answer» - 2 (13.3%).

To the question «Do you possess, in your opinion, emotional intelligence»: «yes» - 14 (93.3%), «no» - no answers (0%), «I find it difficult to answer» - 1 (6.7%)

To the question «In your opinion, do you possess justice»: «yes» - 15 (100%).

To the question «Do you possess, in your opinion, creativity»: «yes» - 13 (86.7%), «no» - not specified (0%), «difficult to answer» - 2 (13.3%).

To the last question «Do you possess, in your opinion, leadership»: «yes» - 10 (66.7%), «no» - 1 (6.7%), «difficult to answer» - 4 (26.6%).

Thus, we can clearly see that the responses of teachers with a personal brand are close to other respondents' answers (Figure 4).
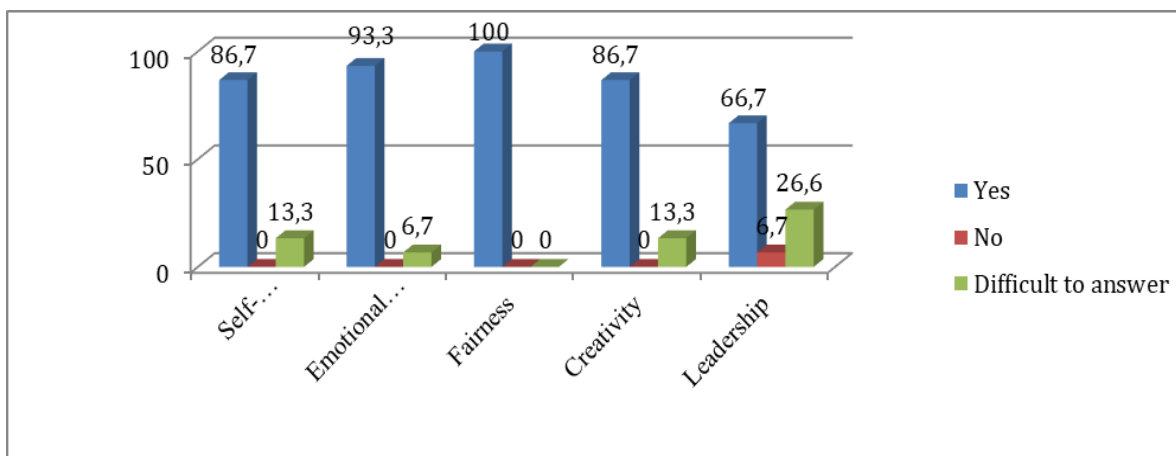

Figure 4: The degree of expressiveness of highlighted Soft skills and qualities in teachers with personal brand. The results of the teachers' survey

Discussion. The investigation of the specific abilities and characteristics encompassed within the domain of soft skills remains a contentious area within the academic discourse. With regard to the attainment of soft skills, our research aligns with the perspective of Susan A. Dean Walden and Julia I. East of Walden University, who posit that the acquisition of hard skills is significantly more straightforward and expeditious than the mastery of soft skills (Dean & East, 2019).

The identification of the skills and qualities that comprise soft skills remains a topic of ongoing debate among scholars. It is our

contention that the specific set of skills and qualities required to perform a given task varies depending on the task itself. Nevertheless, certain soft skills are considered universal, including creativity, critical thinking, communication, and collaboration (Tazhenova & et al., 2024).

In the context of this study, the views of scientists are of particular importance, which emphasize the specificity of the teaching profession and identify a number of essential soft skills for teachers, including assertiveness, networking abilities, teamwork, sensitivity, socialisation, action orientation, the ability to work under pressure, and social desirability (Karaolis, 2019).

In considering the role of soft skills in the development of a teacher's personal brand, it is important to recognise that the very nature of the phenomenon, namely the teacher's personal brand, necessitates the possession of certain qualities and soft skills by teachers. The extent to which these soft skills are demonstrated affects the formation of a teacher's personal brand. A review of the academic literature revealed that the following soft skills were identified as influential in the development of a teacher's personal brand: self-presentation skills, emotional intelligence, fairness, creativity, and leadership.

Furthermore, it is of paramount importance to emphasize the correlation between soft skills and personal branding. Soft skills assist teachers in creating a positive impression on others, fostering trust, and establishing effective relationships with students, parents, colleagues, and administration.

In our study, we identified a number of soft skills, including self-presentation skills, emotional intelligence, fairness, creativity, and leadership, among teachers with well-developed personal brands.

The incorporation of self-presentation skills into the framework of personal branding is substantiated by the scholarship by scientists. In accordance with the perspectives of these scholars, we concur that self-presentation enables teachers to effectively represent themselves and their activities, fostering trusting relationships with students, parents, and colleagues. The capacity to articulate ideas

with clarity and assurance not only enhances the authority of teachers but also serves as a model for emulation (Zinko & Rubin, 2015).

The research conducted by Gradinaru and et al. (2020), is dedicated to the mastery of emotional intelligence with the objective of creating a personal brand. The essence of their findings can be likened to the manner in which a skilled artist employs a variety of shades to create a masterpiece. Similarly, teachers must navigate emotions and relationships in order to demonstrate their unique individuality. The assertions made by these researchers provide grounds for the argument that a personal brand constitutes reputation and renown, necessitating educators to set goals and chart a developmental trajectory.

By fostering authentic connections, enhancing communicative skills, and demonstrating resilience, professionals can elevate their professional presence and craft an appealing personal brand. It is our contention that any discussion of a teacher's personal brand must be aligned with these attributes.

This assertion is supported by the conclusions drawn by scientists, who assert in their works that objectivity and impartiality in evaluating students' actions and behaviours form the cornerstone of trust and respect toward the teacher. Teachers who are perceived as fair are better able to maintain equilibrium in the classroom, uphold discipline, and motivate students to achieve high standards. The results obtained in the study support the theory of social justice: everyone should be given equal opportunities and resources. Such teachers are preferred by students (Habib and et al., 2024).

Jugen Salenbacher (2013) has discussed the significance of creativity as a pivotal aspect of personal branding, emphasizing its role in rendering education more captivating and memorable. Creativity empowers individuals to devise unconventional solutions and swiftly adapt to evolving circumstances.

We concur with the view that leadership competencies facilitate the inspiration and motivation of others, directing them towards the achievement of shared objectives. Leaders are able to cultivate team cohesion, promote collaboration, and maintain a high level of interaction among all stakeholders (Milovanovic and et al., 2015).

The findings of our survey offer substantial support for the contention that the identified soft skills attributes and proficiencies are instrumental in shaping a teacher's personal brand. Both phases of the survey yielded consistent results, with a prevalence of positive responses from respondents exceeding 85%. This provides further evidence to validate our hypothesis.

The results of this study have the potential to inform the development of training initiatives or workshops designed to enhance a teacher's personal brand. Nevertheless, it is essential to recognise that the sample size limits the strength of our conclusions. Consequently, the study's outcomes should be interpreted with caution in light of its limitations. It is also noteworthy that the research did not include prospective teachers. Consequently, further investigation involving this demographic is required to deepen our understanding of the relationship between soft skills and the development of a teacher's personal brand.

Conclusion. Summarizing all of the above, we can conclude that there is no universally accepted definition of the concept of «teacher's personal brand» in science. In our study, we understand it as the ability to stand out among colleagues and create one's professional and personal identity.

Talking about Soft skills, we understand it as a set of non-specialized, career-important supraprofessional skills that are responsible for successful participation in the work process, high performance and are cross-cutting, i.e., not related to a specific subject area. Based on the empirical findings, we can conclude that the influence of Soft skills on the development of teacher's personal brand is significant. The qualities and skills identified by the respondents are categorized as significant and having a significant impact on the development of teacher's personal brand. The authors recommend teachers to pay more attention to the development of such Soft skills as self-presentation, emotional intelligence, fairness, creativity and leadership, as well as the organization of targeted methodological work in schools to develop these skills that contribute to the improvement of the unique image of teachers.

References

Blessing, E., Wood, T.A, & Grahovec, N.E. (2022). Case-by-Collaboration: An Adaptable Soft Skills-Based Educational Model for Health Disciplines. *The Internet Journal of Allied Health Sciences and Practice, 20(4),* 57-70. https://doi.org/10.46743/1540-580X/2022.2211

Clarendon, P. (2010). Soft skills: Oxford English Dictionary. Publisher: *Oxford University Press.* https://doi.org/10.1093/acref/9780199571123.001.0001

Dean, S.A. & East, J.I. (2019). Soft Skills Needed for the 21st-Century Workforce. *International Journal of Applied Management and Technology*, *18*, 17-32. https://doi.org/10.5590/IJAMT.2019.18.1.02

Gradinaru, C., Toma, S.-G., Catana, S.A. & Andrisan, G.N. (2020). A view on transformational leadership: The case of Jeff Bezos. *Creativity and innovation in current management, 31,* 93-100.

Habib, N., Mumtaz, M. & Watts, S. (2024) Application of social justice theory in online learning: A comparison of rural and urban students on perceived learning effectiveness in pre and during COVID-19 era. *Education and information technologies, 5,* 78-92. https://doi.org/10.1007/s10639-024-12874-x

https://www.researchgate.net/publication/349380465_A_view_on_transformational_leadership_The_case_of_Jeff_Bezos

Karaolis, A. & George, N. P. (2019). Teachers' Professional Identity. *Affect and Mathematics Education, 5*, 397-417. https://doi.org/10.1007/978-3-030-13761-8_18

Lippman, L.H., Ryberg, R., Carney, R. & Kristin, A. (2015). Workforce connections: key "soft skills" that foster youth workforce success: toward a consensus across fields. *Child Trends Publication.* https://cms.childtrends.org/wp-content/uploads/2015/06/2015-24WFCSoftSkills.pdf

Milovanovic, S., Baltazarevic, B. & Milovanovic, N. (2015). Personal branding through leadership. International Review, 9, 75-81. https://doi.org/10.5937/INTREV1504075M

Pishghadam, R., Yousofi, N. & Tabatabayeeyan, M.S. (2021). Interplay of psychological reactance, burnout, and spiritual intelligence: A case of Iranian EFL teachers. *Revista de Psicodidáctica (Englished), 27(1),* 76-85. https://www.sci-hub.ru/10.1016/j.psicoe.2021.06.002

Salenbacher, J. (2013). Creative Personal Branding: The Strategy to Answer: What s Next. Publisher: *Laurence King Publishing.* https://archive.org/details/creativepersonal0000jrge

Shklyaeva, N.A. (2023). Personal brand of a pedagogical worker. *Sowushka, 2 (32)*, 5-11. https://kssovushka.ru/zhurnal/32/3122-lichnyi-brend-pedagogicheskogo-rabotnika/.

Sultanova, L., Hordiienko, V., Romanova, G. & Tsytsiura, K. (2020). Development of soft skills of teachers of Physics and Mathematics. *Published under license by IOP Publishing Ltd. Journal of Physics: Conference Series, 18,* 136-145. https://doi.org/10.1088/1742-6596/1840/1/012038

Tazhenova, G., Mikhaylova, N. & Turgunbayeva, B. (2024). Digital media in informal learning activities. *Education and Information Technologies, 10*, 139-143. https://doi.org/10.1007/s10639-024-12687-y

Turgunbaeva, B.A., Aspanova, G.R. & Gelişli, Y. (2016). The Structural and Conceptual Model of Development of Leadership in Junior School Children. *International journal of environmental and science education, 11*, 2467-2479. https://doi.org/10.12973/ijese.2016.700a

Upadhyay, S. & Upadhyay, N. (2016). Multi-Criteria Decision Framework to Measure Spiritual Intelligence of University Teachers. *Procedia Computer Science, 91,* 591-598. https://doi.org/10.1016/j.procs.2016.07.150

Zinko, R., & Rubin, M. (2015). Personal reputation and the organization. *J. Manage Organ, 21*, 217–236. https://doi.org/10.1017/jmo.2014.76

Ивонина, А.И., Чуланова, О.Л. & Давлетшина, Ю.М. (2017). Современные направления теоретических и методических разработок в области управления: роль soft-skills и hard skills в профессиональном и карьерном развитии сотрудников. Интернет-журнал «НАУКОВЕДЕНИЕ», 9(1), 23-34.

Каленникова, Т.Г. & Борисевич, А.Р. (2013). Энциклопедический словарь психологии и педагогики.

Комина, Н.Ф. & Малышева, Е.В. (2014). Дискурсивная практика самопрезентации учителя в педагогическом общении. Мир лингвистики и коммуникации: электронный научный журнал, 36, 1-6.

Сорокина, Ю. (2022). Внедрение дисциплины «Креативное предпринимательство» в Казахской национальной академии искусств имени Т. К. Жургенова. Central Asian Journal of Art Studies, 7(1), 131-142.

References

Blessing, E., Wood, T.A, & Grahovec, N.E. (2022). Case-by-Collaboration: An Adaptable Soft Skills-Based Educational Model for Health Disciplines. *The Internet Journal of Allied Health Sciences and Practice, 20(4),* 57-70. https://doi.org/10.46743/1540-580X/2022.2211

Clarendon, P. (2010). Soft skills: Oxford English Dictionary. Publisher: *Oxford University Press.* https://doi.org/10.1093/acref/9780199571123.001.0001

Dean, S.A. & East, J.I. (2019). Soft Skills Needed for the 21st-Century Workforce. *International Journal of Applied Management and Technology*, *18*, 17-32. https://doi.org/10.5590/IJAMT.2019.18.1.02

Gradinaru, C., Toma, S.-G., Catana, S.A. & Andrisan, G.N. (2020). A view on transformational leadership: The case of Jeff Bezos. *Creativity and innovation in current management, 31,* 93-100.

Habib, N., Mumtaz, M. & Watts, S. (2024) Application of social justice theory in online learning: A comparison of rural and urban students on perceived learning effectiveness in pre and during COVID-19 era. *Education and information technologies, 5,* 78-92. https://doi.org/10.1007/s10639-024-12874-x

https://www.researchgate.net/publication/349380465_A_view_on_transformational_leadership_The_case_of_Jeff_Bezos

Karaolis, A. & George, N. P. (2019). Teachers' Professional Identity. *Affect and Mathematics Education, 5*, 397-417. https://doi.org/10.1007/978-3-030-13761-8_18

Lippman, L.H., Ryberg, R., Carney, R. & Kristin, A. (2015). Workforce connections: key "soft skills" that foster youth workforce success: toward a consensus across fields. *Child Trends Publication.* https://cms.childtrends.org/wp-content/uploads/2015/06/2015-24WFCSoftSkills.pdf

Milovanovic, S., Baltazarevic, B. & Milovanovic, N. (2015). Personal branding through leadership. International Review, 9, 75-81. https://doi.org/10.5937/INTREV1504075M

Pishghadam, R., Yousofi, N. & Tabatabayeeyan, M.S. (2021). Interplay of psychological reactance, burnout, and spiritual intelligence: A case of Iranian EFL teachers. *Revista de Psicodidáctica (Englished), 27(1),* 76-85. https://www.sci-hub.ru/10.1016/j.psicoe.2021.06.002

Salenbacher, J. (2013). Creative Personal Branding: The Strategy to Answer: What s Next. Publisher: *Laurence King Publishing.* https://archive.org/details/creativepersonal0000jrge

Shklyaeva, N.A. (2023). Personal brand of a pedagogical worker. *Sowushka, 2 (32)*, 5-11. https://kssovushka.ru/zhurnal/32/3122-lichnyi-brend-pedagogicheskogo-rabotnika/.

Sultanova, L., Hordiienko, V., Romanova, G. & Tsytsiura, K. (2020). Development of soft skills of teachers of Physics and Mathematics. *Published under license by IOP Publishing Ltd. Journal of Physics: Conference Series, 18,* 136-145. https://doi.org/10.1088/1742-6596/1840/1/012038

Tazhenova, G., Mikhaylova, N. & Turgunbayeva, B. (2024). Digital media in informal learning activities. *Education and Information Technologies, 10*, 139-143. https://doi.org/10.1007/s10639-024-12687-y

Turgunbaeva, B.A., Aspanova, G.R. & Gelişli, Y. (2016). The Structural and Conceptual Model of Development of Leadership in Junior School Children. *International journal of environmental and science education, 11*, 2467-2479. https://doi.org/10.12973/ijese.2016.700a

Upadhyay, S. & Upadhyay, N. (2016). Multi-Criteria Decision Framework to Measure Spiritual Intelligence of University Teachers. *Procedia Computer Science, 91,* 591-598. https://doi.org/10.1016/j.procs.2016.07.150

Zinko, R., & Rubin, M. (2015). Personal reputation and the organization. *J. Manage Organ, 21*, 217–236. https://doi.org/10.1017/jmo.2014.76

Ivonina, A.I., Chulanova, O.L. & Davletshina, Y.M. (2017). Sovremennyye napravleniya teoreticheskikh i metodicheskikh razrabotok v oblasti upravleniya: rol' soft-skills i hard skills v professional'nom i kar'yernom razvitii sotrudnikov [Modern directions of theoretical and methodological developments in the field of management: the role of soft-skills and hard skills in professional and career development of employees]. Internet-zhurnal "NAUKOVEDENIE" - Internet Journal "Science Studies", 9(1), 23-34. [in Russian]

Kalennikova, T.G. & Borisevich, A.R. (2013). Entsiklopedicheskiy slovar' psikhologii i pedagogiki [Encyclopedic dictionary of psychology and pedagogy]. Electronic resource. [in Russian]

Komina, N.F. & Malysheva, E.V. (2014). Diskursivnaya praktika samoprezentatsii uchitelya v pedagogicheskom obshchenii [Discursive practice of teacher self-presentation in pedagogical communication]. Mir lingvistiki i kommunikatsii: elektronnyy nauchnyy zhurnal - World of Linguistics and Communication: Electronic Scientific Journal, 36, 1-6. [in Russian]

Sorokina, Yu. (2022). Vnedreniye distsipliny «Kreativnoye predprinimatel'stvo» v Kazakhskoy natsional'noy akademii iskusstv imeni T. K. Zhurgenova [Introduction of the discipline "Creative Entrepreneurship" in the Kazakh National Academy of Arts named after T. K. Zhurgenov]. Central Asian Journal of Art Studies, 7(1), 131-142. [in Russian]

Information about authors:

Abdimanapov Bakhadurkhan, doctor of geographical sciences, professor, Abai Kazakh National Pedagogical University, ORCID ID: 0000-0003-2377-6031, e-mail: bahadur_66@mail.ru

Abdykhalykova Zhazira, PhD, Associate Professor, Psychology Faculty, L.N. Gumilyov Eurasian National University, ORCID ID: 0000-0002-2541-2437, email: zhazkenti@mail.ru

Abenova Saulet, PhD, Senior Lecturer, L.N. Gumilyov Eurasian National University, ORCID ID: 0000-0002-5725-6635, email: sauleta_astana@mail.ru

Ageyeva Larissa, Candidate of Pedagogical Sciences, associate professor, Kazakh National Women's Teacher Training University, ORCID ID: 0000-0002-6692-9985, email: ageeva.l@qyzpu.edu.kz

Agranovich Yelena, PhD, associate professor, Kazakh National Women's Teacher Training University, ORCID ID: 0000-0002-6111-5552, email: agranovich.e@qyzpu.edu.kz

Akhmetova Aigul, PhD, associate professor, Alkey Margulan Pavlodar pedagogical university, ORCID ID: 0000-0002-5183-6962, e-mail: aigul0884@mail.ru

Alimova Sholpan, PhD, associate professor, Alkey Margulan Pavlodar pedagogical university, ORCID ID: 0000-0003-4254-1932, e-mail: sholpan_alimova@mail.ru

Alipbek Ardak, PhD, associate professor, Ozbekali Zhanibekov South Kazakhstan Pedagogical University, ORCID ID: 0000-0003-2633-9451, email: alipbek_ardak@mail.ru

Alpysbay Leila: Master of Pedagogical Sciences, doctoral student, Abai Kazakh National Pedagogical University, ORCID ID: 0009-0006-4881-8719, email: alpysbai.laila78@mail.ru

Aspanova Gulmira, PhD, associate professor, Alkey Margulan Pavlodar Pedagogical University, ORCID ID: 0000-0003-3062-4765, email: gulmiraramazanovna@bk.ru

Axakalova Zhanna, Candidate of Psychological l Science, a senior teacher, Abai Kazakh National Pedagogical University, ORCID ID: 0000-0003-1083-2559, email: zh.aksakalova@abaiuniversity.edu.kz

Ayapbergenova Gulsum, PhD, associate professor, Alkey Margulan Pavlodar Pedagogical University, ORCID ID: 0000-0002-4952-3289, e-mail: gulsumas@mail.ru

Begimbetova Guldana, Master of Pedagogical Sciences, doctoral student, Yogyakarta State University, ORCID ID: 0000-0002-0435-1014, email: begimbetovaguldana227@gmail.com

Bekmagambetova Roza, Doctor of Pedagogical Sciences, Professor, Abai Kazakh National Pedagogical University, ORCID ID: 0000-0002-5422-6940, email: r.bekmagambetova@mail.ru

Berdygulova Gulmira, candidate of geographical sciences, docent, Abai Kazakh National Pedagogical University, Almaty, ORCID ID: 0000-0001-8560-218X, e-mail: gberdygulova@mail.ru

Bezhina Viktoriya, PhD, Candidate of Pedagogical Sciences, Associate Professor, Akhmet Baitursynuly Kostanay Regional University, ORCID ID: 0000-0001-8419-2975, email: vukvuk85@mail.ru

Botalova Olga, candidate of pedagogical sciences, associate professor, Alkey Margulan Pavlodar Pedagogical University, ORCID ID: 0000-0001-5370-7729, email: o.botalova@mail.ru

Butabayeva Laura, PhD, Associate Professor, Kazakh National Pedagogical University named after Abai, ORCID ID: 0000-0002-3758-8624, email: lbutabayeva@gmail.com

Dieteren Nico, MSc, test expert and senior consultant Cito International (until February 2024), email: dutchtestologist@outlook.com

Ibragimova Elmira, Doctoral student of Educational Program "Kazakh Language and Literature", Korkyt Ata Kyzylorda University, ORCID ID: 0000-0001-8944-5433, email: ibragimova_elmira@mail.ru

Ilyassova Lira, PhD student, L.N.Gumilyov Eurasian National University, ORCID ID: 0009-0005-9149-5065, email: lira.lira.8282@mail.ru

Iminova Yulduz, PhD Doctoral Student, Abai Kazakh National Pedagogical University, ORCID ID: 0009-0006-9588-7522, email: iminova.yulduza@mail.ru

Ishkibayeva Madina, 3-year PhD student, Social Sciences Faculty, L.N. Gumilyov Eurasian National University, ORCID ID: 0009-0002-3859-2083, email: mmaratova575@gmail.com

Ismagulova Svetlana, Researcher, SDU University, Director of the Center for Inclusive Education, National Academy of Education named after Y. Altynsarin, ORCID ID: 0000-0002-6381-1981, email: svetlana_isk@list.ru

Jandarova Aigul, MSc, head of the student selection department, Nazarbayev Intellectual schools, email: jandarova.aigul.s@gmail.com

Jumabayeva Zhanna (corresponding author), PhD, expert of the research and data analysis department, Nazarbayev Intellectual schools, email: jumabayeva_zh@cpi.nis.edu.kz

Kabylzhanova Bota, 3-year PhD student, Philology Faculty L.N. Gumilyov Eurasian National University, ORCID ID: 0000-0002-2514-7047 email: k_bonya@mail.ru

Kaukenova Assem, Leading Researcher, SDU University, ORCID ID: 0000-0003-0313-4760, email: assem.kaukenova@sdu.edu.kz

Kehinde Clemente, PhD, Developmental and Counseling Psychology a visiting professor at the Department of Psychology L N. Gumilyov Eurasian National University Astana, Kazakhstan. Research fellow at the Faculty of Education, Walter Sisulu University Butterworth Campus, ORCID ID: 0000-0002-4740-4630, email: lawrence.kclement@gmail.com

Khamzina Sholpan, candidate of pedagogical sciences, professor, Alkey Margulan Pavlodar Pedagogical University, ORCID ID: 0000-0002-2931-026X, email: khamzina_64@mail.ru

Khegay Natalya, Master in Humanities, senior lecturer, Korkyt Ata Kyzylorda University, ORCID ID: 0000-0002-1354-8513, email: sanakim@inbox.ru

Kolumbayeva Sholpan, Professor of the Abai Kazakh National Pedagogical University, Candidate of Pedagogical Sciences, Head of the Department of Pedagogy, https://orcid.org/0000-0003-1491-8990 , kolumb_09@mail.ru

Konvisar Anna, Police Colonel, Deputy Head of Department, Shrakbek Kabylbayev Kostanay Academy of the Ministry of Internal Affairs of the Republic of Kazakhstan, ORCID ID: 0009-0007-3526-315X, email: anna-konvisar@mail.ru

Kosherbayev Rinad, PhD, lecturer, Abai Kazakh National Pedagogical University, ORCID ID: 0000-0002-3851-2242, email: rinad77@mail.ru

Kosherbayeva Aigerim, Doctor of Pedagogical Sciences, professor, Abai Kazakh National Pedagogical University, ORCID ID: 0000-0002-3307-9814, email: aigera63@mail.ru

Kosmaganbetova Gulnara, PhD student, L.N. Gumilyov Eurasian National University, ORCID ID: 0009-0000-8877-3312, gulnara_kosmaganbetova@mail.ru

Kozhageldiyeva Laura, Leading Researcher, SDU University, ORCID ID: 0000-0003-0553-8988, email: laurahealthprojects@gmail.com

Kuanysheva Bakyt, PhD, associate professor, Toraighyrov university, ORCID ID: 0000-0002-8771-9370, e-mail: danaslyamova@mail.ru

Mankhanova Azhar, Msc in Engineering, Almaty Mangement university, ORCID ID: 0009-0002-0716-4713, email: a.mankhanova@almau.edu.kz

Muzdybayeva Karlygash, candidate of geographical sciences, senior lecturer, Abai Kazakh National Pedagogical University, ORCID ID: 0000-0003-4258-5636, e-mail: mkk77@mail.ru

Myrzaly Nazira, master, senior lecturer, Abai Kazakh National Pedagogical University, ORCID ID: 0000-0001-8646-6255, e-mail: naziramyrzaly@gmail.com

Narbekova Banu, Candidate of Historical Sciences, Associate Professor, Vice-Rector for Academic Activities of the Abai Kazakh National Pedagogical University, b.narbekova@abaiuniversity. edu. kz

Polatova Saule, PhD, a senior teacher, Miras University, ORCID ID: 0000-0002-0017-0232, email: saulepolatova@gmail.com

Rakhymzhan Ramiz, bachelor of architecture, Abai Kazakh National Pedagogical University, ORCID ID: 0009-0008-4017-2540, ramiz22tenten@gmail.com

Satbekova Aigul, Doctor of pedagogical sciences, Professor, Kazakh National Women's Teacher Training University, ORCID ID: 0000-0001-7266-2028, e-mail: satbekova@mail.ru

Seidullayeva Gulzhan, Candidate of Philological Sciences, Associate Professor, International Educational Corporation, ORCID ID: 0000-0002-2437-9321, e-mail: g.a.seidullaeva@mail.ru

Shilibekova Aidana, Candidate of Pedagogical Sciences, deputy chairman of the board (until December 2023), Nazarbayev Intellectual schools, email: aidanashil@gmail.com

Sholpankulova Gulnar, c.p.s. Associate Professor, L.N. Gumilyov Eurasian National University, ORCID ID: 000-0002-4481-8635, sh.gul@mail.ru

Shora Nurym, MSc, expert of the research and data analysis department, Nazarbayev Intellectual schools, email: shora_n@cpi.nis.edu.kz

Šmigelskas Kastytis, PhD, Professor, Lithuanian University of Health Sciences, ORCID ID: 0000-0001-5371-9500, email: kastytis.Smigelskas@lsmuni.lt

Solovyova Natalya, Candidate of Pedagogical Sciences, Professor, Akhmet Baitursynuly Kostanay Regional University, ORCID ID: 0000-0002-6262-8632, email: solovyovana@mail.ru

Syzdykbayeva Aigul, PhD, associate professor, Kazakh National Women's Teacher Training University, ORCID ID: 0000-0003-1356-2988, email: syzdykbaeva.a@qyzpu.edu.kz

Tanatova Assel, candidate of pedagogical sciences, senior lecturer of the department of pedagogy of the Abai Kazakh National Pedagogical University. https://orcid.org/0000-0003-4383-0699, assel_tanatova@inbox.ru

Tazhenova Gulsara, PhD, a senior teacher, Abai Kazakh National Pedagogical University, ORCID ID: 0000-0002-9356-7043, email: karakulovagulsara@bk.ru

Turgunbaeva Botagul, doctor of pedagogical sciences, professor, Abai Kazakh National Pedagogical University, ORCID ID: 0000-0001-5168-0083, email: botagul53@mail.ru

Tyan Violetta, master of pedagogical sciences, lecturer, Kazakh Women's Teacher Training University, email: tyan.v@qyzpu.edu.kz

Zadayeva Almagul, Master of Pedagogical Sciences, senior teacher, Kazakh National Women's Teacher Training University, ORCID ID: 0000-0003-0149-2695, email: zadaevaalmagul@mail.ru

Zhandilova Aizhan, master of pedagogical sciences, teacher, Alkey Margulan Pavlodar Pedagogical University, ORCID ID: 0009-0007-6586-2110, email: zhandill@mail.ru

Zhaukina Saule, MA, Senior Lecturer, Akhmet Baitursynuly Kostanay Regional University, ORCID ID: 0009-0007-6753-8701, email: saulekab86@mail.ru

Zhumagulova Valentina, Doctor of philological sciences, Professor, Kazakh National Women's Teacher Training University, ORCID ID: 0000-0002-0218-227X, email: rus_yazyk@mail.ru