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General Information

About the Journal

Abai journal of Pedagogy and Psychology is a peer-reviewed scientific and methodological journal founded in 2009 by Abai Kazakh National Pedagogical University. The journal focuses on key issues in education at all levels, from early childhood to higher education, and serves as a platform for academic discourse, research dissemination, and professional development in the fields of pedagogy and psychology.

Aims and Scope

The journal publishes original research articles, theoretical analyses, and methodological developments in the following areas:

1. Innovative Approaches and Practices in Modern Education;
2. Psychological and Pedagogical Problems of Professional Development of Education Specialists.

Editorial Strategy

The editorial board adheres to the following principles:

3. Impartial and objective peer-review process;
4. High standards of scientific rigor and methodological accuracy;
5. Collective decision-making based on expert consensus;
6. Efficient and transparent communication with authors;
7. Full respect for intellectual property rights;
8. Strict adherence to the publication schedule;
9. Limitation of publication frequency to a maximum of two articles per author per calendar year.

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Open Book Exams in Higher Education: A Systematic Review

Abstract

Introduction. The traditional exam system is in crisis as it focuses on rote memorization and high loads, which increase student anxiety and reduce the level of practical training. In response to these challenges, more attention is being paid to innovative assessment formats, such as open-book exams (OBE), aimed at developing critical thinking, self-regulated learning, and deep understanding of the material. *Methodology and Methods*. A systematic review analyzed 20 studies published between 1950 and 2025, involving 3,349 participants from 11 countries. The studies were conducted in accordance with PRISMA guidelines. Databases such as PubMed, Web of Science, and Scopus were used, along with citation and reference analysis to identify relevant publications. Data were collected and synthesized thematically to identify key trends and effects of OBE implementation. *Results*. The review showed that OBEs significantly reduce student anxiety by focusing on understanding and applying knowledge rather than mere memorization. They promote critical thinking, self-learning skills, and deeper engagement with learning materials. However, the effectiveness of OBEs depends on proper question design, preparation strategies, and implementation. *Scientific Novelty*. This study represents the first systematic review covering data over a 75-year period and examining the impact of OBEs on educational outcomes, students' emotional state, and cognitive development. *Practical Significance*. The findings highlight the potential of OBEs as a tool for improving the quality of education and preparing students for professional activities, especially when implemented thoughtfully.

Keywords: examination, higher education, open-book, exam review, higher education review.

Introduction. The rapid transformation of the education system and the growing acceptance of non-formal education highlight the need for innovative teaching methods in higher education. Traditional approaches often fail to address diverse learner needs, foster personal growth, or promote lifelong learning. New methodical ways, such as tailored educational paths, inclusive tools, and goal-oriented strategies, are essential to expand access, enhance practical skills, and encourage continuous development. By integrating flexible models like the student-university-environment framework, universities can create motivating environments that unlock individual potential and adapt to modern societal demands (Suvorova et al., 2024).

Exams in modern higher education serve as a critical tool for assessing knowledge, promoting learning, and fostering skills like collaboration and critical thinking. Traditional individual exams emphasize mastery of content, while collaborative assessments encourage teamwork, communication, and problem-solving-essential skills for the modern workforce (Holmes & Lauwerys, 1969). Beyond measuring performance, exams shape instructional strategies, offering opportunities for feedback and reflection. However, their role is evolving, with growing emphasis on innovative formats like two-stage or open-book exams to align with real-world demands. Balancing assessment rigor with instructional time and addressing challenges like free-riding remain key considerations in optimizing exams for student success (Efu, 2019).

The traditional exam system is in crisis, as it heavily relies on rote memorization and high-stakes testing, which exacerbate student anxiety

and stress (Buckley, 2024). Many students feel unprepared for real-world challenges because the system prioritizes theoretical knowledge over practical application. This outdated approach often fails to foster critical thinking, creativity, and problem-solving skills, leaving learners disconnected from the demands of modern life(Jensen et al., 2014). Moreover, the pressure to perform in rigid, time-bound exams undermines holistic learning and mental well-being. As education evolves, there is an urgent need to shift toward more inclusive, skill-based, and practical assessment methods that nurture both personal growth and professional readiness while reducing unnecessary stress (Sato et al., 2019). The determination of new examination methods, such as e-exams, is driven by the need for innovation in higher education, supported by models like "Open Book", which emphasize optimizing implementation through teacher training, technology familiarity, and effective communication strategies, ensuring a theory-based, goal-oriented approach to transforming assessments while addressing challenges and leveraging existing institutional structures (Fink et al., 2023).

Materials and Methods. This systematic review was conducted following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Statement guidelines (Page et al., 2021). The search was conducted in February 2025. Studies were included in the current systematic review if they were in accordance with the following criteria: 1) peer-reviewed; 2) used human subjects; 3) high-school, courses, online exams were excluded; 4) in the English language. As this is the first time such a review has been undertaken, all eligible studies before the search date were included. Three electronic databases were utilized for the systematic literature search: PubMed, Web of science and Scopus. The following search terms were included and combined using the operators "AND", "OR": ("open book") AND ("exam" OR "control" OR "examination"). Additionally, reference lists and citations (Google Scholar) of the identified studies were explored to detect further relevant studies.

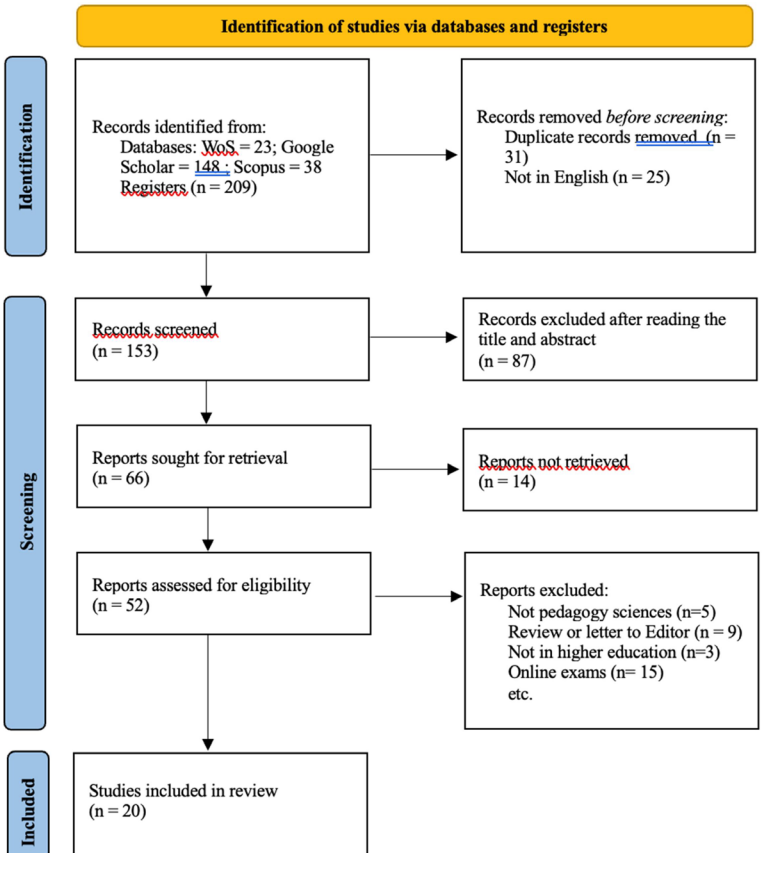

Figure 1: PRISMA flow chart of data extraction from the literature search

The final screening was based on the relevance of the inclusion and exclusion criteria and the identified items for assessing open-book exams in relation to higher education. If the title showed any potential relevance, the abstract was screened. When abstracts indicated potential inclusion, full-text articles were reviewed to determine the eligibility of the studies. Data were collected for all relevant experimental variables related to open-book examination, including observations, authorship, year, and country of study. The abstracts were then imputed into a bibliography software (Zotero) to remove duplicate studies, and then an abstract list was extracted to Microsoft Word. Wide-ranging protocols and measured outcomes and observations were used in the included studies. A thematic synthesis was undertaken, which systematically extracted, recorded and synthesized relevant data from each study (Thomas & Harden, 2008). Each study's variables and outcomes were recorded and coded on a Google Sheets spreadsheet by both psychological and climbing content to make connections between individual studies around relevant descriptive and then analytical themes.

Results. Of the 209 records identified after duplicates and non-English studies were removed, 153 were screened in full text for eligibility. Of these 52, 26 were excluded. Reasons for exclusion are listed in Figure 1. After screening, 25 studies were included. Study characteristics can be seen in Tables 1. All of the studies used quantitative methods and one used qualitative method. The studies were conducted in 11 countries and published between 1950 and 2025. Total Participants: 3349 individuals across all studies. Participants ranged from 8 to 50 years. Countries Involved: UK, USA, Iraq, Australia, Belgium, South Africa, Malaysia, Pakistan, Cyprus, Netherlands, Germany. Many studies examined whether open-book exams led to better scores compared to closed-book exams. Results were mixed-some found improved performance, while others reported no significant difference. Few studies found that open-book exams enhanced long-term retention; most showed no significant impact.

Table 1. *Characteristics of studies examining open-book examination in higher education*

Study/ year / country	Participants	Task or intervention	Outcomes
Dlzar Sedeeq Anwer et.al. / 2020 / Iraq (Abdulmajeed Mamhusseini, 2020)	100 nursing students and 35 teaching staff from the College of Nursing at Hawler Medical University	Allow students to use notes, textbooks, and other approved materials during exams.	Reduction in Test Anxiety: Both students (60%) and teachers (51.4%) agreed that OBEs reduce students' test anxiety, aligning with findings from studies conducted in Hong Kong and Singapore. Promotion of Critical Thinking: A significant proportion of students (41%) and teachers (48.6%) strongly agreed that OBEs encourage critical thinking about course content. Encouragement of Self-Directed Learning: Most participants (students: 42%; teachers: 40%) believed that OBEs foster self-directed learning by promoting deep learning and critical thinking. Decrease in Memorization: Both groups (students: 49%; teachers: 54.3%) agreed that OBEs reduce the need for rote memorization, encouraging students to focus on understanding concepts rather than recalling facts. Enhanced Engagement with Textbooks: Teachers (60%) and students (48%) strongly agreed that OBEs motivate students to read textbooks and articles more frequently and deeply. Preparation Time:

			While students (46%) strongly agreed that OBEs require less preparation time, teachers (28.6%) moderately agreed with this statement. This finding contrasts with a Finnish study where students reported spending similar amounts of time preparing for OBEs and traditional exams. Preference Over Closed-Book Exams: A majority of students (40% strongly, 40% moderately) preferred OBEs over closed-book exams, while teachers were slightly less enthusiastic (31.4% moderately, 31.4% somewhat).
David Boniface / 1985 / USA (Boniface, 1985)	30 volunteer candidates from a second-year psychology course at Hatfield Polytechnic	Candidates were allowed to bring handwritten notes and textbooks into a three-hour open-book examination.	Reduction in Test Anxiety: Both students (60%) and teachers (51.4%) agreed that OBEs reduce students' test anxiety, aligning with findings from studies conducted in Hong Kong and Singapore. Promotion of Critical Thinking: A significant proportion of students (41%) and teachers (48.6%) strongly agreed that OBEs encourage critical thinking about course content. Encouragement of Self-Directed Learning: Most participants (students: 42%; teachers: 40%) believed that OBEs foster self-directed learning by promoting deep learning and critical thinking. Decrease in Memorization: Both groups (students: 49%; teachers: 54.3%) agreed that OBEs reduce the need for rote memorization, encouraging students to focus on understanding concepts rather than recalling facts. Enhanced Engagement with Textbooks: Teachers (60%) and students (48%) strongly agreed that OBEs motivate students to read textbooks and articles more frequently and deeply. Preparation Time: While students (46%) strongly agreed that OBEs require less preparation time, teachers (28.6%) moderately agreed with this statement. This finding contrasts with a Finnish study where students reported spending similar amounts of time preparing for OBEs and traditional exams. Preference Over Closed-Book Exams: A majority of students (40% strongly, 40% moderately) preferred OBEs over closed-book exams, while teachers were slightly less enthusiastic (31.4% moderately, 31.4% somewhat).
Richard Brightwell et.al. / 2004 / UK (Brightwell et al., 2004)	First-semester Bachelor of Science students (N = 196) at Edith Cowan University	Students completed an online multiple-choice test twice-once in a closed-book setting and once in an open-book setting. The test included questions	Students generally perceive open-book exams as less stressful and more conducive to higher-order thinking. Educators view open-book exams as promoting critical thinking rather than rote memorization. Despite these perceptions, the study found no significant difference in mean scores between the two formats (closed-book mean = 55%, open-book mean = 57%; $p > 0.05$). Many students did not adequately prepare for the open-book exam, which may explain why their scores did not improve significantly.

		aligned with Bloom's Taxonomy levels 2 (comprehension) and 3 (application).	Weaker students showed a slight (non-significant) improvement in open-book conditions, suggesting that such exams might benefit lower-performing students. Time spent on the exam (>60 minutes) did not correlate with better performance, indicating that extended time may not be advantageous.
Cnop I. et.al. / 1992 / Belgium (Cnop* & Grandsard, 1994)	Freshmen pharmacy students at a Dutch-speaking university in Brussels, who are motivated but lack strong mathematical preparation.	The study introduces an open-book exam format where students are allowed to bring course texts, books, and personal notes during the theoretical oral exam.	Traditional exams testing memorization skills The authors highlight that traditional exams fail to assess higher-level mathematical skills or the ability to synthesize knowledge. The open-book exam addresses this by testing students' ability to locate, explain, and apply concepts from their notes and textbooks. Reduced stress, improved skills in synthesis and reasoning The open-book format reduced stress for students and encouraged them to develop skills such as synthesis, reasoning, and application. However, some students still relied heavily on rote learning, indicating a need for further adaptation to this new format. Deeper engagement with material, promotion of lifelong learning, preparation for real-world applications
H du Preez et. al. / 2012 / South Africa (du Preez & du Preez, 2012)	The participants were 10 B Com Accounting (Honours) students at the University of Pretoria, South Africa, selected from a pool of 218 students enrolled in taxation courses.	The task involved conducting an IQA focus group to explore students' perceptions of open-book assessments before they experienced such exams. Participants were asked to share their thoughts, feelings, and expectations about open-book assessments.	Preparation as the Cornerstone Students viewed preparation as essential for success in open-book assessments. They emphasized understanding principles and organizing resources effectively. Familiarity with the layout of the Income Tax Act. Importance of forming a referencing habit. Avoiding over-reliance on textbooks during the exam. Resource Accessibility and Its Dual Impact While resources like the Income Tax Act were seen as beneficial, they also raised concerns about dependency and laziness. Reduced need for memorization, access to detailed information. Potential for incomplete answers and poor time management. Emotional and Cognitive Shifts Open-book assessments prompted a mental and emotional adjustment, requiring students to adopt new study and exam strategies. Increased optimism and motivation. Need for a different approach to studying and answering questions. Environmental and Personal Challenges Students anticipated challenges related to the exam environment and personal habits.
Deborah Erlich et.al. / 2017 / USA (Erlich, 2017)	Third-year medical students enrolled in the mandatory 6-week family medicine clerkship at Tufts University School of Medicine (N = 599 over three years)	A novel final exam consisting of two parts: Closed-Book Knowledge Assessment (KA): Traditional multiple-choice questions testing factual knowledge.	Feasibility Successful administration of the open-book exam to a large cohort of students, with minimal technical issues and high completion rates. Performance No significant difference in scores between the open-book and closed-book exams, suggesting that open-book exams are as rigorous as traditional formats. Correlation with Clinical Skills Strong alignment between open-book exam performance and preceptors' clinical ratings, particularly in domains like information mastery and self-directed learning.

		Open-Internet Information Mastery Assessment (IMA). Timed, case-based questions requiring students to use web resources to answer clinical questions, cite evidence, and provide strength-of-recommendation ratings.	Learning Experience Positive student feedback, reduced anxiety, and appreciation for the higher-order skills tested.
Afshin Gharib et.al. / 2012 / USA (Gharib et al., 2012)	297 students (64 males, 233 females) across eight sections.	Students were permitted to use all course materials (e.g., textbooks, notes) during the exam	The main outcomes related to open-book exams were analyzed under three categories: performance, retention, and anxiety. Performance Students scored significantly higher on open-book exams compared to closed-book exams in Introductory Psychology ($p< 0.05$). Retention There were no significant differences in retention quiz scores across exam types in either Introductory Psychology or Statistics ($p > 0.05$). Anxiety Test anxiety levels were significantly lower during open-book exams compared to cheat sheet exams in both Introductory Psychology ($p< 0.05$) and Statistics ($p< 0.05$).
Muhammad Fairuz Abdul Jalal et.al / 2013 / Malaysia (Jalal et al., 2014)	The study involved 396 undergraduate students from two psychology courses at a small liberal arts university	Students were subjected to three types of exams: open-book, cheat sheet, and closed-book. These exam types were counterbalanced across sections to ensure fairness.	Performance Students scored higher on open-book exams compared to closed-book exams in Introductory Psychology (mean score: 80.11 vs. 72.52, $p< 0.05$). In Statistics, there was no significant difference between open-book and cheat sheet exam scores. Retention No significant differences were found in retention quiz scores across exam types, suggesting that open-book exams do not necessarily enhance long-term retention. Anxiety Test anxiety was significantly lower during open-book exams compared to cheat sheet exams in both courses ($p< 0.05$). Preferences Students overwhelmingly preferred open-book exams over closed-book exams, perceiving them as less stressful and more conducive to better performance.
Tariq Javed et. al. / 2020 / Pakistan (Javed & Choudhary, 2020)	The participants were 54 students in Grade IX from a Fede-	The open-book exam group was allowed to use notes, textbooks, and	Academic Achievement Through Open-Book Exams The open-book exam group demonstrated better comprehension and application of concepts compared to the closed-book group.

	ral Government Public School in Rawalpindi	other helping materials during formative assessments over a four-week period. In contrast, the closed-book exam group followed traditional assessment methods without access to external materials.	Statistical analysis (t-test) showed that the difference in performance between the two groups was significant, supporting the effectiveness of open-book exams for struggling learners. The unrestricted approach of open-book exams helped learners focus on understanding rather than rote memorization. Open-Book Examination as a Motivational Tool Students in the open-book exam group reported reduced exam anxiety and increased intrinsic motivation. The mean score of the open-book exam group (32.55) was higher than that of the closed-book exam group (30.18), indicating better academic performance. Open-book exams encouraged self-directed learning and promoted critical thinking among struggling learners. Challenges and Benefits of Open-Book Exams Reduced reliance on rote learning. Encouraged active engagement with content and materials. Promoted higher-order thinking skills like analysis, synthesis, and evaluation.
Richard A. Kalish / 1958 / USA (Kalish, 1958)	158 students (85% women, 75% sophomores) in two sections of a child psychology course, replicated with 161 students.	Two mid-term exams-one closed-book, one open-book-administered under controlled conditions.	No significant reduction in errors with open-book exams. There was no significant difference in total errors between open-book and closed-book exams. Statistical analysis showed that the opportunity to use materials did not reduce errors, suggesting that access to resources did not enhance accuracy. Open-book exams measure different abilities than closed-book exams. Open-book exams measured different abilities than closed-book exams, as evidenced by significantly lower correlations between scores on the two types of exams (r = .495 and .460 vs. r = .691 and .579). This indicates that open-book exams assess skills like practical reasoning and application, while closed-book exams emphasize memory and recall. No correlation between students' perceived help from open-book exams and their scores. Students' self-reported ratings of how helpful they found the open-book format («Much,» «Some,» «Little,» «No») were not correlated with their performance. For example, students who rated the open-book exam as «Little help» performed similarly to those who rated it as «Much help.»
Mary Koutselini Ioannidou / 1997 / Cyprus (Koutselini Ioannidou, 1997)	The participants were 72 sophomore and junior students from the University of Cyprus enrolled in a course on «Theory and	Students were encouraged to use textbooks and notes during the course as aids for discussion and critical thinking.	Achievement Scores: No statistically significant difference in total scores between the open-book and closed-book groups. Closed-book students performed better in sections requiring definitions/terminology understanding and problem-solving. Open-book students showed slightly better performance in the argumentation section, though this difference was not statistically significant. Behavioral Observations: Students who spent more than 50% of their time consulting books scored lower overall.

	Teaching Methodology.» Control Group (n=39): Closed-book examination setting. Experimental Group (n=33): Open-book examination setting.		A strong positive correlation was found between writing time and total score, while consulting books negatively correlated with performance. Qualitative Insights: Some students relied excessively on reference materials, treating them as substitutes for their own thinking. Closed-book students appeared to prepare more thoroughly due to the perceived difficulty of the exam.
Daniel T. Malone et. al. / 2021 / Australia (Malone et al., 2021)	Final-year Bachelor of Pharmacy students at Monash University, Australia.	Allowing students to use the AMH (a medicines formulary) during end-of-semester examinations in the second semester, compared to closed-book examinations in the first semester.	Performance No significant difference in examination marks between closed-book and open-book formats. Open-book examinations featured a higher proportion of cognitively demanding questions without negatively impacting performance. Study Behaviors Students spent more time studying with the AMH during the second semester. Self-reported study hours remained consistent across semesters, suggesting no reduction in effort despite the availability of the AMH. Perceptions Students preferred open-book examinations, citing reduced anxiety and enhanced focus on higher-order thinking skills. Concerns were raised about the potential for over-reliance on the AMH and its impact on demonstrating individual knowledge. Alignment with Real-World Practice Open-book examinations were viewed as more relevant to real-world pharmacy practice, where practitioners frequently consult resources like the AMH.
Srinivasan Ramamurthy et.al. / 2016 / Malaysia (Ramamurthy et al., 2016)	The participants were undergraduate pharmacy students enrolled in a Bachelor of Pharmacy program at the International Medical University (IMU), Malaysia. Year 1 Students: 71 students (12 males, 59 females).	The intervention involved administering two types of formative examinations: Open-Book (OB) Examination: Students were allowed to use textbooks, online resources, or personal notes during the test. Closed-Book (CB) Examination: Students were not	Performance, Perception, and Learning Approach Students performed significantly better in OB examinations (mean score = 57.4) compared to CB examinations (mean score = 50.5), with a medium effect size (Cohen's d = 0.36, p = 0.003). Year 2 students showed slightly higher scores than Year 1 students in both OB and CB formats, likely due to their familiarity with OB exams. Deep Information Processing (DIP) Scores No significant difference was found in DIP scores between OB and CB formats for either cohort, indicating that the type of exam did not influence the depth of learning. However, Year 2 students scored slightly higher in critical reading and structuring dimensions, possibly due to their greater experience and confidence.

	Year 2 Students: 65 students (12 males, 53 females).	permitted to refer to any external materials during the test.	
Gregory Samsa / 2021 / UK (Samsa, 2021)	The participants include students enrolled in a Master's of Biostatistics program at Duke University Medical Center.	The intervention was the redesign of the QE into an open-book, collaborative, take-home format. This new format allowed students a week to complete the exam, encouraged collaboration with peers and instructors, and focused on integrating first-year course material into applied settings.	Student Feedback and Perceptions of Open-Book Exams Students generally viewed the QE positively, rating it 79 out of 100 on average. Key positive aspects included: Collaboration helped build confidence and provided different perspectives. The exam mirrored real-world tasks, preparing them for post-graduation expectations. Questions required critical thinking and integration of concepts across courses. Educational Goals and Fairness in Open-Book Examinations Educational Process Fairness: Enabled students to perform to their potential regardless of background. Cultural and Linguistic Fairness: Sensitive to students' social, cultural, and linguistic diversity. Goal Fairness: Focused on skills relevant to students' future careers rather than rote memorization. Evolution Toward an Open-Book Examination Format The outcomes included improved alignment between the QE and the program's educational goals, reduced stress for students, enhanced opportunities for learning during the exam process, and better preparation for real-world biostatistical practice. Students reported that the new format felt practical and less like a traditional exam.
Olesya Senkova et. al. / 2018 / USA (Senkova et al., 2018)	The study involved undergraduate students enrolled in introductory psychology courses at a public university in the Midwestern United States (136 females vs. 39 males).	Participants studied Swahili-English word pairs and were subjected to either open-book or closed-book quizzes during the initial testing phase. The open-book condition allowed participants to refer to the study list while answering quiz questions, whereas the closed-book condition required reliance on memory.	Similar Performance Across Formats Open-book and closed-book formats yielded comparable results on the final test, suggesting that both formats effectively promote long-term retention. Testing Effect Prevails The act of being quizzed, regardless of format, enhanced long-term retention compared to re-studying. Potential Advantage of Closed-Book Cued Recall While open-book tests were not inferior, closed-book cued recall showed a slight advantage in promoting deeper processing and higher final test performance for correctly recalled items. Implications for Online Learning Open-book tests are particularly useful in online classes where preventing cheating during closed-book tests is difficult.

Tali Spiegel et. al. / 2023 / Netherlands (Spiegel & Nivette, 2023)	Bachelor-level students: Upper-level course, including international exchange students in 2019 but not in 2020 due to COVID-19 restrictions (150 students) Master-level students: Enrolled in a one-year master's program, with some students from other programs (60 students)	Two types of examination: In-Class Closed-Book Examination and Take-Home Open-Book Examination (Conducted remotely, allowing students access to course materials).	Academic Performance and Knowledge Retention No significant differences were found in examination grades between ICE and THE cohorts for either bachelor or master students. However, bachelor students in the THE cohort reported significantly lower overall course grades, potentially due to reduced performance on additional assignments. Wellbeing and Stress Bachelor students in the THE cohort reported significantly lower wellbeing compared to their ICE peers, contrary to expectations that open-book exams reduce stress. Master students showed no significant differences in wellbeing between the two examination formats. Cheating and Academic Integrity Concerns about cheating were raised, particularly regarding collaboration and help-seeking behaviors during THEs. Plagiarism cases were identified and addressed, but other forms of cheating (e.g., unauthorized collaboration) may have gone undetected. Strict time limits and plagiarism detection tools partially mitigated these risks.
Markus Spitzer/ 2025 / Germany (Spitzer et al., 2025)	Two cohorts were compared: Open-Book Group (2021): 112 students who took an online open-book examination. Closed-Book Group (2022): 83 students who took an in-person closed-book examination.	The intervention involved administering two different examination formats: Open-Book Examination (2021): Students could use supplementary materials such as textbooks, notes, and digital resources during the exam. The exam was conducted online via the ILIAS platform, with no proctoring or monitoring of resource usage. Closed-Book Examination (2022): Students were not allowed to use	Higher Examination Accuracy: Students in the open-book group achieved significantly higher average examination accuracy (mean = 69.09%) compared to the closed-book group (mean = 64.26%). This difference was particularly pronounced for lower-performing students, who benefited more from the open-book format than higher-performing students. Increased Pass Rates: A higher proportion of students passed the open-book examination (89%) compared to the closed-book examination (78%). Longer Examination Duration: Students in the open-book group spent more time on the exam (mean = 49.79 minutes) compared to the closed-book group (mean = 40.06 minutes), likely due to the use of supplementary materials. No Differential Item Functioning: The benefits of the open-book format were consistent across all question items, regardless of difficulty level. Selective Effects for Lower-Performing Students: Lower-performing students (first quartile) showed greater improvement in examination accuracy in the open-book format compared to higher-performing students (fourth quartile).

		any external resources and completed the exam in a controlled university setting using standardized computers.	
Christos Theophilides / 1996 / Cyprus (Theophilides & Dionysiou, 1996)	The study involved all sophomore students (N = 173) enrolled in an introductory education course at a university's teacher-education program.	Students participated in an open-book examination as part of their course assessment. This exam allowed them to use course textbooks, notes, and other prepared materials during the test.	Creative Knowledge Application Students demonstrated critical thinking and deep problem analysis Developed original answers rather than recalling memorized information Transferred knowledge to new situations effectively Course Content Mastery Students engaged in comprehensive study techniques Compared and contrasted information from multiple sources Integrated knowledge across different course topics Self-Evaluation and Feedback Students identified learning gaps during preparation Conducted post-exam self-assessment of performance Adjusted study approaches based on self-evaluation Stress Reduction Exam anxiety significantly decreased Students approached exams more optimistically Worked through answers in a relaxed manner Self-Regulated Learning Students actively monitored their study progress Identified weaknesses in understanding Emphasized gathering and synthesizing information
Christos Theophilides / 2000 / Cyprus (Theophilides & Koutselini, 2000)	The participants were 276 education majors enrolled in an introductory course on instructional theory and practice at the University of Cyprus	The intervention involved exposing students to both closed-book and open-book examination formats during the same course. Specifically: Closed-Book Examination: Students were required to recall information without access to external materials. Open-Book Examination: Students were	Course-Content Mastering Behavior Students preparing for open-book exams engaged in deeper learning, interrelating information and reconstructing course content meaningfully. Closed-book preparation focused on memorization and surface-level study. Involvement in the Learning Process Open-book preparation encouraged consistent study throughout the semester, while closed-book preparation often led to last-minute cramming. Creative Use of the Course-Acquired Information During open-book exams, students applied critical thinking, analyzed and synthesized information, and presented personal views creatively. Closed-book exams limited creativity, focusing on recall-based answers. Optimism for the Exam Outcome Students approached open-book exams with greater confidence and optimism, reducing stress and anxiety compared to closed-book exams.

		allowed to consult textbooks, notes, and other course materials during the exam.	
Jacob Verduin/ 1950 / USA (Verduin, 1950)	College freshmen enrolled in plant science courses at the University of South Dakota. The study involved 186 students over four semesters.	Students were allowed to use textbooks and reference materials during exams.	Shift Away from Memorization Closed-book exams emphasize rote memorization, which limits students' ability to apply knowledge practically. Open-book exams reduce reliance on memory and encourage students to focus on understanding concepts and utilizing resources effectively. Enhanced Learning Engagement Above-average students embraced the opportunity for broader study, motivated by the need to consult multiple sources. Below-average students initially preferred closed-book exams, believing they could achieve better grades through memorization. Improved Assessment Accuracy Open-book objective tests provided accurate grading comparable to traditional «lab practical» exams. The combination of open-book testing and objective design resulted in a fair evaluation of student abilities. Development of Critical Skills Students developed skills such as locating information, interpreting diagrams, and analyzing experimental data. Thought problems fostered critical thinking and collaborative learning. Attitudinal Changes Toward Education Students began viewing education as a process of skill development rather than mere knowledge acquisition. The abandonment of lectures helped shift the focus from «answers» to the process of finding answers.

Discussion. Across multiple studies, open-book exams are consistently reported to reduce test anxiety by shifting the focus from rote memorization to understanding and application. For instance, Dlzar Sedeeq Anwer et al. (2020) found that both students (60%) and teachers (51.4%) agreed that OBEs alleviate stress, aligning with similar findings from Hong Kong and Singapore. This sentiment is echoed in studies by Afshin Gharib et al. (2012) and Muhammad Fairuz Abdul Jalal et al. (2013), which demonstrated statistically significant reductions in anxiety during OBEs compared to closed-book or cheat sheet exams. Christos Theophilides (1996, 2000) further highlighted that students approached OBEs more optimistically and worked through answers in a relaxed manner, attributing this to reduced reliance on memory. Similarly, Gregory Samsa (2020) noted that the collaborative, take-home format of OBEs mirrored real-world tasks, reducing stress and enhancing confidence. However, Tali Spiegel et al. (2023) presented a contrasting perspective, finding that bachelor students in a take-home OBE cohort reported lower wellbeing despite the open-book format, suggesting that contextual factors like workload or pressure from additional assignments may offset the anxiety-reducing benefits. Overall, while most studies agree that OBEs reduce test anxiety, their effectiveness depends on how they are implemented and the broader educational context.

Open-book exams are consistently reported to promote critical thinking and higher-order skills such as analysis, synthesis, and application. For instance, Dlzar Sedeeq Anwer et al. (2020) found that a significant proportion of students (41%) and teachers (48.6%) strongly agreed that OBEs encourage critical thinking, while Cnop I. et al. (1992) highlighted that OBEs reduce reliance on rote memorization and instead foster skills like reasoning and synthesis. Similarly, Richard Brightwell et al. (2004) noted that students perceive OBEs as conducive to higher-order thinking, particularly at Bloom's Taxonomy levels 2 (comprehension) and 3 (application). Christos Theophilides (1996, 2000) further emphasized that students preparing for OBEs engaged in deeper learning, interrelating information and creatively applying knowledge during exams. However, some studies, like Mary Koutselini loannidou (1997), caution that over-reliance on reference materials can hinder independent thinking, and Richard Brightwell et al. found no significant performance differences between OBEs and closed-book exams, suggesting that outcomes depend on preparation and question design. Overall, while most studies agree that OBEs promote critical thinking, their success hinges on how effectively students adapt to the format and how well exams are designed to assess higher-order skills.

Christos Theophilides (1996, 2000) highlighted that students preparing for OBEs engaged in comprehensive study techniques, comparing information from multiple sources and integrating knowledge across topics. H du Preez et al. (2012) further emphasized that students viewed preparation as essential for success in OBEs, focusing on understanding principles and organizing resources effectively. However, some studies, such as Mary Koutselini loannidou (1997), noted that over-reliance on materials could hinder independent thinking, as students who spent excessive time consulting books during exams often scored lower. Dlzar Sedeeq Anwer et al. (2020) found that both teachers (60%) and students (48%) strongly agreed that OBEs motivate students to read and interact with course materials more deeply. Despite this, the consensus is that OBEs encourage deeper engagement with materials, fostering skills like synthesis, reasoning, and application, which are critical for real-world problem-solving. Most studies agree that OBEs promote active interaction with learning resources, shifting the focus from rote memorization to meaningful engagement with content. While challenges like over-reliance on materials and variability in preparation exist, the overall impact of OBEs is positive, particularly in encouraging students to develop self-directed learning habits and higher-order thinking skills. When implemented thoughtfully, OBEs can be a powerful tool for fostering deeper engagement with course materials and preparing students for practical applications beyond the classroom.

The theme of Self-Directed Learning and Preparation Strategies is consistently supported across multiple studies, with a strong consensus that open-book exams (OBEs) foster self-directed learning by encouraging students to take ownership of their learning process. For example, Dlzar Sedeeq Anwer et al. (2020) found that a significant proportion of students (42%) and teachers (40%) believed OBEs promote deep learning and critical thinking, while H du Preez et al. (2012) emphasized the importance of preparation strategies, such as organizing materials and understanding principles, for success in OBEs. Similarly, Christos Theophilides (1996, 2000) highlighted that students preparing for OBEs engaged in comprehensive study techniques, integrating knowledge from multiple sources and applying critical thinking during exams. However, some studies, such as Richard Brightwell et al. (2004), noted that many students did not adequately prepare for OBEs, which limited their effectiveness. This underscores the variability in engagement and preparation strategies, suggesting that while OBEs encourage self-directed learning, their success depends on how well students adapt to the format and utilize resources effectively. Most studies agree that OBEs promote self-directed learning by shifting the focus from rote memorization to understanding and application, but challenges like inadequate preparation and over-reliance

on materials highlight the need for guidance. When implemented thoughtfully, OBEs can help students develop essential skills such as resource organization, critical thinking, and lifelong learning habits. These exams also align with real-world applications, as noted by Gregory Samsa (2020), where collaboration and integration of knowledge mirror professional expectations. Overall, OBEs are a valuable tool for fostering self-directed learning, provided students are equipped with effective preparation strategies and clear expectations.

Conclusion. The systematic review of open-book exams (OBEs) in higher education reveals significant insights into their effectiveness, challenges, and implications for teaching and learning. Across multiple studies, OBEs consistently demonstrate a reduction in test anxiety by shifting the focus from rote memorization to understanding and application. This aligns with findings that students and educators perceive OBEs as less stressful and more conducive to fostering critical thinking and higher-order skills such as analysis, synthesis, and evaluation. For instance, studies like those by Dlzar Sedeeq Anwer et al. (2020) and Afshin Gharib et al. (2012) highlight statistically significant reductions in anxiety during OBEs compared to closed-book formats. However, the effectiveness of OBEs in reducing stress depends on contextual factors, including workload and additional assignment pressures, as noted by Tali Spiegel et al. (2023). Thus, while OBEs generally alleviate anxiety, their implementation must consider broader educational contexts.

Promoting critical thinking and higher-order cognitive skills is another key advantage of OBEs. Studies indicate that OBEs encourage deeper engagement with course materials, fostering skills like synthesis, reasoning, and problem-solving. Christos Theophilides (1996, 2000) emphasized that students preparing for OBEs engaged in comprehensive study techniques, integrating knowledge across topics and applying critical thinking during exams. Nevertheless, some studies caution against over-reliance on reference materials, which can hinder independent thinking. The variability in student preparation strategies underscores the need for clear guidance and expectations to maximize the benefits of OBEs. Enhanced engagement with learning materials and self-directed learning are also prominent themes. OBEs motivate students to interact deeply with course content, promoting lifelong learning habits. H du Preez et al. (2012) highlighted the importance of preparation strategies, such as organizing resources and understanding principles, for success in OBEs. However, inadequate preparation remains a challenge, as noted by Richard Brightwell et al. (2004), suggesting that the success of OBEs hinges on how well students adapt to the format.

In conclusion, OBEs offer significant potential to transform assessment practices in higher education by reducing anxiety, promoting critical thinking, and encouraging deeper engagement with learning materials. Their alignment with real-world applications makes them particularly relevant in modern education. However, challenges such as over-reliance on materials and variability in preparation strategies highlight the need for thoughtful implementation, clear guidelines, and ongoing support for both educators and students. When designed and executed effectively, OBEs can serve as a powerful tool to foster holistic development, equipping learners with essential skills for academic and professional success.

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Practice-Oriented Tasks for Increasing Motivation in STEM Education

Abstract

Introduction. The study addresses the problem of enhancing student motivation in learning cause-and-effect relationships in nature through the implementation of practice-oriented educational tasks and illustrative materials. *Methodology and Methods.* A pedagogical experiment was conducted with control and experimental groups, where active teaching methods were applied in the experimental group through the performance of practical tasks designed to identify cause-and-effect relationships using illustrative materials. *Results.* It was established that meaningful and didactically well-structured learning activities play a crucial role in fostering student motivation by enabling learners to engage consciously with educational content in real-life contexts. The experimental group demonstrated significantly higher student engagement compared to the control group, showing greater interest in practical activities and higher motivation to succeed. Successful completion of practice-oriented tasks instilled a sense of achievement and self-confidence in students. *Scientific novelty.* The effectiveness of practice-oriented tasks as a motivational tool that promotes active and conscious learning in studying cause-and-effect relationships in nature has been proven. *Practical significance.* The developed approach can be applied to improve the quality of the educational process, achieve defined learning objectives, and sustain increased student motivation for research-based and project-oriented learning activities.

Keywords: education, practice-oriented training, didactics, motivation, educational activity, causal relationships.

Introduction. According to Aleksashina I., the education system is currently undergoing a period of reform associated with changes in content and the search for optimal teaching methods and technologies that can meet the growing demands of both the individual and the state. The study of the Natural Sciences still occupies a leading position, as it determines the level and style of scientific thinking. This is a natural science that fully reflects the ability of the human mind to analyze any incomprehensible situation, identify its fundamental, qualitative and quantitative aspects and bring the level of understanding to the possibility of theoretical forecasting of its nature and the results of its development over time. Natural Science Education is one of the components of preparing the younger generation for an independent life (Abdimanapov et al., 2018; Balabaeva et al., 2011). Along with other components of education, it ensures the comprehensive development of the child's personality during his studies and upbringing at school.

The problems of education of love for nature and care for it were studied by Gaisin (1995), Moiseeva (1996), Tsvetkova (2000), Chawla (2006), Bukovskaya (2007), Perkins (2010), Abdimanapov (2018), Anđić & Maurović (2024), Mazitova (2007) and others. Such scholars as L.N. Bozhovich, A.A. Leontiev, S.L. Rubinstein, D.B. Elkonin, and others have made significant contributions to the study of the developmental characteristics of preschool and primary school children, particularly regarding

their interaction with the external environment (Yasnitsky, 2010). At different times, various scientists were engaged in the problems of natural sciences. A great contribution to the formation of natural science ideas in modern educational systems was made by O.I. Donina, F.Yu. Siegel, V.N. Komarov, B.V. Kukharkin, E.P. Levitan, E.A. Paladyants, F. Hoyle, S. Hawking and others (Artemieva, 2007). For example, Hawking (1988) reasoning a statement related to natural science as follows: «it makes no sense to ask if the theory is true, because we know that reality depends on the theory».

Mumtaz (2000) considers this approach based on the principle of observation (indirect measurements that confirm or refute the theory) to be the most optimal for fruitful knowledge of the level of reality that is inaccessible to direct perception and control and whose phenomena are impossible. It explains that it must be embodied in familiar images and understood from the point of view of the accessible consciousness of a person. Natural science is also valuable because it helps to understand man's place in the world as an integral part of nature, without which his existence is impossible, he is the most intellectual and highly spiritual being responsible for the future of the biosphere.

The subject of natural science is studied scientifically in secondary schools as the legal links between the system «natural environment-man-society», as well as a sense of responsibility for maintaining the environment clean, improving the natural environment without creating environmental problems. In this regard, cause and effect are interrelated-combined with natural substances and actions. The depth of the definition of cause-effect relations by means of the outstanding establishes the general theoretical degree of the original scientific creation.It is necessary to teach the student the same principles:

- each manifestation has its prerequisites and results, it is necessary to be able to understand it, (a combination of these factors);

- forecast of the likely outcome (consequences) according to the set of factors;

- resumption to a predictable extent of possible factors that led to a real result;

- there are not only one causal relationship, but also many relationships that can determine these factors;

-fixing the causal relationship in schematic or tabular form.

In such conditions, one of the areas of educational practice – practice-oriented tasks-begins to gain special weight.

- practice-oriented tasks allow you to significantly increase your learning motivation. Their relevance is due to the following circumstances:

- firstly, the effectiveness of teaching is significantly increased by increasing the personal status of the student and the practice-oriented content of the proposed task;

- secondly, in the process of interaction, feedback channels are constantly working in the «teacher-student» system;

- thirdly, students develop an interest in creativity, which allows them to learn the joy of creative activity.

The study of the motivating component of students activities makes it possible to obtain information about the quality of work of an educational institution, that is, schools. It is the motivating component that determines the student's ability to set and successfully solve educational tasks. The analysis of the data obtained as a result of the study determines the qualitative and quantitative indicators of learning motivation: the final level of development of motivation as a whole and the levels of development of its individual components (the presence of individual meaning of learning, the ability to set goals; the predominance of cognitive or social motives, external or internal motivation, the desire to achieve success or avoid failure, the implementation or absence of learning motives in behavior). The results obtained make it possible to identify ways to solve the identified problems, to draw the attention of teachers to methods of increasing the motivation of students of a certain age.

The most important requirement of society for the training of school graduates is the formation in them of a broad scientific worldview, based on solid knowledge and life experience, readiness to apply the knowledge and skills acquired

from the school threshold throughout their lives. The implementation of this requirement involves the orientation of educational systems to the development of the qualities necessary for the life of students in modern society and the implementation of practical interaction with objects of nature, production, household. Motivation is a cornerstone of effective education, and its significance in science classrooms cannot be overstated. As educators and researchers delve deeper into the dynamics of science education, they are increasingly recognizing the pivotal role of practice-oriented tasks in enhancing students' motivation and engagement. The traditional model of science education, often characterized by lectures and theory-focused instruction, has shown limitations in sustaining students' interest and fostering a genuine passion for the subject. To address this challenge, a shift towards more practice-oriented tasks has gained prominence in contemporary pedagogical approaches (Sanat et al., 2022; Tikhonova et al., 2021; Slough et al., 2010). The integration of practice-oriented tasks in science lessons brings a transformative element to the learning process. It aligns classroom activities with real-world scientific applications, making science education more relevant and experiential. This approach is rooted in the idea that students are more likely to become engaged and motivated when they can see the direct implications and practicality of what they are learning. By immersing students in hands-on experiments, problem-solving exercises, and interactive projects, educators can ignite a sense of curiosity, exploration, and purpose in their students pursuit of scientific knowledge.

This paper explores the multifaceted relationship between practice-oriented tasks and motivation in science lessons. It delves into the theoretical underpinnings of motivation in the context of science education, discusses the benefits of practice-oriented tasks, and presents practical strategies for implementing these tasks in the classroom. Through this examination, we aim to shed light on the potential of practice-oriented tasks to revolutionize science education, enhance student motivation, and ultimately inspire a new generation of passionate and proficient scientists.

Materials and Methods. The scientific article used the following set of research methods, namely:

- analysis of psychological and pedagogical literature;
- generalization and systematization, study of documentation;
- empirical: experiment, interview, observation;
- use of diagnostic methods;
- analysis of the products of students activities.

Research methods: theoretical: generalization, systematization on the topic of research.

The subject of the study is practice-oriented tasks in natural science lessons as a means of increasing the motivation of students.

The purpose of the study is to get acquainted with the system of application of practice - oriented tasks to increase motivation for learning.

The hypothesis of the study is that if the training of students in natural science lessons is built on the basis of solving practice - oriented tasks, then this increases the motivation to learn.

Research objectives:

1. Study of the state of the problem under study in the scientific and methodological literature.
2. Familiarization with the methodological requirements for practice-oriented tasks.
3. Ability to develop and use practice-oriented tasks in the educational process.
4. Checking the effectiveness of using practice-oriented tasks to increase motivation.

Research base: MPI «Secondary School named after D. Kunaev» in the Glubokovsky District of East Kazakhstan region.

Results. The introduction substantiates the relevance of the problem. The purpose, object and objectives of the study are formulated, the scientific novelty of the work, theoretical significance, practical value are indicated, the stages of the study are distinguished. Practice-oriented learning is a type of training, the main goal of which is to form students ' skills and skills of practical work, which are currently in demand in various areas of social and

professional practice, as well as the formation of an understanding of where, how and why the acquired skills are used in practice. Practice-oriented learning is a form of learning. Its main goal is the formation of students ' practical work skills, which are currently in demand in various areas of social and professional practice, as well as the formation of an understanding of where, how and why the acquired skills are used in practice.

The practice-oriented type of training is aimed at addressing a key question: what should be the content and forms of instruction that ensure a shift in the educational process toward the essential understanding of knowledge and concepts, while primarily fostering the ability to carry out practical tasks and apply skills in real-world contexts? This approach emphasizes the reproduction and reinforcement of practical skills and experiences in the professional field chosen by the students (Budnyk, 2021). At the tactical level, this reorientation is realized through the integration of a set of practice-oriented training courses into the modern educational system. These courses are specifically designed to develop students' competencies, focusing primarily on practical skills, applied abilities, and relevant hands-on experience.

One of the most effective ways to influence the educational process and guide it in the desired direction is through the deliberate organization of learning conditions by the teacher. Moreover, effective learning depends on the appropriate didactic use of visual aids to support the achievement of educational goals. In essence, the teacher's primary organizational task is to create conditions in which students develop psychological readiness and openness to pedagogical influences. It is evident that only under such circumstances can the educational process be expected to yield meaningful and effective outcomes. Today, the issue of training effectiveness is becoming increasingly pressing due to a marked decline in students' interest in learning within the mass education system. A significant portion of students demonstrate little to no motivation to acquire knowledge and skills. In this context, it is essential to address the shortcomings of the educational process and to continuously stimulate students' interest in academic subjects through a diverse arsenal of pedagogical methods. This engagement, or "educational momentum", largely depends on the teacher - specifically, on their ability to conduct lessons in an engaging and effective manner.

A well-designed practice-oriented task enhances students' understanding of thematic material, supports their ability to answer both self-generated and teacher-posed questions, and facilitates successful completion of assigned learning objectives (Namestovski & Kovari, 2022). It is important to emphasize that the teacher's role in developing such tasks is both essential and decisive. Without the integration of practical tasks into the learning process, education risks becoming a purely formal exercise for many students-lacking in meaning, relevance, and tangible outcomes. As a result, students may struggle to successfully complete even basic assignments, undermining the effectiveness of the educational process.

Practice-oriented tasks are derived from real-life contexts and environments, aiming to develop practical skills essential for everyday life (Liu et al., 2023). These tasks often incorporate elements such as local history materials and components of production processes. Their primary goal is to cultivate the ability to act effectively in socially meaningful situations. While grounded in previously acquired knowledge and skills, such tasks challenge students to apply their learning in practical, often unfamiliar, scenarios-thereby bridging the gap between theory and practice.

The most important characteristics of practice-oriented tasks, as outlined by educational standards (subject-based, interdisciplinary, and applied), include the following:

- significance of the outcome - whether cognitive, professional, cultural, or social - which plays a key role in fostering students' cognitive motivation;

- contextual formulation - tasks are presented as real-life plots, scenarios, or problems that require students to draw on knowledge from various sections of a topic, across different disciplines, or from everyday experiences not explicitly stated in the task description;

- multiformat data presentation - information within the task may be displayed in diverse formats such as diagrams, tables, charts, or graphs, thus requiring students to identify and interpret various types of representations;

- application of results - the task indicates, either explicitly or implicitly, the potential areas or contexts in which the solution or results can be applied, thereby reinforcing the relevance and transferability of knowledge.

In addition to the four established mandatory characteristic features, practice-oriented tasks are divided into the following:

1) in terms of structure, these tasks are non-standard, i.e. in the task structure, some of its components are unknown;

2) the presence of redundant, missing or contradictory data in the case of the task, which leads to a voluminous formulation of the condition;

3) the presence of several solutions (different degrees of rationality), these methods may not be known to students and will need to be built.

Practice-oriented tasks have three difficulty levels, which are presented in the table below. (Table 1).

Table 1. *Difficulty levels of practice-oriented tasks*

Levels	Practice-oriented tasks	Compliance with the level of competence
1 level	Practical conditions designed to solve one theoretical fact.	Playback level
2 level	To solve a set of several scientific ideas, it is necessary to solve knowledge from different sciences, using individual observations in a practical situation.	Communication level
3 level	When looking for several ways to solve the same problem, it is necessary to consider solutions using the research method.	Reflection level

In the process of identifying causal relationships, practice-oriented tasks can be employed to achieve various learning objectives at different stages of the lesson. One of the key purposes is to enhance student motivation. At the initial stage of implementing a practice-oriented learning framework, it is advisable to introduce first- and second-level tasks, progressing to third-level tasks - the most complex - only at the final stage. This progression aligns with the increasing cognitive challenges presented to students. First-level tasks present minimal difficulty, typically involving concrete objects within a contextual narrative. Solving such tasks generally requires the application of a single theoretical concept to a practical situation. Second-level tasks serve as a bridge between the simpler first-level and more complex third-level tasks. They necessitate integrating several scientific concepts, drawing on interdisciplinary knowledge, and incorporating personal observations. Third-level tasks are the most challenging, involving the identification of specific objects and the relationships between them. These tasks demand a research-oriented approach, including situation modeling, exploration of new material, and the consideration of multiple solution strategies.

The tasks of the first two levels of difficulty typically do not pose significant challenges for students, serving as preparatory exercises for more complex third-level problems. A key feature of third-level tasks is not only the unconventional construction of the situational model but also the uncertainty involved in selecting appropriate methods for their resolution. This characteristic makes third-level tasks more closely aligned with practice-oriented tasks encountered in real-world conditions. The complexity level of practice-oriented tasks should be determined based on two criteria: the novelty of the objects presented to the students and the relationship within the substantive model of the problem; and the difficulty in choosing appropriate methods for solving the task.

The selection of these criteria is grounded in the understanding that students possess a certain base of acquired knowledge and life experience, which aligns with their age and the content of the school curriculum. For instance, solving tasks related to lightning (tasks 1–9) would not present significant challenges for

high school students, as they have already accumulated the necessary subject-specific knowledge and relevant life experience. Therefore, such a task would be classified as low in complexity for them. Consequently, the complexity level of a practice-oriented task is not a fixed characteristic. For example, the same task assigned in both 5th and 6th grade may be evaluated at different levels of difficulty. This variation could be attributed to changes in the assessment of the first criterion during the learning process (the degree of novelty for students and the relationships within the content model). Determining the complexity levels of tasks helps identify core objectives whose solutions are mandatory for all students within a particular age group.

In turn, in a practice-oriented task, the following components can be distinguished that make up its structure:

- substantive: this component includes the content of the educational material, basic natural science concepts based on the solution of the proposed problem, stages of scientific modeling;

- active: this component is characterized by experience-oriented skills that are planned to be formed in students during the work on the proposed task;

- task: this component describes the system of classification of practice-oriented tasks and their levels of complexity;

- procedural: it is the latter that, by description, but not by essence, the proposed component defines the time periods for the implementation of practice-oriented tasks.

The solution of the problem consists of a proposal for execution, discussion, obtaining the final result, compiling the source materials and determining the goal necessary to solve the problem.

The form of setting any task, including a practice-oriented task, is understood as the specific formulation of the task condition, which characterizes all the input and output information necessary for solving it. Outgoing information on the task is considered data that students present as the result of work on solving the proposed task.

Politsinsky & Demenkova (2015) stated that «when presenting a practice-oriented task for solving, it should be borne in mind that it must be attractive for students of a particular class who have their own characteristics in terms of interests, life experience, and so on».

Thus, the typology of the above tasks, as well as the requirements for the form of setting a practical-oriented task and its content, make it possible to formulate the following methodological features of teaching the solution of practical-oriented problems in Natural Science:

- offering students a practice-oriented task, it is necessary to take into account their interests in everyday life and rely on their life experience;

- special attention should be paid to the formulation of the task, which should be attractive in form and content for specific students, only then it will be possible to ensure the conditions for the full inclusion of students in the work on the task, which should be perceived as the goal of educational activity at a certain time;

- when working on solving a problem, it is necessary to devote significant time to the modeling phase, i.e.presentation of the situation described in the report in the form of a situation model, which will be the final stage in solving.

Our experiment was conducted in the municipal state institution «Secondary School named after D. Kunaev» of the Department of education of the Glubokovsky District of the Department of education of the East Kazakhstan region. The experiment was held in natural science classes in students of the 6th grade (class 6 A-control group, class 6 B-experimental group, 2022-2023 academic year). At the first stage of the experiment, we conducted input diagnostics, the purpose of which was to study the level of motivation in order to track the activity of students in the learning process using the methods of Lukyanova & Kalinina (Smirnaya et al., 2022). The determination of the level of complexity of practice-oriented tasks was carried out according to two criteria:

- for the 1st students, it was necessary to clearly define the relationship between the novelty of objects and the content model of the problem;

- 2nd the difficulty of drawing conclusions and choosing methods for solving.

The results of the input diagnostics are shown below (Figure 1).

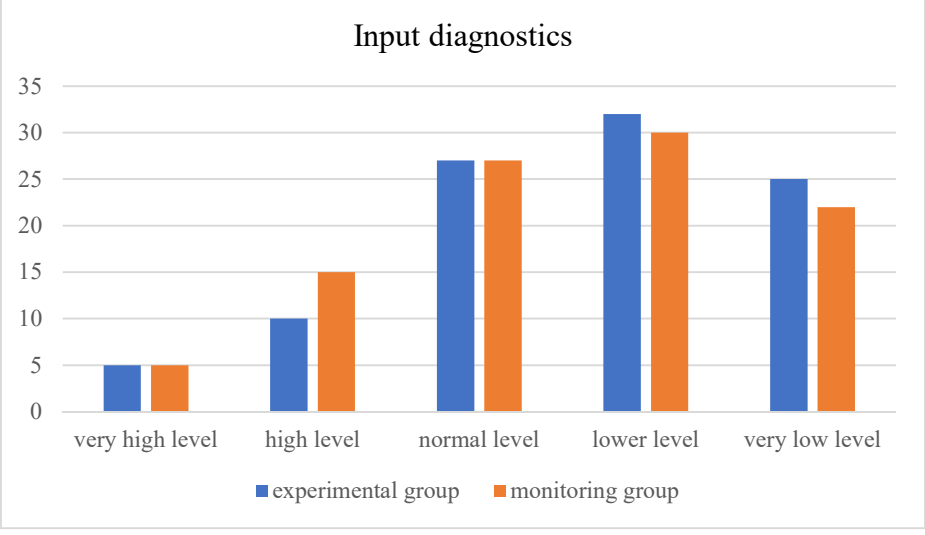

Figure 1: The results of the input diagnostics

From the results obtained during the analysis, we made the following conclusions:

During the formative experiment, two consecutive lessons were conducted, each lasting 45 minutes. In the experimental group, unlike the control group, the instruction was carried out using practice-oriented tasks specifically designed to enhance student motivation. Upon completion of the series of lessons, we conducted post-instruction diagnostics in both the experimental and control groups in order to draw a comparative conclusion regarding the effectiveness of the applied methodology.

The results of the output diagnostics are shown below (Figure 2).

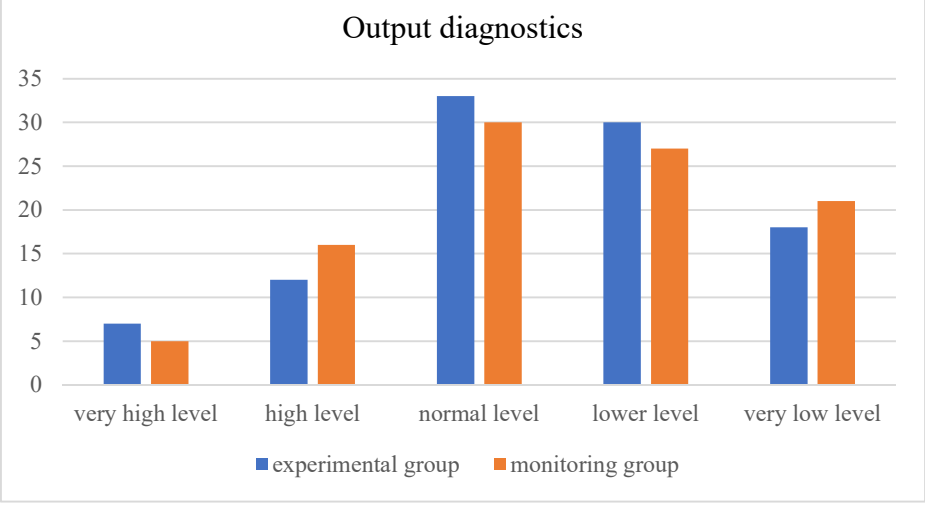

Figure 2: Results of output diagnostics

For the purpose of comparing the above diagrams, we compared the results of output diagnostics with the results of input diagnostics of the experimental and control group and showed below (Figure 3, 4).

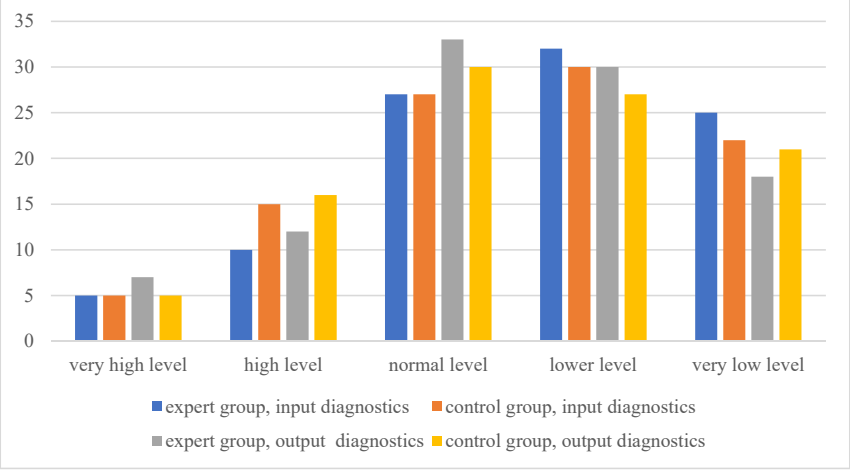

Figure 3: Comparison of input and output diagnostics results

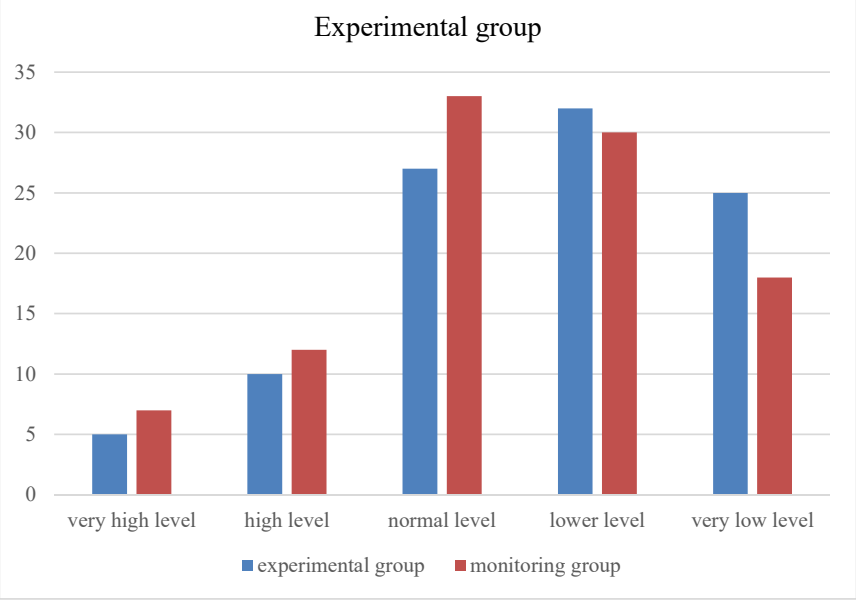

Figure 4: Comparison of the results of input and output diagnostics in the experimental group

Discussion. The data obtained from the control group did not demonstrate any significant changes. However, following the implementation of a series of lessons using practice-oriented tasks aimed at increasing student motivation in the experimental group, notable improvements were observed: the number of students exhibiting very high, high, and average levels of motivation increased, while the number of students with low and very low motivation levels decreased. These results indicate the positive impact of practice-oriented learning on student motivation.

In line with the humanistic approach to education, practice-oriented learning serves to overcome the gap between scientific knowledge and everyday human experience. It highlights the relevance of acquired knowledge to real-life situations and addresses issues encountered in daily living. While maintaining a consistent and logical presentation of scientific foundations at all stages of instruction, each topic also includes content that illustrates its practical significance and the role of natural laws in daily life. Practice-oriented learning differs fundamentally from traditional subject-centered education-not only in its goals and objectives but also in the organization of the learning process. A key distinction lies in the emphasis: subject-oriented systems prioritize the transmission of knowledge, often at the expense of developing students' practical skills.

In contrast, practice-oriented learning fosters the ability to apply knowledge in real-world contexts, thereby enhancing the overall quality and relevance of education.

Conclusion. Summing up the results of our work, we formulated the main goal as follows: to explore the system of implementing practice-oriented tasks to enhance students' motivation for learning. The ability to identify and analyze causal relationships is an essential quality for individuals seeking to understand the world around them. This cognitive activity not only stimulates students' intellectual engagement but also enhances the teaching process from a pedagogical perspective. To achieve this goal, we conducted a theoretical analysis of pedagogical literature, which enabled us to define methodological requirements for the design of practice-oriented tasks. Based on these findings, we developed a set of tasks that will be integrated into future Natural Science lessons to promote student motivation. At the second stage of the study, drawing on existing developments in pedagogical science, we carried out diagnostics to assess the level of motivation among 6th-grade students at our school. Entry-level monitoring, conducted using the methodology of M.I. Lukyanova and N.V. Kalinina, revealed that more than half of the students demonstrated low or very low levels of motivation. In light of these findings, we hypothesized that structuring Natural Science lessons around the solution of practice-oriented tasks would contribute to an increase in students' motivation. This hypothesis was confirmed in the course of the pedagogical experiment, thereby validating the effectiveness of the proposed approach.

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Innovative Model of Formation of Reading Interest in Primary School Students

Abstract

Introduction. The study presents theoretical substantiation of an innovative model for developing reading interest among primary school students in the context of digitalization of social life, addressing the absence of a systematic scientifically-based approach to developing reading interest in younger schoolchildren in pedagogical practice. *Methodology and Methods.* The methodological foundation consists of activity-based, personality-oriented, and systemic approaches, whose integration ensures comprehensive impact on the formation of reading interest as a multi-component personal formation. The research methodology includes theoretical analysis and modeling of the educational process. *Results.* A comprehensive model was developed comprising four interconnected components: target-oriented (aimed at developing stable emotionally-positive attitude toward reading), content-based (including motivational-value, cognitive, and activity-reflective blocks), technological (defining forms, technologies, methods, and means), and result-evaluation (containing criteria and levels of formation). Four stages of reading interest formation were identified: preparatory, introductory, developmental, and creative-independent. Pedagogical conditions for effective development were substantiated: creating favorable reading environment, developing systematic reading activities, fostering active reading position, and applying diverse pedagogical technologies. *Scientific novelty.* The research systematizes scientific approaches to reading interest formation and creates a comprehensive model that accounts for psychological and pedagogical characteristics of primary school age in the digital era. *Practical significance.* The proposed model can be implemented in primary school educational processes to enhance the effectiveness of developing students' reading interest and improve pedagogical practice in the context of modern digitalization challenges.

Keywords: reading interest, reading literacy, formation model, primary school students.

Introduction. In the context of rapid digitalization of social life (Kyzym, 2021), where visual images, interactivity and instant access to information dominate, changes in reading habits and preferences of the younger generation are observed. Data from the international PISA (Programme for International Student Assessment) study over recent decades demonstrate a persistent negative trend in reading literacy, with declining motivation for reading among students (Koyuncu, 2020).

The current generation of schoolchildren ("digital natives" or "Generation Z") has been immersed from early childhood in an environment of short informational messages, dominated by social networks with concise posts, minute-long videos, gaming applications with rapid visual image changes and interactive platforms, forming in children a habit of fragmentary content consumption, where attention quickly switches from one object to another, and the need for deep immersion in text gradually atrophies. Neuropsychological research shows that constant interaction with digital devices leads to changes in brain structure - connections that ensure sustained concentration and deep analysis of textual information related to information processing become weakened (Bhalla, 2021).

Particularly concerning is the fact that the decline in reading activity occurs precisely during primary school age, which is a critical period for forming the foundations of reading culture and cognitive strategies. Children aged 6-10, while actively developing reading skills, are simultaneously subjected to the

powerful influence of the digital environment, which offers alternative, more attractive ways of obtaining information and entertainment from the perspective of immediate emotional impact. The result is the formation of so-called "clip thinking," characterized by fragmented perception, inability to sustain prolonged concentration on one object, and preference for visual information over textual (Bkhat, 2018).

The negative consequences of this trend manifest in a significant decline in modern schoolchildren's ability for deep reading, which presupposes not only understanding the explicit meaning of text, but also the capacity for interpretation, subtext analysis, establishing cause-and-effect relationships and critical evaluation of what is read. Research shows that children predominantly oriented toward digital information formats experience considerable difficulties when working with lengthy texts requiring sustained concentration and analytical work. Their capacity for empathy and emotional connection with literary characters diminishes, since brief digital formats do not provide sufficient time and space for deep emotional immersion in the artistic world of a work (Korytova, 2024).

Primary school represents a critical period for forming reading competencies, since it is precisely at ages 6-10 that the foundations of reading literacy are laid and attitudes toward books as sources of knowledge and emotional experience are formed. The absence of stable reading interest at this age creates serious obstacles to students' further academic success, since reading is a basic skill for mastering all academic subjects. Contemporary requirements of the State Educational Standard for primary education emphasize the necessity of developing in younger schoolchildren not only technical reading skills, but also sustained motivation for reading activity, the ability to understand and interpret what is read, and to use reading for solving educational and life tasks (Ministry of Education and Science of the Republic of Kazakhstan, 2018).

The problem is exacerbated by the fact that traditional methods of introducing children to reading, based predominantly on coercion and formal control, do not meet the needs of the current generation of students who have grown up in conditions of interactive media environment. Pedagogical practice shows that existing approaches to forming reading interest often have an episodic character and do not provide systematic impact on the child's motivational sphere. At the same time, psychological-pedagogical research indicates that primary school age possesses special receptivity to the formation of reading habits and represents an optimal period for developing intrinsic motivation for reading (Yeo, 2014).

Materials and Methods. Reading interest represents a complex psychological-pedagogical phenomenon characterized by a positive emotional attitude toward the reading process, intrinsic motivation for perceiving textual information, and a stable need for reading activity (Aminah, 2025). The structure of reading interest includes cognitive, emotional, and behavioral components, where the cognitive component encompasses knowledge about literature and understanding of reading's value, the emotional component reflects experiences and feelings associated with the reading process, and the behavioral component manifests in active book-seeking and regular reading practice.

Many outstanding researchers have addressed the problem of reading interest formation at the international level. John T. Guthrie from the University of Maryland and Allan Wigfield are leading specialists in the field of reading motivation research. Their collaborative work laid the foundations for modern understanding of reading motivation as a multidimensional construct including interest, perceived control, collaboration, engagement, and self-efficacy. Guthrie developed the engaged reading model, which defines reading as a motivated, strategic, knowledge-based, and socially interactive activity (Guthrie, 1997).

Linda B. Gambrell from Clemson University, former president of the International Reading Association, made significant contributions to studying reading motivation and reading comprehension strategies (Gambrell, 1996). Edward Deci and Richard Ryan created self-

determination theory, which distinguishes between intrinsic and extrinsic motivation for reading (Deci, 2000).

Research has shown that reading motivation is multidimensional and includes at least nine components: curiosity or interest, challenge preference, involvement, self-efficacy, competitiveness, recognition, grades, social interaction, and work avoidance. Lori Baker and other researchers discovered gender differences in reading motivation, showing that girls demonstrate higher reading motivation than boys (Baker, 1999).

Contemporary research conducted within the PISA program reveals factors influencing reading motivation among students from different countries. Wang, J. H., & Guthrie, J. T. and colleagues emphasize that, although most researchers agree that motivation affects student achievement, reading development models typically do not account for motivation or other socio-emotional processes (Baumrind, 1989; Wang, 2004). Kathy Conradi conducted a conceptual review of motivation terminology in reading research, identifying problems in defining and studying motivational constructs (Conradi, 2014).

The formation of reading interest is a global challenge for contemporary education, requiring the development of a model for forming reading interest among primary school students. The necessity of designing a model for forming reading interest among primary school students is conditioned by the absence of a systematic scientifically-based approach to solving the problem of declining reading interest in contemporary pedagogical practice. Existing methodologies for working with children's books are predominantly fragmentary in nature and do not account for the complex nature of reading interest as a multi-component personal formation that includes cognitive, emotional, motivational, and behavioral aspects. The absence of a comprehensive model leads to pedagogical interventions often proving ineffective, since they do not address all structural components of reading interest and do not ensure their coordinated development.

Model design allows overcoming randomness and chance in organizing work on forming reading interest, ensuring scientific validity and systematic nature of pedagogical interventions. The model as a theoretical construct provides the opportunity to identify and structure the main components of reading interest, establish connections between them, and determine mechanisms of their functioning in primary school conditions, where the foundations of reading culture are laid and basic attitudes toward books are formed.

Contemporary pedagogical reality is characterized by heterogeneity of approaches to forming reading interest (Burgess, 2002; Bus, 1995), creating the problem of choosing the most effective methods and techniques for specific educational environment conditions. The model performs an integrating function, allowing the unification of various pedagogical technologies, methods, and means into a single system, ensuring their complementarity and synergistic effect. It serves as a kind of matrix for designing specific pedagogical strategies adapted to the characteristics of a particular educational environment, student population, and available resources.

The necessity of the model is also conditioned by the need for a tool for diagnosing and monitoring the process of reading interest formation, since without a clear understanding of this phenomenon's structure, it is impossible to adequately evaluate the effectiveness of pedagogical interventions and timely correct the educational process. The model defines criteria and indicators of reading interest formation at various stages of its development, enabling a differentiated approach to each child and ensuring individualization of the educational process.

Model design meets the requirements of the contemporary educational paradigm oriented toward the systemic-activity approach and formation of universal learning actions, since reading interest functions not only as an independent pedagogical goal, but also as the most important means of developing cognitive, communicative, regulatory, and personal competencies of primary school students. The model ensures understanding of how reading

interest formation is connected to solving broader educational tasks and contributes to achieving planned results in mastering the basic educational program of primary general education.

The practical necessity of the model is determined by teachers' need for a concrete tool for planning and organizing work on reading interest formation that would account for the psychological-age characteristics of primary school students, the specificity of the contemporary information environment, and educational standards requirements.

Purpose of the study: theoretical substantiation of a model for forming reading interest among primary school students.

Results. The methodology for model design was based on theoretical-methodological analysis of the problem of reading interest formation among primary school students to answer the *research question*: What is the structure and content of the model for forming reading interest among primary school students? In the process of model construction, scientific literature analysis was conducted, which allowed identification of basic constants of reading interest formation that determined the optimal model structure. Based on theoretical analysis, the following components were substantiated to ensure model integrity and functionality: target-oriented, content-based, technological, and result-evaluation. Activity-based, personality-oriented, and systemic approaches were used as methodological approaches, whose integration creates a theoretical-methodological foundation for effective reading interest formation among primary school students (Figure 1).

The target-oriented component of the model for forming reading interest among primary school students is aimed at developing a stable personal formation characterized by an emotionally-positive attitude toward reading, cognitive need for literary information, and readiness for independent reading activity, focusing on the formation of an integrative quality of the primary school student's personality that includes the motivational sphere (internal impulse to read), cognitive component (knowledge about literature and understanding of what is read), emotional-value aspect (experiencing and comprehending literary works), and activity readiness (capacity for active reading behavior).

The target orientation of the component is conditioned by the necessity of overcoming the contradiction between the objective significance of reading for a child's intellectual and personal development and the declining level of reading activity among contemporary primary school students. Reading interest formation is viewed as the foundation for subsequent development of reading competency and general personal culture, determining the strategic importance of this pedagogical process in the primary education system.

The methodological foundation of the model consists of activity-based, personality-oriented, and systemic approaches, whose selection is conditioned by the specificity of the reading interest formation process in children of primary school age.

The activity-based approach is defined as leading due to the fact that reading interest is formed exclusively in the process of a child's active reading activity, ensuring the student's subject position in the process of interaction with a literary work, and contributing to the development of intrinsic motivation for reading through practical mastery of various types of reading activity. Psychological research confirms that interest as a personal formation can be developed only under the condition of subject inclusion in corresponding activity, which makes this approach methodologically justified for solving the stated tasks (Dekker, 2006).

The personality-oriented approach is conditioned by the necessity of accounting for individual characteristics of primary school students' reading development, differences in their cognitive needs, emotional receptivity, and pace of reading skill formation, allowing for the creation of conditions for developing reading interest in each child according to their individual characteristics and ensuring personalization of pedagogical impact, which increases the effectiveness of forming the studied personality quality.

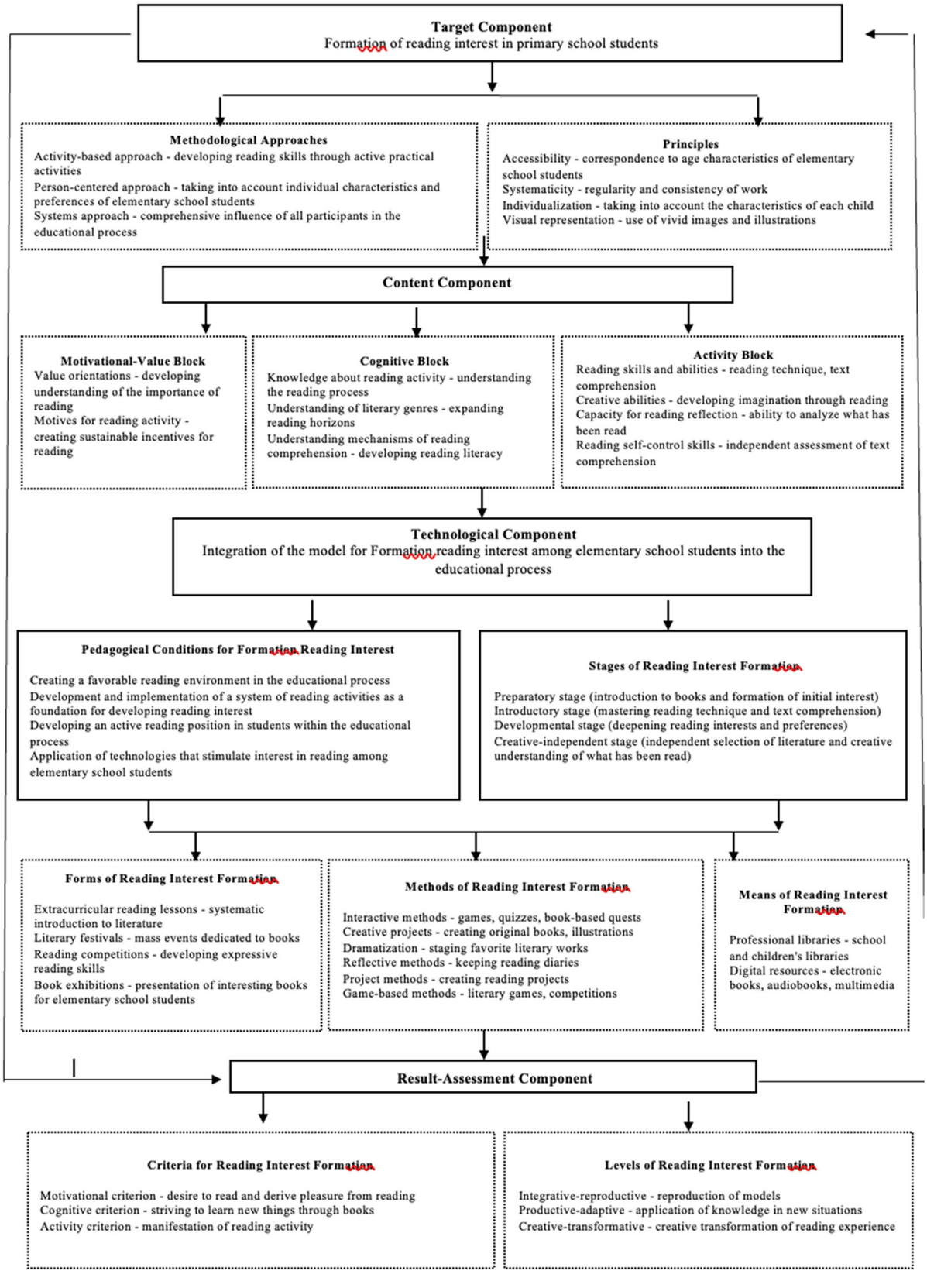

Figure 1: Innovative model of formation of reading interest in primary school students

The systemic approach is defined as a methodological foundation due to the fact that reading interest represents a complex personal formation whose development requires coordinated impact on all components of the child's personality. Systematicity

ensures integrity of the pedagogical process, coordination of various forms and methods of work, as well as continuity in developing reading qualities at different stages of primary school education, allowing consideration of the reading interest formation process as an interconnected totality of structural components functioning in unity and ensuring achievement of the stated goal.

Implementation of methodological approaches in the process of forming reading interest among primary school students is carried out through a *system of principles* that concretize theoretical positions and ensure their practical implementation in the pedagogical process.

The principle of accessibility is defined as the leading principle in the research due to the psychophysiological characteristics of primary school children, characterized by concrete-visual thinking, limited attention span, and insufficiently developed voluntary control of mental processes. This principle ensures the correspondence of content, forms, and methods of work on developing reading interest to students' age-related capabilities, which is a necessary condition for the emergence of a positive emotional attitude toward reading. Violation of this principle leads to the formation of negative experience in interaction with books, which hinders the development of reading interest and may cause persistent aversion to reading.

The principle of systematicity is determined by the specificity of reading interest as a stable personal formation, the development of which requires prolonged and consistent pedagogical influence. Episodic activities aimed at introducing children to reading cannot ensure the formation of stable interest, as they do not create the necessary conditions for consolidating positive experience in reading activities. Systematicity implies regular contact between the child and books, gradual complication of reading tasks, and ensuring continuity between different stages of work, which contributes to the progressive development of the studied personality trait.

The principle of individualization serves as the leading principle due to significant differences in the pace and characteristics of reading development among primary school students, conditioned by individual features of the cognitive sphere, emotional receptivity, and sociocultural experience of children. Ignoring individual differences leads to a formal approach to developing reading interest, where pedagogical influence proves ineffective for a significant portion of students. This principle ensures the creation of optimal conditions for each child, taking into account their reading preferences and capabilities, which increases the likelihood of forming stable interest in reading.

The principle of visual representation is defined as fundamental in working with primary school students due to the predominance of visual-figurative thinking over abstract-logical thinking. The perception of literary works by children of this age is largely mediated by visual images, which necessitates the use of illustrative materials, demonstration tools, and other forms of visual aids. This contributes to activating emotional perception of literary works, facilitates understanding of text content, and creates favorable conditions for the emergence of reading interest. The absence of visual support complicates the perception of literary works by primary school students and reduces the effectiveness of pedagogical influence on the formation of the studied personality trait.

The implementation of the model for developing reading interest among primary school students should be carried out specifically within the *educational process of primary school* due to a combination of psychological-pedagogical, social, and organizational factors that determine the optimality of this educational environment for solving the set tasks.

Primary school age is characterized by sensitivity to the formation of learning activities and cognitive interests. Children aged 6-10 are in the most favorable period for laying the foundations of reading culture, as this age witnesses intensive development of voluntary attention, verbal-logical thinking, and the ability for self-regulation of activities. The educational process of primary school provides systematic and purposeful pedagogical influence on the

formation of reading skills and abilities, creates conditions for the transition from involuntary to voluntary attention when working with texts, which is a necessary condition for developing stable reading interest (Dunst, 2011).

The content of primary education has a specific feature - reading instruction serves as the foundation for mastering all academic subjects and forming universal learning actions. The integrative nature of the educational process in primary school allows for the formation of reading interest not only in literature classes but also within other subject areas, which ensures comprehensiveness and systematicity of pedagogical influence. Interdisciplinary connections create multiple opportunities for practical application of reading skills and demonstration of the significance of reading for cognitive activities, which contributes to strengthening the motivational foundation of reading interest.

Primary school represents the first stage of organized educational process, where the foundations of a child's social experience are laid and basic cultural competencies are formed. The educational process at this level of education is characterized by a high degree of pedagogical control and support, which creates favorable conditions for overcoming difficulties in mastering reading and preventing the formation of negative attitudes toward this type of activity. Collective forms of organizing learning activities in primary school contribute to creating a reading community where reading experience is exchanged and a culture of reading communication is formed.

The educational process of primary school is characterized by a high degree of structure, systematicity, and consistency of pedagogical influences. Curricular and extracurricular activities in primary school represent an interconnected system that provides the possibility of implementing various forms and methods of work on developing reading interest. The regulated nature of the educational process creates conditions for systematic and planned pedagogical influence, which is a necessary condition for forming stable personality traits (Guthrie, 2001).

Primary school teachers possess specialized training in developmental psychology, reading instruction methodology, and organization of the educational process with children of this age. The professional competence of primary school educators in children's literature, knowledge of age-related characteristics of artistic work perception, and mastery of appropriate methodological techniques ensure the effectiveness of implementing the reading interest formation model within the educational process.

Thus, the educational process of primary school represents an optimal educational environment for implementing the reading interest formation model, as it provides the necessary psychological-pedagogical conditions, substantive foundation, organizational opportunities, and professional support for this process.

The *content component of the model* for developing reading interest among primary school students represents a structured system of interconnected blocks that determine the subject content of the pedagogical process and characterize the internal structure of the personality trait being formed.

The *motivational-value block* forms the foundation of the content component, as it is directed toward forming the emotional-need sphere of the primary school student's personality in the area of reading activities. Reading needs are considered as internal impulses toward reading that arise based on awareness of knowledge deficiency or emotional experiences that can be satisfied through interaction with literary works (Georgiou, 2021; Hood, 2008). The formation of this component involves creating conditions for the emergence of internal motivation for reading, based on cognitive interest and emotional attractiveness of the artistic text perception process. Value orientations in the structure of reading interest represent a system of stable ideas about the significance of reading for personal development, understanding the surrounding world, and cultural enrichment. The development of value orientations involves forming primary school students' understanding of reading not only as a learning activity but also

as a way of spiritual development, a source of aesthetic experiences, and a means of expanding life experience.

Reading activity motives function as specific impulses toward reading that determine the direction and stability of reading behavior. In primary school age, the dominant motives are cognitive (desire to learn something new), emotional (striving for experience), and social (need for communication about what has been read) motives, which through purposeful pedagogical influence should acquire a stable character (Li, 2025).

The cognitive block of the content component ensures the formation of a system of knowledge and concepts necessary for carrying out reading activities and developing reading interest. Knowledge about reading activities includes understanding the specificity of the reading process as active interaction between reader and text, awareness of various strategies for working with literary works, and ideas about the role of reading in human cognitive and personal activities.

Concepts about literary genres form the foundation of primary school students' reading horizon, providing orientation in the diversity of literary works and the ability to make conscious choices of literature for reading. This involves familiarization with the main genre characteristics of fairy tales, stories, poems, fables, and other forms of literary works accessible to children of this age.

Understanding the mechanisms of reading perception is connected with forming ideas about the processes that occur during reading, including text decoding, building semantic connections, emotional experience, and interpretation of what has been read. This contributes to increasing awareness of reading activities and forming reading literacy.

The *activity-reflective block* determines the practical component of the content element, characterizing the set of skills, abilities, and capabilities necessary for realizing reading interest in concrete activities. Reading skills and abilities include the technical side of reading (speed, accuracy, expressiveness) and the semantic side (content comprehension, identifying main ideas, establishing cause-and-effect relationships), which together ensure the success of reading activities and create the foundation for developing stable interest in reading.

Creative abilities in the context of reading activities involve developing imagination, the ability to interpret artistic works, skills in creating original texts based on what has been read, and the capacity for creative self-expression based on literary impressions. The ability for reading reflection represents the skill to analyze one's own reading activities, evaluate the quality of comprehension of what has been read, recognize one's reading preferences and needs, ensuring self-regulation of reading activities and contributing to its improvement. Reading self-control skills include the ability to independently assess text comprehension, the skill to identify and correct errors in the reading process, and control the correspondence between reading pace and text perception tasks, ensuring autonomy of reading activities and creating prerequisites for independent development of reading interest (Supriyadin, 2025).

The technological component of the reading interest formation model for primary school students represents the instrumental-procedural constituent of the pedagogical system, defining specific methods, means, and technologies for implementing set goals and objectives in educational process practice.

Forms of developing reading interest constitute the organizational foundation of the technological component, ensuring the structuring of pedagogical interaction in the process of forming reading interest. Extracurricular reading lessons involve regular introduction of primary school students to children's literature works that go beyond the mandatory curriculum, ensuring expansion of students' reading horizons, formation of ideas about the genre diversity of literature, and creation of conditions for expressing reading preferences.

Literary festivals represent a mass form of organizing reading activities, characterized by emotional richness, spectacle, and collective participation, contributing to the formation

of positive emotional attitudes toward reading, creation of a reading community, and demonstration of the social significance of reading activities. Reading competitions are aimed at developing expressive reading as an important component of reading culture, contributing to deeper understanding of artistic works and formation of public speaking skills. Participation in reading competitions stimulates thorough work with texts, develops artistic abilities, and increases motivation to study poetic works. Book exhibitions are particularly effective when working with primary school students due to the predominance of visual-figurative thinking at this age, serving an informational-promotional function in the process of forming reading interest, providing visual presentation of literary works and creating conditions for conscious selection of books for independent reading (Yusnaeni, 2024).

Methods of developing reading interest determine the ways of pedagogical influence on the student's personality in the process of forming reading interest. Interactive methods are based on active interaction among participants in the educational process and involve the use of game-based activities that correspond to the age characteristics of primary school students. Literary games, quizzes, and book-based quests ensure activation of cognitive activities, create success situations, and contribute to reinforcing positive emotions associated with reading. Creative projects represent a method of organizing independent student activities aimed at creating products of creative activity based on read works. Creating original books, illustrations, and alternative endings to works contributes to deepening understanding of literary texts, developing creative thinking, and forming a subject position in reading activities. Dramatization as a method of forming reading interest involves staging literary works, ensuring the translation of verbal images into visual-motor representations, corresponding to their need for play activities and contributing to deeper emotional experience of work content (Silinskas, 2025).

Means of developing reading interest represent the material-technical base for implementing the technological component of the model. Professional libraries, including school and children's libraries, ensure accessibility of quality children's literature, create conditions for free book selection, and form a culture of working with library resources. The library environment contributes to creating a special atmosphere conducive to reading and communication about what has been read. Digital resources, including electronic books, audiobooks, and multimedia materials, expand opportunities for organizing reading activities and correspond to the information needs of modern children, allowing diversification of forms of working with text, ensuring individualization of the reading process, and creating additional motivation for reading activities.

Technologies for developing reading interest define systematic ways of organizing the pedagogical process that ensure achievement of set goals. Reflective technologies, based on keeping reading diaries, contribute to developing the ability to analyze one's own reading activities, forming self-control skills, and increasing awareness of the reading process. Project technologies involve organizing independent research activities of students in the field of literature, which contributes to developing cognitive activity, forming information processing skills, and creating conditions for in-depth study of works of interest. Game technologies, including literary games and competitions, ensure creation of an emotionally positive atmosphere in the process of working with literary works, contribute to removing psychological barriers, and forming stable positive associations with reading activities.

Pedagogical conditions for developing reading interest in primary school students represent a combination of external and internal factors of the pedagogical process that ensure effectiveness in achieving the set goal and create an optimal environment for developing the studied personality trait.

Creating a favorable reading environment in the educational process serves as a basic condition that determines the general atmosphere

and context for developing reading interest, involving organization of educational space that contributes to the emergence and maintenance of positive emotional attitudes toward reading. A favorable reading environment is characterized by accessibility of quality children's literature, availability of comfortable reading conditions, creation of aesthetically attractive design of library and classroom spaces, ensuring quiet and psychological comfort during reading activities, requiring coordinated actions of all participants in the educational process to create an atmosphere in which reading is perceived as a valuable and significant activity.

Development and implementation of a system of reading activities as the foundation for forming reading interest ensures structure and purposefulness of pedagogical influence. This condition involves creating a comprehensive program of activities that includes various forms of working with books and is aimed at gradual development of all components of reading interest. The system of reading activities should be characterized by continuity between different forms of work, consideration of students' age characteristics, diversity of applied methods and means, and regularity of implementation.

Developing an active reading position of students in the educational process is aimed at forming subjectivity of primary school students in reading activities. An active reading position is characterized by independence in choosing literature for reading, initiative in discussing what has been read, ability for critical reflection on work content, and striving for creative interpretation of artistic texts. This involves providing students with opportunities to demonstrate reading initiative, creating choice situations in reading activities, encouraging independent reading discoveries, and organizing activities that require active interaction with text (Silaban, 2025). Developing an active reading position contributes to forming internal motivation for reading and ensures stability of reading interest.

Application of diverse pedagogical technologies that stimulate interest in reading among primary school students ensures methodological diversity of the pedagogical process and consideration of students' individual characteristics. This involves using gaming technologies that correspond to children's age needs, project methods that contribute to developing independence and creative abilities, information and communication technologies that increase motivation for reading activities, and interactive forms of work that ensure active participation of all students in the process of mastering literary works (Saputri, 2025). The diversity of applied technologies allows creating conditions for successful formation of reading interest in children with various types of perception, temperamental characteristics, and levels of reading development. The effectiveness of implementing this condition is determined by the adequacy of chosen technologies to set tasks, students' age characteristics, and the specificity of the personality trait being formed.

The combination of considered pedagogical conditions ensures creation of a comprehensive system for forming reading interest in primary school students, characterized by complex influence on all components of the studied personality trait, consideration of students' age and individual characteristics, and correspondence to modern requirements for organizing the educational process in primary school.

The stages of developing reading interest in primary school students represent sequential phases of the pedagogical process, characterized by specific tasks, content, and results that ensure progressive development of the studied personality trait from elementary manifestations to stable personal formation.

The preparatory stage is aimed at creating an initial foundation for forming reading interest and is characterized by introducing the child to the book as a cultural phenomenon and source of cognitive and aesthetic information. This stage involves forming elementary ideas about the book, its structure and purpose, and developing a positive emotional attitude toward the process of interacting with printed text. The main tasks of the preparatory stage include overcoming possible fear of the book as an unfamiliar object, forming primary skills in handling books, and creating success situations during first attempts

at independent reading. The result of this stage is the emergence of primary interest in books, manifested in the desire to look at illustrations, listen to adults reading, and attempts to independently reproduce familiar texts. The duration of the preparatory stage corresponds to the adaptation period of first-grade learning and is characterized by intensive pedagogical support of the process of familiarization with book culture.

The familiarization stage is characterized by mastering the technical side of reading and forming basic text comprehension skills. The main task of this stage is ensuring the transition from mechanical reproduction of symbols to meaningful perception of the content of reading material. The familiarization stage involves systematic work on developing reading technique, including correctness, fluency, expressiveness, and awareness, forming elementary skills of working with text, and developing the ability to establish cause-and-effect relationships in work content. An important aspect of this stage is preventing the formation of negative attitudes toward reading due to difficulties in mastering technique, which is achieved through individualizing the learning pace and creating success situations for each child. The result of the familiarization stage is achieving a level of reading technique that ensures understanding of age-appropriate text content and forming readiness for independent work with books.

The developmental stage is aimed at deepening reading interests and forming selective attitudes toward literature, characterized by expanding the range of works read, familiarization with various literary genres, and developing the ability for emotional experience of artistic text content. The main tasks of the developmental stage include forming ideas about the genre diversity of children's literature, developing aesthetic perception of artistic works, and establishing individual reading preferences. At this stage, intensive development of the child's imagination occurs through interaction with artistic images, formation of the ability to empathize with literary characters, and development of skills to express one's attitude toward what has been read. The result of the developmental stage is the formation of stable reading preferences, manifestation of selectivity in literature choice, and the ability for emotional-evaluative perception of artistic works.

The creative-independent stage is characterized by achieving relative autonomy in reading activities and developing the ability for creative comprehension of what has been read, forming skills for independent literature selection in accordance with individual interests and needs, developing the ability for critical analysis of work content, and establishing the need for creative self-expression based on reading impressions. The main tasks of the creative-independent stage include developing reading independence, forming skills for planning and organizing one's own reading activities, and establishing the ability for creative interpretation of artistic works. At this stage, integration of the child's reading experience with other types of activities occurs, along with development of skills to use reading impressions in play, visual, and speech activities. The result of the creative-independent stage is the formation of reading interest as a stable personality trait, manifested in independent turning to books, ability for prolonged concentration on reading activities, and the need for constant expansion of reading experience.

The identified stages are characterized by relative temporal boundaries and the possibility of their partial overlap in individual child development, which necessitates diagnostic support of the reading interest formation process and individualization of pedagogical influence at each stage.

The result-evaluation component of the reading interest formation model for primary school students represents a system of criteria, indicators, and levels that ensure objective assessment of pedagogical process effectiveness and the degree of achieving set goals.

Criteria for the formation of reading interest in primary school students serve as qualitative characteristics that allow judging the presence and degree of development of the studied personality trait. The system of criteria includes internal and external criteria, which

together provide comprehensive evaluation of pedagogical influence effectiveness.

Internal criteria characterize subjective manifestations of reading interest, reflecting the child's internal state and experiences during reading activities. The motivational criterion is determined through manifestation of the desire to read and derive pleasure from the reading process, which is expressed in independent turning to books, striving to continue reading begun works, emotional anticipation of meeting new books. This is fundamental for assessing reading interest formation, as it reflects the presence of internal need for reading activities and characterizes the stability of the motivational foundation of the studied personality trait.

The cognitive criterion manifests in the striving to learn new things through books and is characterized by the child's activity in seeking answers to interesting questions through reading, reflecting the connection between reading interest and the personality's cognitive need. It manifests in asking questions about the content of what has been read, desire to obtain additional information on topics of interest, and striving to expand reading horizons.

The emotional criterion is characterized by the ability to respond emotionally to what has been read and manifests in experiencing the content of literary works, empathizing with literary characters, and emotionally evaluating events and character actions. This testifies to the depth of artistic work perception and serves as an indicator of the child's quality interaction with literary text.

The activity criterion is determined through manifestation of reading activity and is characterized by initiative in literature selection, independence in organizing reading activities, striving to discuss what has been read, and participation in reading events. This reflects behavioral manifestations of reading interest and testifies to the transition of internal impulses into concrete actions.

External criteria represent level characteristics of reading interest formation that allow determining the degree of achieving set pedagogical goals and objectives. The integrative-reproductive level is characterized by reproduction of reading behavior patterns under adult guidance and manifests in performing reading assignments according to instructions, participating in organized reading events, and following suggested recommendations for literature selection. This corresponds to the initial stage of reading interest formation and is characterized by dependence of reading activity on external stimulation.

The productive-adaptive level manifests in applying formed reading skills and interests in new situations and is characterized by the ability to transfer reading experience to various types of activities, independent selection of literature within familiar genres, and initiative participation in reading events. Reading interest acquires relative stability and manifests in various situations of the educational process.

The creative-transformative level is characterized by creative transformation of reading experience and manifests in creating original works based on what has been read, organizing reading events on one's own initiative, critical comprehension of literary work content, and formation of individual reading style. This testifies to the formation of reading interest as a stable personality trait and is characterized by autonomy of reading activities and a creative approach to interaction with literary works.

The system of criteria and levels provides the possibility of diagnosing reading interest formation at various stages of the pedagogical process, allowing for individual support of each child's development and correction of pedagogical influence in accordance with achieved results.

Discussion. The results of analyzing contemporary research confirm the necessity of creating a comprehensive model for developing reading interest among primary school students, based on the trinity of "family-school-community." Li's research (2025) convincingly demonstrates that all three components of this model positively correlate with the development of reading interest in children, which aligns with contemporary theories of collaborative education. The family reading environment has the greatest impact on developing children's

interest in reading, which is confirmed by studies in both Chinese (Li, 2025; Tang et al., 2017) and Singaporean contexts (Yeo et al., 2014), testifying to the universality of this phenomenon regardless of cultural characteristics.

Dekker and colleagues (2006) complement this picture by showing that children's interest in reading is closely connected to the quality of mother-child interaction during shared reading. Active parental participation in reading activities serves as the most powerful predictor of developing both reading skills and stable interest in reading. The school reading environment ranks second in terms of influence on children's reading interest. Lerkkanen's research reveals an important aspect of this influence, demonstrating the interconnection between parental trust in the teacher and the child's academic interests. High parental trust in the educator contributes to developing children's interest in academic subjects, including reading, which indicates the necessity of close collaboration between family and school.

Despite the fact that the community environment has the least influence among the three factors considered, its role should not be underestimated. The community creates a cultural context in which reading practices and values are formed and transmitted from generation to generation. Analysis of research reveals a complex system of direct and indirect influences on the development of reading interest. Tang and colleagues (2017) found that parental beliefs about reading influence children's literacy development both directly and indirectly through home literacy practices and children's interest in reading, indicating the necessity of working not only with behavioral aspects but also with parents' value orientations.

The longitudinal study by Dekker and colleagues (2006) shows that the influence of various factors on the development of reading interest may change with the child's age. Children's interest in reading at an early age (18-42 months) proves to be a predictor of subsequent development of language skills and letter knowledge, which emphasizes the importance of early formation of positive attitudes toward reading. Comparison of research results conducted in various cultural contexts (China, Singapore, Finland) testifies to the existence of both universal patterns of reading interest development and culturally specific features. For example, in the Singaporean study by Yeo and colleagues (2014), it was found that verbal parental participation negatively predicted children's reading competence, reflecting cultural differences in parental interaction styles.

Despite the significant contribution of the reviewed studies to understanding factors in reading interest development, several limitations should be noted. Most research focuses on preschool and early school age, while the dynamics of reading interest in middle and upper elementary grades are insufficiently studied. Deeper investigation of interaction mechanisms between different components of the "family-school-community" model is required. The presented analysis confirms the necessity of an integrative approach to developing reading interest among primary school students. An effective model should consider the dominant role of the family environment, the significance of the school context, and the supporting function of the community. Practical implementation of such a model requires coordinated efforts from all participants in the educational process and consideration of the cultural characteristics of the specific context.

Conclusion. Reading interest serves as a fundamental personality trait that determines the success of cognitive activities and cultural development of a person. In primary school age, the formation of reading interest acquires particular significance, since it is precisely during the period of 6-10 years that the foundations of reading culture are laid, the formation of attitudes toward books as a source of knowledge and emotional experience occurs, and reading becomes a basic tool for mastering all academic subjects. The sensitivity of this age period to the formation of learning activities and cognitive interests creates unique opportunities for developing stable motivation for reading activities. However, the contemporary digital environment has significantly changed the nature of children's information perception, contributing to the formation of fragmented "clip thinking"

and reduced ability for prolonged concentration on textual material. These changes require rethinking traditional approaches to forming reading interest and developing new pedagogical strategies that consider the characteristics of the modern generation of primary school students.

The result of the conducted research was a theoretically grounded model for forming reading interest, representing a comprehensive pedagogical system that integrates target orientations, content components, technological tools, and diagnostic apparatus. The developed model ensures systematic influence on all components of reading interest - motivational-value, cognitive, and activity-reflective - which creates conditions for forming this trait as a stable personal formation. The practical value of the model lies in the possibility of its adaptation to various educational contexts and individual characteristics of students.

The proposed system of pedagogical conditions and staged organization of the reading interest formation process will allow practicing educators to carry out purposeful and effective work on developing reading motivation among primary school students. Prospects for further research are connected with experimental verification of the developed model's effectiveness in various educational institutions, studying the influence of family reading environment on the formation of reading interest in children, developing digital tools to support primary school students' reading activities, and researching possibilities for integrating traditional and digital reading formats in the educational process. An urgent direction is also the preparation of pedagogical personnel for work on forming reading interest in conditions of digital transformation of education.

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Innovative Play-Based Methodologies for Development of Communication Skills of Preschoolers

Abstract

Introduction. The study examines the challenges of fostering communicative competencies among preschool-aged children through play-based pedagogical approaches, addressing the need for systematic approaches to developing communication skills in early childhood education. *Methodology and Methods.* The research employs comprehensive theoretical analysis of fundamental characteristics underlying communicative skills, drawing upon seminal contributions from distinguished scholars including L.S. Vygotsky, A.V. Zaporozhets, M.I. Lisina, T.A. Repina, E.V. Subbotsky, S.G. Yakobson, and other prominent figures in developmental psychology and educational theory. A systematic taxonomy approach was utilized to categorize communicative competencies. *Results.* The investigation provides conceptual clarification of communication skills and presents a systematic taxonomy encompassing three primary dimensions: informational-communicative, regulatory-communicative, and affective-communicative competencies. Contemporary gaming methodologies demonstrating significant potential for advancing communicative skill acquisition were delineated. Evaluative criteria encompassing cognitive, motivational, and behavioral dimensions were established, with three developmental proficiency levels identified: emergent, developing, and advanced. A comprehensive diagnostic protocol for assessing communicative skill development in preschool populations was developed. *Scientific novelty.* The research elucidates scientific and theoretical frameworks underlying communicative skill development in preschool children, conceptualizing play-based activities as efficacious pedagogical instruments that facilitate acquisition of effective interpersonal interaction strategies and enhance comprehensive language development. *Practical significance.* Evidence-based methodological guidelines for educators were formulated to enhance communicative competency levels of young learners, providing practical tools for implementing play-based approaches in preschool educational settings.

Keywords: early childhood, interpersonal communication, communicative practices, communicative competencies, developmental components of communication skills, diagnostic assessment framework, play-based interventions for communicative skill enhancement in preschool populations.

Introduction. Human beings, as inherently social entities, manifest a fundamental need for interpersonal interaction from the earliest stages of development. Communication, characterized as a multidimensional and complex phenomenon, necessitates the acquisition of specialized knowledge and competencies that individuals develop through the assimilation of accumulated social-cultural heritage transmitted across generations. Proficient communicative abilities constitute a critical determinant of successful social adaptation across diverse environmental contexts, thereby underscoring the practical imperative for cultivating these competencies during early developmental phases.

Contemporary recognition of the intrinsic value of the preschool developmental period, conceptualized as a distinctive phase of personality

formation, has established the pedagogical objective of expanding opportunities for individual children to make informed decisions regarding their developmental trajectories. Such trajectories are fundamentally influenced by interpersonal orientation, comprehension of communicative conventions, and engagement in diverse experiential activities (Doove et al., 2021). Initial interpersonal experiences establish the foundational framework upon which subsequent individual development occurs. The trajectory of a child's psychosocial and interpersonal development is significantly influenced by the quality of relationships established within their first formal social group - the kindergarten classroom environment (Lonigan et al., 2020). Research demonstrates that social communication skills uniquely predict self-regulation capabilities beyond vocabulary development (Lonigan et al., 2020).

Communicative competencies assume a paramount role in the development of preschoolers' interpersonal communication domain. These skills enable children not only to articulate thoughts with precision and accurately process information from communication partners, but also to differentiate among various communicative contexts, comprehend others' emotional states within such situations, and modify behavioral responses accordingly (Lonigan et al., 2020). This complexity necessitates the identification of authentic developmental resources for enhancing preschoolers' communicative capabilities.

Examination of psychological and pedagogical scholarship reveals extensive research addressing communication phenomena and communicative skill development. Studies demonstrate that reading aloud and storytelling can enhance children's communication development when staff prioritize literacy in preschool and have knowledge about how to use these activities to support children's communication (Brodin & Renblad, 2019). Contemporary research emphasizes the pivotal role of parental education in addressing the complexities of modern-day parenting, particularly in supporting children's communication development (Sultana & Purdy, 2024). The communicative development of preschool populations has been extensively investigated by researchers who have examined distinctive communication patterns among children with diverse educational requirements and analyzed the complexities of preschool communicative interactions (Timler et al., 2007). Recent adaptations in early years language and communication support, particularly in response to global challenges, have served as catalysts for reflection and more successful parental engagement strategies (Jack et al., 2024).

Contemporary research demonstrates that learning through play has emerged as an important strategy to promote student engagement, inclusion, and holistic skills development beyond the preschool years (Parker et al., 2022). Playful experiences lead to deeper learning when they are joyful, actively engaging, meaningful, iterative, and socially interactive (Parker et al., 2022). Play-based learning is relatively common in preschool settings and has been linked to the development of 21st century learning skills - including collaboration, communication, content, critical thinking, creative innovation, and confidence (Institute of Education Sciences, 2024). Through play-based learning, children engage in imaginative and exploratory activities that encourage them to think creatively, solve problems, and develop communication skills organically (Brightwheel, 2025). Research indicates that play develops multiple essential skills including social skills such as taking turns and working cooperatively, cognitive skills including problem-solving and early academic skills, and communication skills such as responding to others and asking questions (National Association for the Education of Young Children, 2022).

Nevertheless, the investigation of methodological approaches for developing preschoolers' communicative competencies through play-based interventions remains inadequately addressed. While learning through play is associated with high quality early childhood education practice and research, studies of learning through play in school for children beyond age five are limited (Parker et al., 2022). This gap in the literature determined the

selection of the research focus: "Development of Preschool Children's Communication Skills Through Play-Based Activities". The primary objective of this investigation is to establish theoretical foundations and methodological frameworks for enhancing communicative competencies in preschool children through structured play activities. Research demonstrates that playful pedagogies can be more effective in fostering social, emotional, physical, cognitive and creative skills than traditional pedagogical approaches used in the primary school classroom (Parker et al., 2022).

Materials and Methods. This investigation employed a comprehensive methodological approach incorporating both theoretical and empirical research methods. The theoretical framework utilized analytical synthesis, generalization, and conceptual specification, while empirical methodologies encompassed survey administration, standardized assessment protocols, and controlled pedagogical experimentation. To establish the theoretical foundations underlying the development of communicative competencies in preschoolers through play-based interventions, this study delineates the essential constructs of "communication", "communicative interaction", "communicative activity" and "communicative skills", while examining their developmental characteristics during the preschool period.

The construct of "communication" (from Latin "communicatio" - to make common, convey, discourse) emerged in scientific literature during the early twentieth century. Contemporary theoretical frameworks conceptualize communication not merely as information transmission, but as an active bidirectional exchange process that influences participant behavior and transforms relational dynamics between communicative partners (Lomov, 2022). Modern scholarship identifies communication as a fundamental structural component of interpersonal interaction, encompassing three interconnected dimensions: communicative (information exchange), interactive (behavioral coordination), and perceptual (social cognition) aspects (YingHu et al., 2017). Contemporary typologies distinguish multiple communication modalities including interpersonal, cognitive, persuasive, expressive, suggestive, and ritualistic forms, each serving distinct functional purposes in facilitating strategic communicative outcomes (Day, 1977). The conceptualization of "communicative skills" originated within social psychological frameworks, defined as the capacity to establish and maintain effective interpersonal relationships through the mobilization of internal resources encompassing both knowledge and behavioral competencies. Leontiev's theoretical model characterizes communicative skills as encompassing linguistic proficiency, situational adaptability, predictive behavioral modeling, empathetic responsiveness, and individual personality characteristics (Leontiev, 2022).

Developmental trajectories during preschool years demonstrate progressive intensification in communicative activity, characterized by increased selectivity, expanded communicative contexts, evolving adult interaction patterns, and enhanced peer-oriented social engagement. Lisina's developmental framework identifies four sequential communication forms with adults: situational-personal, situational-business, non-situational-cognitive, and non-situational-personal modalities (Lisina, 2009). The emergence of non-situational-personal communication during late preschool years represents the pinnacle of communicative development, characterized by transcendence of immediate contextual constraints and recognition of adults as complex social entities with multifaceted personal histories. This advanced communicative form facilitates children's integration into social relationship networks and promotes acquisition of moral frameworks, behavioral norms, and interactive conventions. Contemporary research identifies four essential components of communicative activity in senior preschoolers: cognitive (understanding human roles, relational dynamics, and communication modalities), motivational-need based (social approval seeking and emotional contact establishment), activity-oriented (empathetic capacity and behavioral appropriateness), and evaluative (self-assessment accuracy and partner perception) (Arbianingsih et al., 2018).

Samokhvalova's tripartite model delineates communicative activity through informational (interaction initiation and maintenance), regulatory (collaborative coordination and conflict resolution), and affective (emotional responsiveness and empathetic engagement) dimensions (Samokhvalova, 2016). Uruntaeva's developmental progression model identifies sequential stages of communicative skill formation: motivational establishment, methodological familiarization, skill automation, and creative application of complex communicative competencies (Uruntaeva, 2001). Play activities assume paramount significance in preschooler communicative development, serving as the predominant mechanism through which children explore and navigate spatial, temporal, and social realities. The transformative function of play enables children to convert abstract or challenging real-world scenarios into manageable, controllable learning experiences while simultaneously facilitating communicative skill acquisition through rule-based interactive frameworks (Malekian et al., 2013).

Play-based interventions promote effective communication strategies, foster collective consciousness, enhance attentional capacities, facilitate precise thought articulation, develop dialogical competencies, and advance linguistic proficiencies. Through play engagement, children acquire emotional expression capabilities, learn behavioral regulation within structured parameters, and develop goal-oriented cognitive processes. Cross-cultural examination of communicative skill development reveals innovative methodological approaches, exemplified by the Japanese Kumon system utilized by over four million children across 48 countries. The Kumon methodology emphasizes graduated skill acquisition through systematic progression, positive reinforcement strategies, engaging play-based learning environments with optimal 20-minute duration sessions, and autonomous skill development protocols that promote independent communicative competency formation. This comprehensive theoretical framework establishes the foundational understanding necessary for implementing evidence-based play interventions designed to enhance communicative competencies in preschool populations.

Results and Discussion. Following comprehensive analysis of psychological and pedagogical literature and theoretical justification of the research problem, this study presents the findings of experimental work conducted at State Municipal Enterprise Kindergarten #20, Department of Education, Almaty. The research sample comprised an experimental group (EG) consisting of 20 children from the "Botocan" group and a control group (CG) of 21 preschoolers from the "Kulyn" group. The experimental design employed a three-phase methodology encompassing baseline assessment, intervention implementation, and post-intervention evaluation stages.

Phase One: Baseline Assessment Protocol

The primary objective of the baseline assessment phase was to establish initial diagnostic measurements of communicative skill development among preschool participants. Diagnostic evaluation utilized a tripartite criteria framework incorporating cognitive, motivational, and behavioral dimensions, grounded in the theoretical contributions of Bodalev, Lozovan, Pronyaeva, Verax, Gutorov, and Sokolov.

Based on established criteria for preschooler communicative competencies, participants were stratified according to three developmental proficiency levels: advanced, developing, and emergent.

Advanced Proficiency Level: Children demonstrate proactive communicative engagement, exhibiting sophisticated listening comprehension and contextually appropriate interaction patterns. These participants readily establish rapport with peers and educators, articulate thoughts with clarity and coherence, and consistently employ appropriate speech etiquette conventions. They demonstrate heightened social awareness through expressions of care, attention, and empathetic responsiveness toward adults and peers. Conflict engagement occurs infrequently, with demonstrated capacity for cooperative problem-solving without emotional dysregulation.

Developing Proficiency Level: Children exhibit adequate listening comprehension and speech understanding capabilities while typically engaging in communication through external initiation rather than self-directed interaction. Speech etiquette utilization demonstrates inconsistent application patterns. Task completion occurs independently but may lack conscious intentionality, often requiring adult prompting. Occasional conflict engagement may occur, with frequent reliance on adult mediation for resolution of interpersonal difficulties.

Emergent Proficiency Level: Children demonstrate limited communicative initiative in interactions with peers and educational personnel, characterized by inattentiveness and minimal utilization of appropriate speech etiquette. Thought expression lacks coherence and sequential organization, with compromised content accuracy in communication attempts. During collaborative activities, these children exhibit distractibility and may interfere with peer engagement. Conflict provocation occurs regularly, with confrontational responses including physical aggression and emotional reactivity in challenging situations. Peer relationships demonstrate predominantly negative characteristics and exhibit selective social preferences.

This comprehensive assessment framework provides the foundational measurement structure necessary for evaluating the efficacy of subsequent play-based communicative skill interventions and documenting developmental progress throughout the experimental investigation.

We used methods for diagnosing the development of preschool children's communication skills (Table 1):

Table 1. *Program for diagnosing the development of preschool children's communication skills*

Criterion	Method of diagnostic
Cognitive	Observation
Motivational	Testing (series of tasks)
Activity	Questionnaire (questionnaire of A. Leontiev)

The study of children's communication skills according to the cognitive criterion was conducted by observing free communication. In the process of observation, attention is drawn to the nature of communication, initiative, ability to enter into a dialogue, maintain and conduct it consistently, listen to the interlocutor, understand him, clearly express thoughts. Criteria for evaluating communication skills: low, medium, high (Makeeva, T., 2008).

The motivational criterion was diagnosed using testing (Samokhvalova, A., 2011), the goal of which is the child's understanding of the state of a peer. The method included 6 tasks (a series of images), for example, task 1, what do you think a boy looks like to a girl? Next to the desired picture, put a cross in a circle. Scoring points:

3 points – the child correctly selected 4 or more images (high level).

2 points – the child correctly chose 2-3 pictures (average level).

1 point – the child correctly chose 1 picture (low level).

Diagnostics of the activity criterion was carried out using a questionnaire (questionnaire of A. Leontiev), consisting of 12 closed questions. For example, question 2:

Child interacting with peers in the classroom:

A) offers its own ways to perform the task, takes into account the opinion of other children.

B) prefers to follow the wishes of other children.

C) does not take into account the opinions and actions of peers.

Answer A-1 point; B-2 points; C-3 points. Points are summed up, with a result of 0-12 points-low level; 13-24 points – average; 25-36 high level of development of communicative skills of a preschool child.

Thus, the ascertaining stage of the study showed the following results (tables 2-4):

In control group:

low level – 5 preschoolers, which is 24%;

average level is 13 preschoolers, which is 62%;

highest level is 3 preschoolers, which is 14%.

In the experimental group:

low level – 7 preschoolers, which is 35%;

average level is 11 preschoolers, which is 55%;

highest level is 2 preschoolers, which is 10%.

Table 2. *Summary data of the ascertaining stage of the study (control group)*

№	Control group	Method of diagnostic			Level of development of communication skills
		Observation	Testing	Questionnaire	
1	K.I.	average	2	13	average
2	S.A.	low	1	10	low
3	A.B.	average	2	15	average
4	N.T.	average	2	20	average
5	V.N.	low	1	7	low
6	A.S.	average	2	18	average
7	A.M.	high	3	27	high
8	A.S.	average	2	20	average
9	I.M.	average	2	14	average
10	I.V.	average	1	8	low
11	G.V.	average	2	21	average
12	K.B.	average	2	18	average
13	I.K.	average	2	13	average
14	D.N.	average	2	15	average
15	N.A.	average	2	19	average
16	A.O.	low	1	8	low
17	M.K.	average	1	9	low
18	D.S.	average	2	13	average
19	G.A.	average	2	24	average
20	N.O.	high	3	32	high
21	T.B.	high	3	27	high

Table 3. *Summary data of the ascertaining stage of the study (experimental group)*

№	Experimental group	Method of diagnostic			Level of development of communication skills
		Observation	Testing	Questionnaire	
1	P.K.	average	2	14	average
2	A.A.	low	1	9	low
3	M.A.	low	1	5	low
4	K.M.	average	2	22	average
5	M.Ch.	average	2	16	average
6	A.F.	average	2	18	average
7	A.A.	average	2	24	average
8	A.A.	average	1	12	low
9	A.K.	low	1	11	low
10	A.A.	average	2	23	average
11	I.S.	average	2	13	average
12	V.F.	average	2	19	average
13	S.S.	low	1	9	low
14	T.B.	high	3	30	high
15	I.N.	average	2	21	average
16	S.O.	average	1	11	low
17	A.K.	high	3	31	high
18	N.P.	average	2	14	average
19	A.A.	average	2	15	average
20	G.N.	low	1	6	low

Table 4. *General summary of both test groups (ascertaining stage of the study)*

№	The subjects of the group	Level of development of communication skills					
		Low	%	Average	%	High	%
1	Control	5	24	13	62	3	14
2	Experimental	7	35	11	55	2	10

Primary diagnostics of the level of development of communication skills of preschool children in both groups is approximately the same, low–average level prevails (35% and 55%). We will perform mathematical processing of the obtained data to check the equivalence of the sample of subjects. Since the diagnostics used a rank scale of measurements: the Mann-Whitney U-test (automated program, accessed 20.02.2020). To do this, we have formulated statistical hypotheses:

H_0 - the level of development of communication skills of the two test groups does not differ.

H_1 - the level of development of communication skills of the two test groups differs.

The result: $U_{emp} = 183$

Critical value:

U_{Kp}	
p≤0.01	p≤0.01
120	146

The obtained empirical value of U_{emp} (183) is in the zone of insignificance. Thus, the hypothesis H_0 was confirmed – the level of development of communication skills of the two test groups does not differ. This confirms the purity of the experiment and allowed us to move to the formative stage of the study, which includes the active use of the game (Malekian, F., 2013) to increase the level of development of communication skills of older preschoolers in the experimental group. Having determined that the problems of developing communication skills in preschool age are expressed in the inability to find an approach to the communication partner, maintain and develop the established contact, coordinate their actions in the process of any activity, respond adequately and Express their sympathy for a particular child, difficulties are noted in the ability to empathize in sadness and enjoy the success of another person-all this leads to various kinds of conflicts and misunderstanding of the interlocutors of each other.

Select the number of games would increase the level of development of communicative skills among them, of course, the leader acts as a role-playing game, providing senior preschoolers the opportunity to establish a role and real relationships that are the basis for the development of their communicative skills, namely the motivational criterion, as well as new game roles (banker, agent, client, makeup artist, designer, etc.) and new game themes "Salon of cellular communication", "Agency", "Bank", "McDonald's", etc. are of interest and contribute to the activity of the child (Martynenko, L, 2016).

To increase the activity criterion, we used theatrical games. Participation in theatrical activities increases speech development (improving dialogues and monologues, mastering the expressiveness of speech), and it is speech that is a means of communication. Joint theater and play activities are a unique type of cooperation. In the older group, all children actively participate in theatrical games and dramatizations. Older preschoolers, along with figurative-game sketches, games-improvisations, staging, become available to independent productions of performances, including on the basis of a "collage" of several literary works. For example, "A journey through Kazakh folk tales", "New adventures of Aldar Kose", etc.

To increase the level of cognitive criteria in the educational process, conversations about the moral qualities of people, about friendship, honesty, and justice play an important role. It is necessary to discuss various cases from their lives, situations,

and actions with children. For example, the conversation "About friendship!"

Points for discussion:

Who do we call friends?

Who's your friend?

Tell me about your friend.

What do you like about your friend?

What are you ready to do for your friend?

What friend do you dream of?

The conversation should always be built after the organization and plot-role and theatrical activities.

Also, in the experimental and control groups, organized training activities for the implementation of the educational field "Communication" (Model curriculum, 2016) continued. The purpose of the control experiment analysis and evaluation conducted a formative experiment to identify the effectiveness of play activities to enhance communicative skills of preschool children, so confirm or refute hypotheses of the study. At the control stage of the study, the same diagnostic program was used as at the ascertaining stage, including diagnostics based on three criteria: cognitive, motivational, and activity (tables 5-7).

Table 5. *Summary data of the control stage of the study (control group)*

№	Control group	Method of diagnostic			Level of development of communication skills
		Observation	Testing	Questionnaire	
1	K.I.	average	2	13	average
2	S.A.	average	2	14	average
3	A.B.	average	2	15	average
4	N.T.	average	2	20	average
5	V.N.	low	1	7	low
6	A.S.	average	2	18	average
7	A.M.	high	3	27	high
8	A.S.	average	2	20	average
9	I.M.	average	2	14	average
10	I.V.	average	1	8	low
11	G.V.	average	2	21	average
12	K.B.	average	2	18	average
13	I.K.	average	2	13	average
14	D.N.	average	2	15	average
15	N.A.	average	2	19	average
16	A.O.	low	1	8	low
17	M.K.	average	1	9	low
18	D.S.	average	2	13	average
19	G.A.	average	2	24	average
20	N.O.	high	3	32	high
21	T.B.	high	3	27	high

Table 6. *Summary data of the control stage of the study (experimental group)*

№	Experimental group	Method of diagnostic			Level of development of communication skills
		Observation	Testing	Questionnaire	
1	P.K.	average	2	17	average
2	A.A.	average	2	19	average
3	M.A.	low	1	11	low
4	K.M.	average	2	29	high
5	M.Ch.	average	2	24	average
6	A.F.	high	2	24	high

7	A.A.	average	2	24	average
8	A.A.	average	2	22	average
9	A.K.	average	2	21	average
10	A.A.	high	2	30	high
11	I.S.	average	2	22	average
12	V.F.	average	2	21	average
13	S.S.	average	2	19	average
14	T.B.	high	3	30	high
15	I.N.	high	2	25	high
16	S.O.	average	2	20	average
17	A.K.	high	3	31	high
18	N.P.	average	2	16	average
19	A.A.	average	2	17	average
20	G.N.	low	2	13	average

Table 7. *General summary of both test groups (control stage of the study)*

№	The subjects of the group	Level of development of communication skills					
		Low	%	Average	%	High	%
1	Control	4	19	14	67	3	14
2	Experimental	1	5	13	65	6	30

Thus, the control stage of the study showed the following results:

In control group:

low level – 4 preschoolers, which is 19%;

average level is 14 preschoolers, which is 67%;

highest level is 3 preschoolers, which is 14%.

In the experimental group:

low level – 1 preschooler, which is 5%;

average level is 13 preschoolers, which is 65%;

highest level is 6 preschoolers, which is 30%.

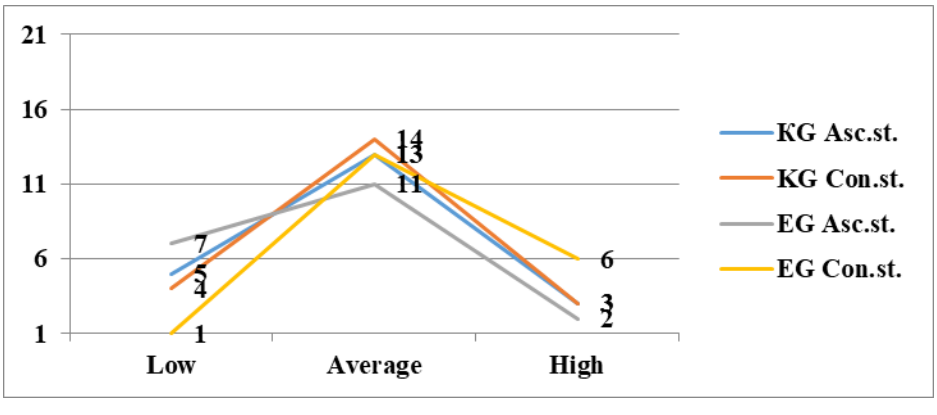

Figure 1: Comparative analysis of data from the ascertaining and control stages of the study

On the face of a significant change in results for the better in the EG: the low level decreased by 30%, the average level increased by 10%, the high level increased by 20%. In the control group, the results remained almost unchanged: the low level was 5%; the average level was 5%; the high level was unchanged (Figure 1).

Conclusion. This investigation addresses the critical challenge of developing communicative competencies among preschool children through systematic play-based pedagogical interventions. The comprehensive analysis of scholarly literature, grounded in the seminal contributions of Vygotsky, Zaporozhets,

Lisina, Repina, Subbotskin, Jacobson, and other distinguished researchers, facilitated the operational definition of "communicative skills" within this study. Communicative skills are conceptualized as the capacity of preschool children to initiate and terminate dialogical interactions effectively, utilizing conversational turn-taking protocols to establish, maintain, and conclude communicative exchanges, while demonstrating proficiency in responsive questioning, active inquiry, and attentive listening behaviors. The research presents a comprehensive taxonomic framework encompassing three distinct categories of communicative competencies: informational-communicative skills (content transmission and reception), regulatory-communicative skills (behavioral coordination and social influence), and affective-communicative skills (emotional expression and empathetic responsiveness).

The study established a multidimensional evaluation system incorporating cognitive, motivational, and behavioral criteria with corresponding indicators and three-tiered proficiency levels (emergent, developing, advanced). Diagnostic assessment employed multiple methodological approaches including systematic behavioral observation, standardized assessment protocols, and structured interview techniques during the baseline evaluation phase. Results from the baseline assessment phase revealed predominantly low-to-moderate levels of communicative skill development among preschool participants. Statistical analysis utilizing the Mann-Whitney U-test confirmed sample equivalence between experimental and control groups prior to intervention implementation, establishing methodological rigor for subsequent comparative analyses. The study identified optimal pedagogical conditions for enhancing communicative skill development through structured implementation of collaborative role-playing activities, theatrical performance experiences, and facilitated conversational exchanges. These interventions incorporated discussions regarding human social roles, interpersonal relationship dynamics, verbal and nonverbal communication modalities, emotional expression, and behavioral norms across diverse situational contexts. Experimental data analysis demonstrated that communicative skill development represents a manageable and systematic educational process. Implementation of evidence-based pedagogical conditions resulted in measurable improvements in communicative competency levels, thereby confirming the research hypotheses and achieving the established investigative objectives.

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Integrating Innovations and Traditions in Teacher Education Through Project-Based Learning

Abstract

Introduction. The study examines project-based learning as a tool for integrating innovations and traditions in teacher training, addressing the need for more effective approaches to preparing future educators who can balance innovative methodologies with traditional pedagogical values and cultural heritage preservation. *Methodology and Methods.* The research employed literary analysis and empirical methods including survey and pedagogical experiment to determine the possibility of using an active model of project-based learning in teacher preparation, using elementary education as an example. A comparative analysis was conducted between experimental and control groups to evaluate the effectiveness of the proposed approach. *Results.* The study revealed that the current level of development of project-based learning in pedagogical universities is low, indicating a need for its enhancement. Seven integration-focused projects were tested in practice: cultural heritage in the classroom, innovative technologies in teaching, environmental education through traditions, grandparents' stories, creative workshop, from traditions to innovations, and virtual tours of historical places. The effectiveness of the model was confirmed through comparative analysis, which demonstrated positive impact on students' knowledge and skills levels in the experimental group. *Scientific novelty.* The research establishes a theoretical framework for integrating innovations and traditions through project-based learning in teacher education, providing a systematic approach to teaching future educators how to incorporate innovative approaches into traditional teaching while maintaining respect for cultural heritage. *Practical significance.* The developed model and tested projects provide practical tools for pedagogical universities to enhance teacher preparation programs, enabling future teachers to effectively integrate innovative methodologies with traditional values in their professional practice and improve the quality of elementary education.

Keywords: project-based learning, innovations, traditions, pedagogical education, pedagogical technologies, students.

Introduction. In the context of modern educational reforms in the Republic of Kazakhstan, the integration of innovative pedagogical technologies with traditional teaching practices has become a critical priority, especially in the field of primary education. This transformation is driven by rapid technological advancement and the resulting shift in societal and educational demands. Therefore, the training of future teachers must focus not only on the preservation of cultural heritage and pedagogical traditions but also on equipping educators with the skills necessary to navigate and implement modern innovations. Project-based learning (PBL) emerges as a pedagogical strategy that effectively bridges this gap, offering a practical framework for combining the values of the past with the tools of the present.

The relevance of research topic is that the modern education system of the Republic of Kazakhstan meets the need to develop the training of teachers in terms of integration of more modern innovative approaches and traditional teaching methods. Their need is especially manifested in the field of primary education. It is conditioned by the fact that in

the conditions of rapid development of modern technologies, changes in all spheres of social development are noted, which results in the need to approach more flexibly to the preparation of students for future pedagogical activity. As a modern teacher in the process of his work, it is necessary to take into account, especially in primary grades, both the achievements of the past (or traditional methods) and modern challenges (innovative approaches). In such conditions, project-based learning is one of the important tools that gives an opportunity to combine both traditions and innovations more effectively in the training of teachers. All this makes this topic relevant and significant.

Project-based learning, grounded in constructivist theory, promotes active and student-centered learning through real-world problem-solving, collaboration, and interdisciplinary approaches. In pedagogical sciences, PBL is characterized as a multifaceted method that synthesizes various educational dimensions-cognitive, social, creative, and practical. The term "project" itself implies forward-looking, structured actions aimed at achieving defined educational outcomes. It encompasses elements such as goal-setting, research, teamwork, creativity, and reflection, all of which align with the competencies required in 21st-century teaching.

In the Kazakhstani context, the methodology of PBL in teacher education emphasizes several core stages: problem formulation, team collaboration, data collection and analysis, project development, practical implementation, and reflective evaluation. These stages are designed not only to develop academic skills but also to foster a deeper understanding of the integration of traditional and innovative methods. By navigating this model, future teachers can apply theoretical knowledge to real classroom scenarios and learn to balance innovation with cultural and pedagogical heritage.

Despite the growing recognition of the importance of PBL, several barriers hinder its systematic application in teacher education. As noted by researchers such as H. Chen (2021), C. Martinez (2022), and others, issues include the lack of a unified methodology that incorporates both traditions and innovations, the dominance of outdated teaching methods, and educators' limited familiarity with modern PBL frameworks. Studies by Kurmanbekova (2019) and Tyunnikov (2024) highlight that successful integration requires more than technological tools-it demands a pedagogical mindset that values both the preservation of cultural identity and the adoption of modern educational strategies.

International perspectives also reinforce the value of blending traditions with innovations. For instance, Nxasana et al. (2023) underscore the significance of creativity and traditional arts in PBL, advocating for the integration of STEAM (Science, Technology, Engineering, Arts, and Mathematics) to enhance student engagement. Barak (2021) and Rodriguez (2024) emphasize the synergy between digital tools and conventional methods in teacher training. Meanwhile, Hero and Lindfors (2019) note that project work fosters critical thinking and autonomy-key elements of effective teacher preparation.

This body of research validates the hypothesis that project-based learning, when carefully structured to integrate both innovative and traditional pedagogical elements, can significantly enhance the preparedness of future teachers. It facilitates a holistic educational experience that respects heritage while fostering the skills necessary for modern classroom environments. The purpose of the study is to determine the possibility of using an active model of project-based learning as a tool for integrating innovations and traditions in the training of teachers of elementary education.

In order to achieve this goal, the following objectives are set:

1. To analyze the existing concepts, methods and practices of project-based learning in the system of teacher education.

2. To identify the features and advantages of the project approach in the training of elementary school teachers.

3. To develop a model of project-based learning that takes into account the specifics of primary education and combines innovation and tradition.

4. Evaluate the effectiveness of the proposed model.

The significance of the study lies in the fact that the obtained results are of practical value for teachers of pedagogical universities, methodologists and students studying in the direction of "Pedagogy and Methodology of Elementary Education". Recommendations on the development of students' skills of integrated project teaching should allow improving the quality of training of future teachers, and increase their professional competence and readiness to work in modern conditions. In addition, the results of the study can be used to improve educational programs and used for further research.

Materials and Methods. When conducting research on the topic "Project-based learning as a tool for integrating innovations and traditions in teacher training" it is advisable to use a set of methods, including both theoretical analysis and empirical research. Literary contextual and comparative analysis. During this analysis, literary sources (scientific publications, textbooks, articles, and methodological developments) on the topic of project-based learning and the features of integrating traditional and innovative methods of project-based learning in elementary school were reviewed. A total of 19 contemporary sources published by Kazakhstani and foreign authors over the past five years were examined. The literary contextual analysis was aimed at identifying developed approaches and existing practices, and establishing possible problems in them that require further research. A comparative analysis of the obtained information was conducted to compare existing models of project-based learning in schools, to establish best practices and possibilities for their adaptation to the conditions of Kazakhstani elementary schools.

At the second stage, empirical methods were used, which include surveys conducted in the form of questionnaires and the organization and implementation of a pedagogical experiment. The questionnaire survey was aimed at obtaining information about the current state in the field of project-based learning, identifying needs and expectations from new methods. For this purpose, an original questionnaire was compiled (the questionnaire was previously tested in their own group and among teachers). Respondents had to answer the following mixed questions of the questionnaire: about participation, use, or development of project-based learning; about the frequency of participation, use, and development of project-based learning; about the most important aspects of project-based learning; about the main problems in participating, using, or developing project-based learning. Literature analysis, in the course of which the literature sources (scientific publications, textbooks, articles and methodological developments) on the topic of project-based learning and the peculiarities of integration of traditional and innovative methods of project-based learning in elementary school were reviewed. Literature analysis is aimed at identifying the developed approaches and existing practices, and identifying possible problems in them that require further research. Comparative analysis is used to compare available models of project-based learning at school, to establish the best experience of their practices and the possibilities of their adaptation to the conditions of Kazakhstani elementary school. Empirical methods include surveys, in the form of questionnaires and pedagogical experiment.

The first survey was conducted among students of the educational program "Pedagogy and Methodology of Elementary Education" (48 students) and teachers (30 people). The survey was aimed at obtaining information about the current state in the field of project-based learning, identifying the needs and expectations of new methods. They were to answer the following questions: About the participation, use or design of project-based learning; about the frequency of participation, use and design of project-based learning; about the most important aspects of project-based learning; about the main problems in participation, use or design of project-based learning.

The experiment was conducted within the framework of approbation of the developed model of project-based learning into the educational process in higher education

institution. At the initial stage diagnostics of the level of knowledge and skills in the field of project-based learning was carried out. For this purpose two groups were used: experimental group (24 people), which will be trained according to the new program and control group (24 people) trained traditionally. At the control stage, the results are compared to assess the effectiveness of the proposed training model.

These questions will provide an opportunity to assess the level of students' readiness to use project-based learning as a tool for integrating innovations and traditions in their future pedagogical activities.

Statistical analysis techniques are used to process the data obtained, which also helps to establish the effectiveness.

Modeling techniques are used to create a model of project-based learning that integrates innovation and tradition.

Analytical analysis is used to summarize the obtained material and formulate conclusions and recommendations to improve the quality of training of future elementary school teachers.

Results. The results of analyzing the existing concepts, methods and practices of project-based learning in the education system. The essence of the concept of "project-based learning" is related to such scientific categories as "project", "learning", "project activity" and "creativity", which from the point of view of different branches of scientific knowledge and methodology have a diverse nature (Chen, 2021). The concept of "project learning" in pedagogy can be considered from two sides: from the point of view of pedagogical and psychological science. Since the training of project activity requires taking into account both the key principles of the pedagogical process and its psychological aspects (Lewis, 2019). "Project" as a separate term comes from the Latin word "projectio", which means throwing forward. It is usually characterized by "project", defined by C. Martinez as a model or ideal representation of a future object, state or plan of action. A project in training usually contains general ideas, concepts, as well as specific tables, schemes, drawings and so on (Martinez, 2022).

Teaching in pedagogy, including project activities, is defined as a process aimed at the formation of knowledge, skills and abilities taking into account certain requirements (Molina-Torres, 2022). Training is usually aimed at assimilation and development of the required intellectual knowledge, potential abilities, as well as at formation and consolidation of a person's outlook and self-education skills. Project activity in teaching is a complex type of special activity, which formed by synthesizing elements of play, cognition, value orientation, learning, transformation, communication and most importantly – creativity (Tyunnikov, 2024).

Modern methodology of project-based learning in the education system in the Republic of Kazakhstan is based on the fact that innovations in the educational sphere determine the need to expand the professional activities of teachers and school administration. A teacher should be able to form an interest in cognition in his students, and for this purpose it is necessary to prepare a practical situation in which students will independently extract new knowledge and teach them to visually demonstrate the results obtained. Such knowledge and skills are usually obtained through organized project activities (Kurmanbekova, 2019). The following important stages should be emphasized in the methodology of project-based learning in the system of teacher education:

- formulation of an actual problem or task, which the instructor proposes to students for a comprehensive solution. The problem or task should correspond to the objectives of the educational course and stimulate students' interest in searching for standard and non-standard solutions;
- team formation, in which students are organized into groups in order to work together on the project. It is important to ensure effective interaction within the team and to take into account the individual characteristics of the team member;
- project planning, according to the action plan that the team develops (goals, objectives, deadlines and responsibilities);
- data collection and research, which is carried out by the project participants. At

this stage, the research skills of working with different information are formed;

- development of a project solution, which the team creates on the basis of the collected data (methodological development, program, training material, etc.). In this case, it is important that the solution complies with the requirements of the GCSE;

- realization of the developed project, on the condition that it can be used in further practical activity as a teacher; reflection, in which the participants of the project activity discuss their results.

Thus, project activity in higher education can be presented as a separate form of educational process, which is aimed at the development of students, future teachers, the required professional competencies (Nguyen, 2020). For this purpose, different forms of practical solution of specific pedagogical tasks, which are related their future professional activities, are used in the learning process. It should be noted that it is in the framework of specially organized project activities that future teachers acquire project learning skills (research, planning, analysis, creative thinking and teamwork), as well as learn to apply theoretical and applied knowledge and skills to create real educational products (Naida, 2024).

Examples of the main methods of project-based learning used in higher education: educational project, used to create various teaching materials; research project, implemented in the framework of thematic scientific research; social project, aimed at organizing social actions and other activities; creative project, in the form of developing interactive textbooks or workbooks; multimedia thematic presentations for lessons; didactic games and tasks for different age groups (Grossman, 2019).

At the same time, according to the materials of other researchers, it was found that at present more actively begin to use the practices of project-based learning in the education system integrate innovation and tradition. Thus a group of African researchers led by S. Nxasana (2023) showed the importance of such indicator as creativity or art for students and teachers. Since recently in higher education system to improve the necessary 21st century skills for students' achievement in learning, it is necessary to use STEAM as a popular technology for new pedagogy. As creativity in STEAM is to improve student learning, develop creativity and potential for success. The authors analyze different approaches to integrate innovations and traditions to implement project-based learning in educational programs (Rahmawati, 2020). Barak (2021) explores in her work innovative approaches to project-based learning in teacher training. The author shares examples of successful practice and offers recommendations for integrating traditional methods with modern technologies. Rodriguez (2024) considering the integration of traditional and innovative teaching through the synthesis of two models, emphasizes the importance of integrating technology and traditional teaching methods in teacher education. Haatainen (2021) investigating the experience of digital educational technology development in higher education, emphasizes the need to integrate traditional methods and innovative approaches in project-based learning and suggests using them more actively in teacher education. Liu (2019) revealing the role of innovation in the modern education system, analyzes the latest research in the field of project-based learning in higher education, including its impact on teacher education regarding the training of future teachers.

The obtained results help to understand modern approaches to project-based learning and its integration into pedagogical practice in more detail and depth. Since they consider modern methods of project-based learning in the educational system. It is analyzed how the integration of innovative technologies into traditional teaching to improve not only the quality of education, but also the training of future teachers (Hero, 2019). It is important to realize that in practice it is necessary to consider the balance between traditional teaching methods and modern innovations, taking into account the importance of project-based learning as a means of achieving this balance (Poonputta, 2023; Alrajeh, 2020).

The results of the questionnaire survey to analyze the current state of affairs in the field of project-based learning, to identify the needs and expectations of the participants of the educational process of pedagogical universities and to develop proposals for improving the system of training future teachers of primary grades are shown in Table 1.

Table 1. *Results of the survey of students and teachers*

Question	Answer options	Students in %	Teachers in %
Do you participate in project-based learning	Yes	44	61
	No	36	19
	Occasionally	20	20
Do you often participate in (use) project-based learning	Regularly	17	33
	Periodically	34	43
	Infrequently	49	24
What aspects of project-based learning do you find most important?	Development of critical thinking	19	14
	Formation of practical skills	22	18
	Integration of theory and	17	30
	Interdisciplinary	17	14
	Teamwork	25	24
What are the main challenges you face when using project-based learning?	Lack of	61	47
	Lack of resources	22	24
	Difficulty in coordinating group work	11	16
	Difficulties in evaluating project results	6	14

Based on the obtained data, the following conclusions can be drawn. In order to analyze the first two questions, let us denote the obtained results additionally and for clarity in Figure 1.

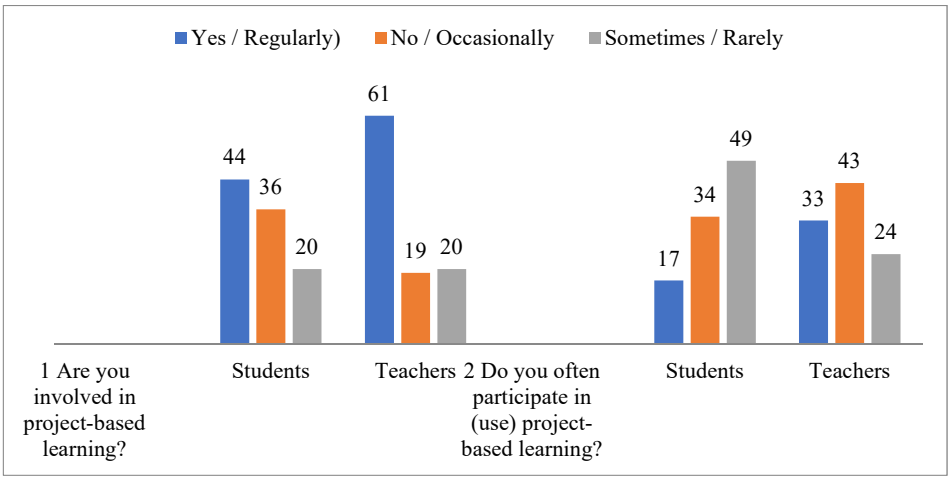

Figure 1: Comparison of results obtained from students and teachers

About half of surveyed students (44%) and more than half of teachers (61%) participate in project-based learning. Periodically: 20% each. Do not participate: 36% of students and 20% of faculty. The obtained data indicates that project-based learning is not badly used in the educational environment. At the same time, the high level of involvement of teachers in project-based learning is higher than that of students.

Only 17% of students and 33% of teachers use project-based learning regularly. In occasionally use 34% of students and 43% of faculty members. While a significant proportion of students (49%) and 24% of faculty members rarely participated in project-based learning. But in general, the results indicate a low level of frequency of using project-based learning and the need to increase the frequency of using project-based learning in educational pedagogical practice.

In response to the third question, students indicate the most important aspects of project-based learning as the development of critical thinking (19%) and the formation of practical skills (22%). While teachers emphasize the importance of interdisciplinary approach (17%) and integration of theory and practice (30%). Such data indicate the importance of different aspects of project-based learning for each group.

The main problem faced by the participants of the educational process is related to the lack of time (61% of students and 47% of teachers). Difficulties in coordinating group work (11% of students and 16% of teachers) and evaluating project results (6% of students and 14% of teachers) are also noted. The obtained data indicate that both students and teachers have both different and common problems when using project-based learning. And their presence indicates that it is necessary to develop more active forms and methods of project-based learning in higher education institution.

Thus, the conclusions obtained in the course of the survey indicate the need to improve the system of project-based learning support. Since it is necessary to increase the effectiveness of using project-based learning in the educational process of future elementary school teachers.

The results of the pedagogical experiment at the initial stage are shown in Table 2.

Table 2. *Results of initial diagnostics of the level of knowledge and skills in the field of project-based learning*

Questions	Options	Answers	
		EG	KG
How do you understand the essence of project-based learning	Traditional	42	42
	Innovative	25	23
	Comprehensive	23	25
What are the steps involved in project-based learning	Setting goals and objectives (traditionally	70	67
	Information gathering and analysis (innovative	20	23
	Presentation of results (comprehensive	10	10
What is the role of the teacher in project-based learning	Project management in the traditional	70	67
	Mentoring and support for innovation	20	20
	Combining traditional and innovative methods	10	13
Do you know how to plan and organize learning projects	I don’t know how	50	54
	I can	50	46
Do you have experience working as part of a team	Yes	62	62
	No	38	38
Do you use modern technology and digital tools in your teaching and learning process?	I’ve never	25	29
	I’m using	75	71
How interested are you in using project-based learning in your future teaching career?	Not all	50	50
	Very	50	50
Do you believe that project-based learning fosters students’ creativity?	Yes	50	54
	No	50	46

Would you like to be involved in the further development and refinement of project-based learning methods	Yes	38	41
	No	62	59

According to the results of initial diagnostics, the following conclusions can be drawn: the majority of students perceive project-based learning as traditional, as well as innovative integrated. Such data indicates that students begin to realize the importance of both traditional and other approaches in project-based learning, although to a lesser extent. The main stages of project-based learning are identified as traditional (setting goals and objectives): 70% (EG) and 67% (CG), 20 and 23% - innovative, based on information gathering and analysis (innovative) and slightly complex (10% each). The role of the teacher in project-based learning the majority (70 and 60%), defined as leading the project in the traditional method, slightly mentoring and supporting innovation, and as combining traditional and innovative methods. Only half and slightly more than half of the students in both groups (50% and 54%) know how to plan and organize learning projects.

This indicates that students have basic preparation for project-based learning. 38% of both groups have no experience in teamwork. The majority of EG (75%) and CG (71%) students actively use modern technologies and digital tools in the learning process. This indicates the importance of introducing innovations in the educational process. Half of KG and EG students show high interest in using project-based learning in their future pedagogical activities, which indicates the important role of project-based learning in the formation of professional pedagogical skills. About 40% of EG students and 41% of CG students express a desire to participate in the further development and improvement of project-based learning methods, which indicates the importance of new initiatives to improve educational programs in the field of project-based learning at the university level

The obtained data allow us to note that students from both groups (experimental and control) have a similar idea of project-based learning, demonstrated approximately the same attitude to the skills of designing and organizing projects, all students actively use modern technologies and digital tools, which shows their readiness to introduce innovations in education. Such data allow us to consider that both groups have the same level of development regarding project-based learning and gives the opportunity, which allows us to start the experiment. At the formative stage, students of the educational program "Pedagogy and Methodology of Elementary Education" (EG) were offered a model of project-based learning, which includes elements of innovation and tradition, taking into account the specifics of elementary education. Its goal is that project-based learning should help students to develop and implement projects aimed at solving current problems of primary education, using a variety of methods and modern technologies

Students are familiarized with the main components of the model. The main component is considered to be learning to identify a problem or challenge that is relevant to primary education - as a result, they formulate project goals and objectives based on analyzing the situation and exploring available resources. Students are also taught to gather information about the problem and investigate possible solutions. They conduct experiments and observations using available tools and resources. Research helps students gain a deeper understanding of the problem and find optimal solutions.

During project implementation: students create and execute projects using both traditional methods such as handwriting, drawing soft materials, making toys, and modeling children's behavior; apply innovative methods such as using multimedia, digital tools, and software to create interactive presentations and virtual models; upon completion of the project, students evaluate the results achieved, discuss successes and failures, and engage in reflective discussions aimed at improving the quality of

the project; and conduct reflective discussions aimed at improving the quality of the project.

The module of direct project-based learning is based on the integration of innovations and traditions, as it combines traditional methods, such as individual assignments and group work, with the use of modern technologies and tools. Project-based learning also involves interaction with other disciplines such as psychology, pedagogy, physiology, etc., which contributes to the formation of a future teacher's holistic view of the problems and challenges in the chosen profession. Students work in teams, assigning responsibilities and coordinating efforts to achieve common goals. Teachers support students with advice, counseling and monitoring of project implementation. The pedagogical workshop established at the university provides students with resources and space to experiment and develop ideas.

Projects are evaluated through discussion, testing and experimentation. Self-assessment is also used, as students are obliged to evaluate their achievements and identify ways to improve them. The best projects should be included in the student's portfolio or used in further research, as they can then become part of the future teacher's professional portfolio. In the course of the experiment the following projects of integration of tradition and innovation, important for the training of students, future teachers of elementary school, were realized in EG:

1. Cultural Heritage in the Classroom Project. Students explore traditions and customs of different cultures, presenting them in the classroom through exhibitions, presentations and workshops. Objectives: to learn how to introduce children to cultural diversity; to develop teamwork and public speaking skills; to integrate traditional knowledge with modern approaches to learning.

2. Project "Innovative Technologies in Teaching". Students develop lessons for grades 1-3, using modern technologies (interactive whiteboards, educational applications) and traditional teaching methods (reading books, games). Objectives: to teach future teachers to use technology to increase interest in the learning process; to compare the effectiveness of different teaching methods in reading, math and other subjects.

3. Project "Environmental Education through Traditions". Description: Students research traditional practices of sustainable farming in different cultures and develop educational activities for children on Cognition of the World. Objectives: to foster children's respect for nature and understanding of the importance of environmental traditions; to integrate knowledge of contemporary environmental issues with traditional approaches to solving them.

4. Grandparents' Stories Project. Students collect stories and memories of older people about their childhood and traditions and then create an interactive book or multimedia presentation for children. Goals: to preserve and pass on cultural heritage through personal stories; to develop children's listening skills and respect for the older generation.

5. Project "Creative workshop: from tradition to innovation". Students organize workshops on traditional crafts (pottery, embroidery and others) using modern materials and technologies (e.g. 3D printing). Objectives: to familiarize children with traditional crafts and their meaning; to develop creativity and skills in working with different materials.

6. Virtual excursions to historical places" project. Students create virtual excursions to places of historical or cultural value using traditional and modern technologies. Objectives: to introduce children to history and culture through modern means; to develop critical thinking skills and analyze information.

All of these projects should help future elementary school teachers learn how to integrate innovative approaches into traditional teaching while maintaining respect for tradition and cultural heritage. Table 3 shows the results of comparative analysis of students' diagnostics at the control stage.

Table 3. *Results of comparative analysis of the control diagnostics of the level of knowledge and skills of students in the field of project-based learning*

Questions	Options	EG		Difference	KG		Difference
		commencement	end		commencement	end	
How do you understand the essence of project-based learning	Traditional	42	25	-17	42	40	-2
	Innovative	25	35	+10	23	25	-3
	Comprehensive	23	40	+17	25	25	0
What are the steps involved in project-based learning	Setting goals and objectives (traditionally	70	23	-47	67	62	-5
	Information gathering and analysis (innovative	20	42	+12	23	25	+2
	Presentation of results (comprehensive	10	25	+15	10	10	0
What is the role of the teacher in project-based learning	Project management in the traditional	70	35	-35	67	62	-5
	Mentoring and support for innovation	20	23	+3	20	20	0
	Combining traditional and innovative methods	10	42	+22	13	18	+5
Do you know how to plan and organize learning projects	I don’t know how	50	30	-20	54	54	0
	I can	50	70	+20	46	46	
Do you have experience working as part of a team	Yes	62	100	+38	62	67	+5
	No	38	0	-38	38	33	-5
Do you use modern technology and digital tools in your teaching and learning process?	I’ve never	25	0	+25	29	33	+4
	I’m using	75	100	-25	71	67	-4
How interested are you in using project-based learning in your future teaching career?	Not all	50	82	+32	50	50	0
	Very	50	18	-32	50	50	0
Do you believe that project-based learning fosters students’ creativity?	Yes	50	100	+50	54	54	0
	No	50	0	-50	46	46	0
Would you like to be involved in the further development and improvement of project-based learning methods	Yes	38	100	+62	41	46	+5
	No	62	0	-62	59	54	-5

The data of the comparative analysis allow us to draw the following conclusions.

In the experimental group (EG) there is a significant improvement in the understanding of project-based learning as an innovative (by 10%) and integrated process (by 17%), while in the control group (CG) the majority continues to perceive it traditionally. Such data indicate the influence of the conducted activities on the positive change in the EG students' perception of the essence of project-based learning. EG students became more aware of the importance of innovative project stages, such as information gathering and analysis (+22%), as well as presentation of results (+15%). The traditional perception of project learning stages prevails in the CG, as they still emphasize more on setting goals and objectives characteristic of traditional learning. In EG there was a significant increase in the number of students (by 22%) who believed that the teacher's role in project-based learning should be based on combining traditional and innovative methods, while in CG the majority still held the opinion of project guidance by traditional method. In EG there is an increase in the number of students confident in their skills of planning and organizing educational projects (by 20%), while in CG the indicator of these skills remained the same.

Teamwork experience: All EG students gained experience in teamwork (38% increase), in contrast to CG, where the number of students who gained such experience increased by only 5%. In EG all students started to use modern technologies and digital tools in the learning process (25% increase), while in CG the increase was only +4%, but still a significant part of CG students continue to ignore them. Interest in using project-based learning increased among EG students by 32% and reached the majority (82%), while interest among CG students remained the same.

The development of students' creative abilities through project-based learning increased: in EG students by 50% and now all 100% are sure that project-based learning contributes to the development of students' creative abilities, while in CG the opinions remained the same (50-50%). The desire to improve project-based learning methods among EG students increased by 62% and as a result all 100% of students expressed their desire to participate in the further development and improvement of project-based learning methods, while in CG the number of those willing to participate was only 46% (with an increase of 5%), the rest of the students did not have a desire to participate. Thus, the results of comparative diagnostics show the positive influence of the conducted work, within the framework of the new model, on the level of knowledge and skills of EG students in the field of project-based learning.

Discussions. The results of this study, which examined the integration of innovations and traditions through project-based learning (PBL) in teacher training, are consistent with and expand upon findings in recent international research. A comparative analysis reveals both overlaps and distinctions in pedagogical objectives, methodologies, and observed outcomes. A major similarity lies in the emphasis on developing 21st-century competencies-critical thinking, creativity, collaboration, and digital literacy-through PBL. Nxasana et al. (2023) stressed that the integration of creativity and traditional elements in South African teacher education enhanced student engagement and helped preserve cultural identity while embracing innovation. This resonates with the current study, which also highlighted projects like "Grandparents' Stories" and "Cultural Heritage in the Classroom" as successful fusions of tradition and innovation.

Furthermore, Barak and Yuan (2021) confirmed that culturally contextualized PBL fosters innovative thinking among preservice teachers. Similarly, our findings showed a 50% increase in experimental group (EG) students acknowledging the role of PBL in enhancing creativity. This validates the assertion that PBL not only fosters skill acquisition but also supports cultural and intellectual synthesis. Rodriguez et al. (2024) emphasized that effective teacher education programs combine STEM disciplines with pedagogical practice through PBL to strengthen interdisciplinary integration. In our study, the implemented model involved cross-disciplinary connections

(e.g., linking environmental education with traditional knowledge), mirroring Rodriguez's recommendations. Despite these parallels, some differences were found in implementation strategies. While studies such as Rahmawati et al. (2020) and Haatainen & Aksela (2021) prioritized digital integration and technological fluency within PBL frameworks, the present study placed equal emphasis on traditional forms of expression (e.g., storytelling, crafts, oral histories). Thus, while technology was used (e.g., digital presentations, virtual tours), it served to augment-not replace-traditional pedagogical modes. This difference reflects regional educational goals that prioritize cultural preservation alongside innovation, particularly in Kazakhstani elementary education. Moreover, Alrajeh (2020) found that in many teacher Education Programs, PBL is often implemented without explicit cultural context, which may reduce its relevance for preservice teachers. In contrast, this study embedded cultural relevance into each project module, thereby increasing engagement and the applicability of content to local educational settings.

This study produced several scientifically valuable results:

1. Enhanced Conceptual Understanding of PBL: EG students showed a statistically significant shift from viewing PBL as a traditional method (−17%) to understanding it as innovative (+10%) and integrative (+17%). This indicates a conceptual transformation facilitated by the blended learning model, supporting the findings of Molina-Torres (2022) that properly structured PBL promotes reflective teaching and learning practices.

2. Increased Readiness for Team-Based, Technology-Enhanced Pedagogy: All students in the experimental group reported teamwork experience and 100% adoption of digital tools, compared to 67% and 67% respectively in the control group. This reinforces the conclusions of Liu et al. (2019), who linked PBL to improved technological and collaborative competence in teacher education.

3. Positive Change in Motivation and Engagement: Interest in using PBL in future careers rose by 32% among EG students. The same group showed a 62% increase in willingness to further develop PBL practices. These motivational shifts reflect conclusions drawn by Hero and Lindfors (2019), who associated PBL with improved student agency and engagement in teacher training programs.

It is important to acknowledge that while this study demonstrated the successful integration of tradition and innovation, the long-term impact on classroom performance remains to be assessed. Future research should examine how these competencies translate into real-world primary education contexts. Additionally, while the current model proved effective in a Kazakhstani setting, cultural adaptation might be necessary before applying it in more digitally advanced or culturally diverse environments, as suggested by Lewis et al. (2019).

Conclusion.The mentioned project-based learning methodologies and successful integration practices indicate that it is necessary to help future teachers to develop professional competencies more actively at the university level. At the same time, more attention should be paid to the integration of tradition and innovation, as comprehensive integration skills of project-based learning will be necessary for their successful work as teachers. They are especially important for future elementary school teachers, as at this age modern children should be educated in an integrated approach. The results obtained during the questionnaire survey of the current state in the field of project-based learning to identify the needs and expectations of all participants in the educational process of universities (students and teachers) indicate the need to improve the support system of project-based learning to reduce the frequency of difficulties and increase the effectiveness of the use of project-based learning in the educational process of future elementary school teachers.

The proposed model of project-based learning is an important tool for the training of future elementary school teachers, allowing them to develop professionally and master the skills necessary for effective work in the educational environment. The projects developed within its framework are tools for integrating innovations

and traditions in the process of training students, future teachers of primary grades. The effectiveness of the model is confirmed by the results of comparative diagnostics, which show the positive impact of the conducted work in the field of project-based learning. Since the level of knowledge and skills of EG students in the field of project-based learning has significantly increased. In addition, it should be noted that this model includes elements of innovation and tradition, taking into account the specifics of primary education, which indicates that it is possible and necessary to take into account the peculiarities of the age of students.

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Developing Adequate Self-Esteem in Primary School Students Through Innovative Educational Practices

Abstract

Introduction. The study discusses the features of developing adequate self-esteem in primary school students, addressing this crucial aspect of their successful adaptation and development during a critical period when children actively compare themselves with others and evaluate their achievements and failures. *Methodology and Methods.* The research employs theoretical analysis of cognitive, emotional, and social development processes in primary school age, examining the dynamic relationship between self-esteem formation and various developmental factors. The study includes analysis of assessment methods and pedagogical strategies for supporting individual student achievements. *Results.* The development of adequate self-esteem in primary school students was identified as a dynamic process closely related to their cognitive, emotional, and social development, directly affecting their self-image formation. The crucial role of teachers in developing adequate self-esteem was established, with practical recommendations developed for creating favorable classroom atmosphere and implementing appropriate assessment methods. Problems associated with both low and high self-esteem were identified, and corrective strategies for addressing negative attitudes were formulated. *Scientific novelty.* The research provides a comprehensive theoretical framework for understanding self-esteem development in primary school students, establishing the interconnected nature of cognitive, emotional, and social factors in this process and emphasizing the need for an integrated approach including parental involvement and psychological support. *Practical significance.* The study offers practical recommendations for teachers, psychologists, and parents interested in promoting harmonious development of primary school students, providing specific strategies for classroom management, assessment practices, and corrective interventions to foster adequate self-esteem formation.

Keywords: self-esteem, primary school students, motivation, self-analysis, psychological comfort, psychological and pedagogical support, inclusive education.

Introduction. We believe that, adequate self-esteem of primary school students is an important component of their developing personality. Its level has a significant impact on the child's motivation to study, on his ability to learn new materials and develop useful skills, on his self-confidence. Primary school age is a period of intensive formation of adequate self-esteem. This is justified by the fact that the child is included in a new socially significant and assessed activity, a significant expansion of the social circle. The development of adequate self-esteem in students is an important factor in the development of personality. The relevance of the research topic is determined by the fact that adequate self-esteem is a complex phenomenon in its psychological nature and is connected by numerous connections and relationships with all mental formations of a person of primary school age and the peculiarities of interaction with others, especially parents and teachers. Overestimated or underestimated self-esteem can lead to behavioral problems, learning difficulties, and decreased emotional well-being. In the context of the modernization of education, when the emphasis is on an individual approach and the development of independence, understanding the features of the formation of adequate self-esteem among younger schoolchildren is becoming particularly

relevant. The identification of factors affecting self-esteem and the development of effective methods for its correction and development will create favorable conditions for the harmonious development of the child's personality.

It has been established that the psychological features of adequate self-assessment of primary school children are less studied in theory and practice than in preschool and youth. Currently, in education there is a contradiction between the progressive increase in the need for school practice in the development of positive self-esteem of primary school students and the incomplete development of specific ways to implement this process. In connection with the above, the problem of formation and development of adequate self-esteem of primary school students has become important for us. The main research question that this study answers is: What are the psychological and pedagogical conditions for the effective development of adequate self-esteem of younger schoolchildren?

The object of research: the pedagogical process of primary school.

The subject of the study is the development of adequate self-esteem of younger schoolchildren.

The purpose of the research is to theoretically substantiate and experimentally test the effectiveness of methods for developing adequate self-esteem in primary school children.

Research objectives:

- to clarify the essence of adequate self-assessment and the features of its manifestation in younger schoolchildren;
- to develop and implement a set of tasks in mathematics lessons aimed at developing adequate self-esteem among younger students;
- to offer methodological recommendations for the formation of adequate self-esteem among younger students.

The main hypothesis is the assumption that the development of adequate self-esteem will be more effective if targeted work and psychological and pedagogical support are organized, aimed at developing reflection, self-cognition and constructive assessment of one's own achievements and failures, which contributes to the development of adequate self-esteem of primary school students.

The content of the article contributes to solving the problem of development of adequate self-esteem of younger schoolchildren as an important component of the "I-concept", including the definition of indicators of three levels of self-esteem, the selection of the most effective methods of development of adequate self-esteem of younger schoolchildren. A set of tasks and methodological recommendations for the development of adequate self-assessment have been formed, which can be used by teachers and specialists in the implementation of the pedagogical process in primary schools.

Self–esteem development is a complex and multifaceted process that is influenced by a number of factors, starting from early childhood and ending with the social environment and personal achievements. Many works by researchers are devoted to the problem of forming adequate self-esteem of primary school children. Let's consider the key theories, concepts and studies of the development of self-esteem. The theory of symbolic interactionism (Cooley, 2001; Mead, 2007) emphasizes the role of social interaction in shaping self-esteem. The concept of the "mirror Self" by H. Cooley suggests that we see ourselves as we think others see us. The Ministry of Foreign Affairs develops this idea, focusing on the influence of significant others and the assimilation of social roles.

Humanistic psychology (Rogers, 2004; Maslow, 2008) considers self-esteem as a key element of self-actualization and personal growth. Rogers emphasized the importance of unconditional positive attention and congruence between "I am real" and "I am ideal" for the development of healthy self-esteem. The theory of social comparison (Festinger, 1983) states that people evaluate their abilities and opinions by comparing themselves with others. Choosing a reference group (with whom we compare ourselves) plays an important role in shaping self-esteem. The theory of self-perception (Bem, 2005) suggests that we draw conclusions about our internal states by observing our behavior and the circumstances in which this behavior manifests itself. That is, we can evaluate our abilities based on how well we are coping with certain tasks.

Cognitive theory (A.Ellis, 2005) focuses on the role of thoughts and beliefs in the development of self-esteem. Irrational beliefs and negative automatic thoughts can lead to low self-esteem. Nowadays researchers consider self-esteem in relation to other processes and properties of personality and environment: the relationship of self-esteem with motivation and comfort (Gutsu, 2023), the relationship of self-esteem with critisizm (Andreeva, 2015), the relationship of self-esteem with self-regulation (Asmolov, 2016), the relationship of self-esteem with positive thinking (Mogeda, 2017).

Among the positive factors influencing the development of adequate self-esteem are: parental warmth (Harris et al., 2017), realistic feedback without excessive praise (Brummelman, 2020), attractive appearance (Mott, 2022), high social status and income (Metzger & Hamilton, 2020). Negative factors inhibiting the development of positive factors: parental hostility (Khaleque, 2017), absence of a father (Luo et al., 2011), disability of the child (Metzge, 2023), low social status and income (Twenge and Campbell, 2002), lack of faith in the success of the child among teachers (Eisenberg & Schneider, 2007). According to A. Kalykbayeva and A. K. Satova, today in inclusive education, the goals of the self-assessment process should be formulated in accordance with the SMART principle. This means that the goal must be Specific, Measurable, Achievable, Realistic, and Timed. Self-assessment should also contribute to changing the relationship between all participants in the educational process, making it more open (Kalykbayeva & Satova, 2020).

There are several points of view on understanding the essence of self-esteem in the scientific literature:

- self-esteem as a system-forming core of a personality that determines his life position (Kolesova, 2021);

- self-esteem as an integral personality quality, manifested in the ability to evaluate oneself and one's activities (Sergeeva, 2018);

- self-esteem as a personal essence of a primary school student related to cognitive activity (Topilina, 2018);

- self-assessment as a subjective assessment of a person's worth (Orth, 2014).

Thus, the analysis of psychological and pedagogical literature revealed that self-esteem refers to how a person evaluates his own strengths and weaknesses, actions, strengths, qualities, the definition of personal role and importance in society, the definition of himself as a whole. Various factors influence the development of an adequate self-assessment of a personality: family (Pavlova, 2019; Dayrabai, 2023); peers (Kovalenko, 2017); academic performance (Zaitseva, 2018); cultural factors (Lebedeva, 2023); physical health and appearance (Mukhina, 2018; Aggarwal, 2023).

Materials and Methods. The participants of the experiment were students of a comprehensive school in Astana city of primary school age at the age of 8-9 years, 40 people studying in 2 "A" and 2 "B" classes. The Department of Pedagogy concluded a cooperation agreement with this school. The choice of classes was random. A number of carefully selected methods were used in the empirical study. To determine the characteristics of a younger student's self-esteem, we used the method of V.G. Shchur "Ladder" (Shchur). To determine the emotional level of self-esteem, the method of A.V. Zakharov "Subtest N 1" was applied. (Zakharova). The method is designed to reveal the child's system of ideas about how he/she evaluates himself/herself, how, in his/her opinion, he/she is evaluated by other people and how these ideas correlate with each other. The survey was conducted with the whole class at the same time. The children were given sheets with the image of a ladder numbered from 1 to 7 steps. To quantify the level of self-esteem among younger students, we applied the S.A. Budassi test. This technique is based on the ranking method. Children were given a list of 48 words denoting personality properties, from which they should choose 20 in the order of preference.

The results were processed as follows: According to the Shchur method: if the child put himself on the 1st, 2nd or 3rd step, he has low self-esteem. Adequate self-esteem if on the 4th, 5th, 6th, 7th. And if on the 8th, 9th, 10th, then self-esteem is inflated. If the child points to

the 3rd,4th circles on the left, it means that he has adequate self-esteem. It means that he/she accepts himself/herself as he/she is, correctly perceives the features of self-image and realizes his/her value. If a child points to the 1st circle, he/she has overestimated self-esteem, and if he/she points to circles beyond the 5th circle, he/she has underestimated self-esteem. The results of the Budassi methodology were processed on the basis of the relationship between rank scores and personality qualities included in the representations "I am real" and "I am ideal", using the rank correlation coefficient according to the calculation formula. The measure of connection is established by means of the rank correlation coefficient. To calculate the coefficient, it is necessary to first find the difference of ranks d1 - d2 for each quality and record the obtained result in column d in the research protocol. Then square each obtained value of the rank difference d by (d1 - d2)2 and record the result in column d2. Calculate the total sum of squares of the rank difference Σ d2 and enter it into the formula r = 1 - 0.00075 x Σ d2, where r is the correlation coefficient (an indicator of the level of self-esteem of the individual). Statistical processing of the research results was carried out by quantifying empirical data and correlation analysis, as well as deducing the arithmetic mean and subsequent numerical calculations.

Results. Based on the analysis, we identified 3 levels of self-esteem development of younger schoolchildren: overestimated, adequate and underestimated, and indicators of each level were determined (Table 1).

Table 1. *Self-assessment indicators*

Overestimated	Adequate	Understated
– setting higher goals; – the level of pretension is higher than the real possibilities; – striving for excellence; – focus on the external aspects of the activity.	– age-appropriate level of aspirations, flexibility in relation to set goals; – a reasonable attitude towards successes and failures, approval and censure; – criticism, independence, sociability; – the motive of achievement is clearly expressed; – the desire for self-affirmation and self-realization.	– setting lower goals; – exaggerating the importance of failures; – fear of failure, fear of mistakes, general insecurity; – withdrawal into «oneself», focusing on the weaknesses of one's character; – increased anxiety and self-criticism.

During the use of the "Ladder" method for determining children's self-esteem, the following results were obtained (Figure 1):

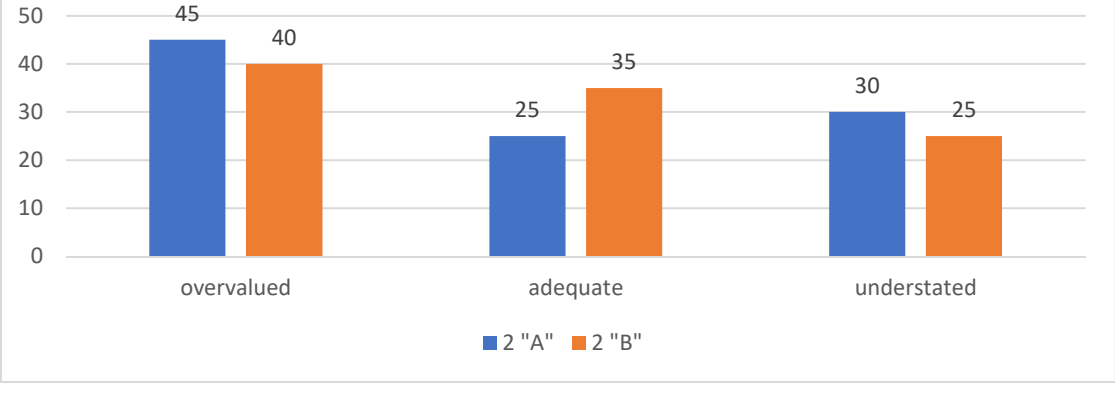

Figure 1: The result of the level of self-esteem of primary school children using the "Ladder" method

25% (5 people) of the 2nd "A" grade have an adequate level of self-esteem. These children look cheerful, active and resourceful. They delve into their mistakes with interest, choose tasks "on their shoulder", and when they successfully solve them, they move on to the same or even more difficult task. 45% (9 people) of the 2nd "A" grade have an overestimated level of self-esteem, i.e. these children behave very actively, they like to be leaders and involve other children to participate in their own games. An underestimated level of self-esteem was found in 30% (6 people). Such children are passive, prefer to take on easy tasks, often play alone, and are reluctant to make contact with other children. More favorable picture emerged in the 2nd "B" grade, 35% (6 people) of students have an adequate level of self-esteem, 40% (8 people) have an inflated level of self-esteem, and 25% (6 people) have an inflated level of self-esteem. To determine the emotional level of self-esteem, we used the "Subtest No. 1" method (author A. V. Zakharova). The diagnostic results are presented in Figure 2.

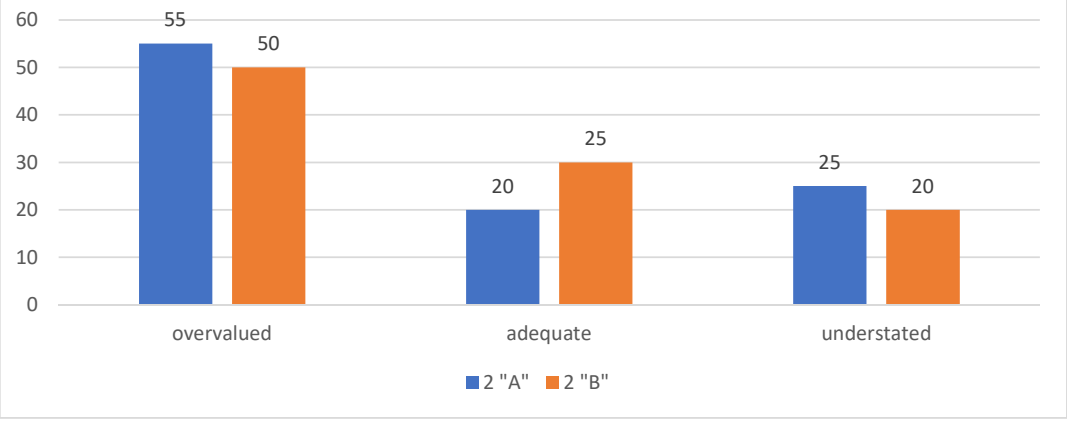

Figure 2: Results of the study of the emotional level of self-esteem of primary school students (the method "Subtest No.1")

An analysis of the diagram shows that 55% of the 2nd "A" grade (11 people) have an overestimated level of self-esteem, and 50% of such students in the 2nd "B" grade. Such children usually overestimate their abilities, they are confident that they are able to achieve academic success on their own, and they are not motivated by a sober self-assessment of their abilities and capabilities. 20% of children (4 people) have an adequate level of self-esteem in the 2nd "A" grade, and 30% (6 people) in the 2nd "B" grade. These children usually look energetic and active. They are happy to learn without feeling rejection to criticism, they are open to communication and have a sense of humor. 25% of students in the 2nd "A" grade (5 people) have a low level of self-esteem, such children prefer the easiest tasks and assignments, they are not confident in themselves, they see only negative moments in themselves. In the 2nd "B" class, there were also students who have low self-esteem and accounted for 20% (4 people). Let's consider the results of the conducted test "Finding a quantitative expression of the level of self-esteem" according to S.A. Budassi (Figure 3).

According to the results of the conducted methodology, we see that 40% (8 people) of the younger students of the 2nd "A" grade have an overestimated self-esteem. Such children misjudge their own strengths and set higher goals for themselves. They are trying to take on tasks that they are clearly unable to complete. When they fail (and this happens most often), they either abruptly change the type of activity, or stubbornly continue to insist that they can do the job. 20% of students in the 2nd "A" grade (4 people) have low self-esteem.

Children of primary school age with low self-esteem usually set lower goals for themselves,

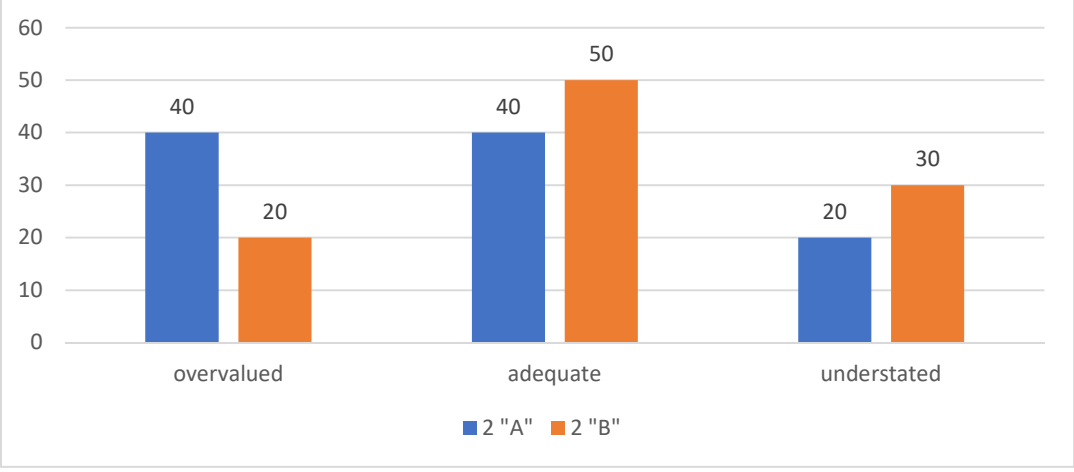

Figure 3: The results of the level of self-esteem of younger schoolchildren using the methodology "Finding a quantitative expression of the level of self-esteem"

exaggerating the importance of failures. 40% (8 people) of children showed adequate self-esteem. Such children successfully solve a range of tasks of medium complexity, without striving to improve their achievements and move on to more difficult goals. In the 2nd grade, the indicators of adequate self-esteem are higher: 50% (10 people) of students, an overestimated level of self-esteem in 20% (4 people) and an underestimated level in 30% (6 people). According to the results of the ascertaining stage of the study, the overall level of self-esteem of younger schoolchildren was determined. The results of determining the overall level of self-esteem are presented in Figure 4.

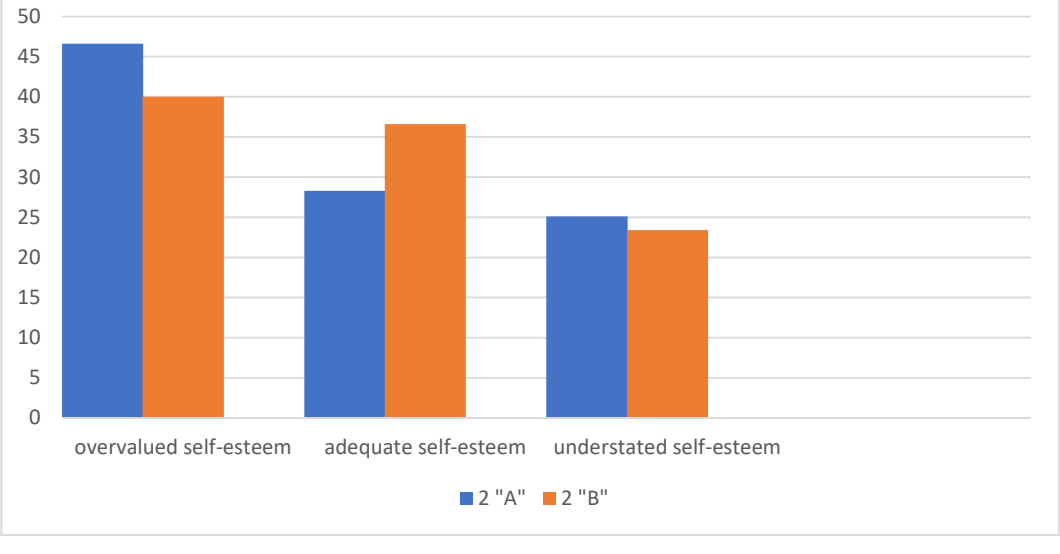

Figure 4: The results of the development of the level of self-esteem of younger schoolchildren at the ascertaining stage of the experiment

The work on the development of adequate self-esteem of younger schoolchildren was carried out in mathematics lessons. The content of a set of exercises and tasks in mathematics lessons for the development of adequate self-esteem among younger students is shown in Table 3.

Table 2. *The content of a set of tasks for the development of adequate self-esteem of younger students*

№	Theme of lesson	The content of the task package
The introductory stage		
1	The combined property of addition	Performing introspection of his own work
The main stage		
2	Written calculation techniques for cases of the type 50-24	«Assessment sheet»
3	Properties of the opposite sides of the rectangle.	«Rainbow»
4	Fixing properties of opposite sides of a rectangle.	«The peer at the desk»
5	Square. Building a square	«Rulers, a five-level scale»
6	Multiplication. The specific meaning of multiplication. The multiplication sign	Performing introspection of his own work
7	Rectangle perimeter	The «Tree of Creativity»
8	The method of multiplying 0 and 1 by a number.	«The peer at the desk»
9	The name of the numbers during multiplication.	«Doubt Card»
The final stage		
10	The area of the figures. Units of area	«Colorways»

The developed set of tasks and methods was carried out as part of research work with an experimental group (2nd A grade) in mathematics lessons for one month and totaled 10 hours.

During the formative stage, the following exercises were conducted to form adequate self-esteem among younger students:

1. Performing self-analysis of his own work (in notebooks). The students were asked to evaluate the outcome of their work. At the end of the page, draw a circle and color it with the color or logo that says how they rated their work in the notebook.

2. "Assessment sheet". The children were given cards that indicated the tasks that were submitted for control, the student's assessment and the teacher's assessment. The student had to evaluate the completed task, and then compare it with the teacher's assessment. If the assessment did not match, an explanation was required.

3. The students were given cards, which show a circle divided into 4 parts, these are the tasks that the teacher submitted for control. Students marked each task that was completed correctly in green, if one mistake was made – in yellow, and if 3 or more mistakes were made - in red.

4. After completing the independent work, the peer at the desk evaluated the student sitting next to him, justifying his assessment and pointing out the shortcomings.

5. Performing self-assessment at different steps of the lesson. Before the younger students begin to complete the task, each student predicts how well he will manage this task, and fixes his assumption on the "success track". After completing and verifying this type of work, students again turn to the "success path" and determine the step along this path, which will be an adequate self-assessment.

6. "Rulers, a five-level scale". After completing the independent work, the students evaluated their results on a five-level scale. First, together with the class, we agreed on the criteria by which the work would be evaluated. These were three criteria: accuracy, correctness and design of the work. In the margins of the notebooks, the students drew three segments with divisions, they showed the level of work done: high, above average, medium, below average and low.

The children put a cross on the scale in the place that corresponds to their assessment of their own work. Each ruler was marked with the letter "C", "A" or "D": C - correctness, A - accuracy, D - design of the work. High, above average, medium, below average, low. By checking the work, we showed how much we agreed with the children's self-assessment. If they agreed with the student's opinion, they circled his cross on the ruler, if they did not

agree, they put the cross higher or lower. If the assessment of the work coincided with the assessment of the children, it means that the student knows how to evaluate himself.

7. The "Tree of Creativity". Visual material was presented on the board: the trunk of an apple tree, carved leaves, apples and flowers. The evaluation criteria were indicated next to them. The apple meant that the lesson was fruitful, the leaf was a wasted day, and the flowers were pretty good. At the end of the lesson, when summing up the results, the students themselves chose and glued either an apple, a leaf, or a flower to the trunk of an apple tree. Some children commented on their choice. The results of the children who chose a piece of paper for evaluation were recorded.

8. "The peer at the desk". The children first evaluated the completed task themselves, then exchanged notebooks with a neighbor at the desk, and evaluated them in pairs. The neighbor's cross was circled if the scores matched, and the discrepancy between the scores was fixed by the neighbor's cross in the circle. By checking the notebooks, it was possible to judge the adequacy of the students' grades.

9. "Doubt Card". The student is offered three types of cards: +– "I understood everything" - – "I didn't quite get it, I doubt it"? – "I didn't understand". To evaluate myself was offered. Then, if the child chose the card "Did not understand" or "Did not quite understand, I doubt it", then together with the teacher, the students understood the assignment. After that, as a rule, the child chose the "I understood everything" card, which means that he increased his self-esteem.

10. "Colorways". Using colored pencils, the student was asked to independently assess how much he had mastered the material. After choosing one of the colors, the students made notes in their notebooks next to their classwork: – green is a signal of well–being: everything is clear to me, I can handle it, – yellow – insecurity: I didn't quite figure it out, – red is an alarm signal: I can't do it, it's hard for me.

In order to develop adequate self-esteem of younger students, increased attention was paid to creating an atmosphere of psychological comfort and support in the classroom. The teacher explained his assessment and remark. They praised even the insignificant successes of weak students. This led to the fact that the student began to respect himself, therefore, his classmates began to respect him. For children with high self-esteem, who had excellent academic results, it was suggested to "take patronage" over those who missed a lot (due to illness, for example), and now these children need help and support.

The purpose of the control stage of the scientific and experimental work is to diagnose the effectiveness of the developed and conducted set of tasks for the development of adequate self-esteem of younger schoolchildren. The results of the dynamics of the development of indicators of the level of self-assessment according to the methodology (V.G. Shchur) of the 2nd "A" class are shown in Figure 5.

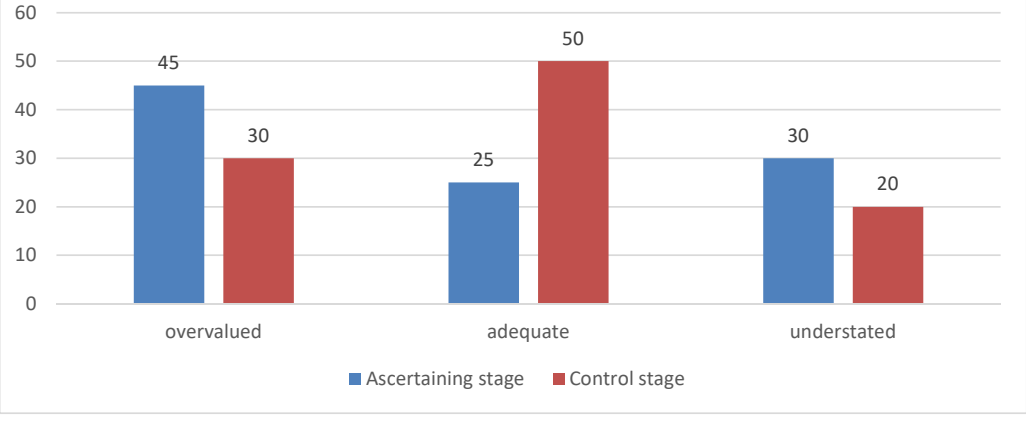

Figure 5: The results of the dynamics of self-esteem of younger schoolchildren using the "Ladder" method in the 2nd "A" class (experimental group)

The analysis of the data obtained shows that in grade 2 "A" the level of adequate self-esteem increased by 25% (5 people), which means that 5 students now have adequate self-esteem. The level of overestimated self-esteem decreased by 15% (3 people), and underestimated by 10% (2 people). It can be noted that at the control stage of the study, primary school-age children began to note a more realistic assessment of themselves, a meaningful approach, while inadequate self-esteem prevailed in children at the ascertaining stage. Let's compare these indicators with the result of self-assessment diagnostics with the control group (2nd "B" grade). The results are shown in Figure 6.

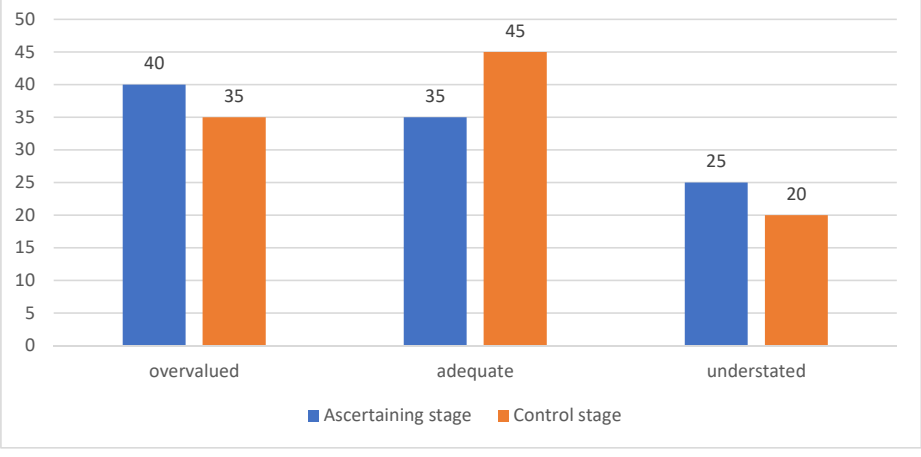

Figure 6: The results of the dynamics of self-esteem development using the "Ladder" method in the 2nd "B" class (control group)

In the 2 "B" class, we also observe positive dynamics, but they are completely insignificant – the level of adequate self-esteem increased by 10%. The levels of inflated and diminished self-esteem decreased by 5%. During the repeated administration of the "Subtest No. 1" in the 2 "A" class, data were obtained as shown in Figure 7.

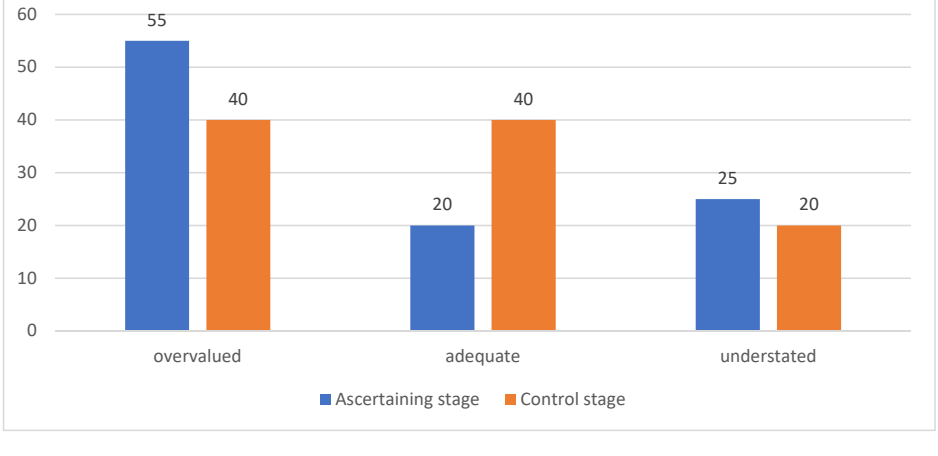

Figure 7: Results of the dynamics of self-esteem development among primary school students according to the "Subtest No. 1" methodology in the 2 "A" class (experimental group)

The analysis of the diagram indicates that the level of adequate self-esteem in the 2 "A" class increased by 20% (4 individuals). The level of inflated self-esteem decreased by 15%, and that of diminished self-esteem by 5%. Comparing the results of the methodology's application at the

initial and control stages, it is noted that before the implementation of the set of tasks, children more frequently demonstrated an inadequate (either high or low) level of self-esteem, whereas at the control stage, children more often began to demonstrate realistic self-esteem. In the 2 "B" class, the dynamics of the indicators turned out to be somewhat smaller (Figure 8).

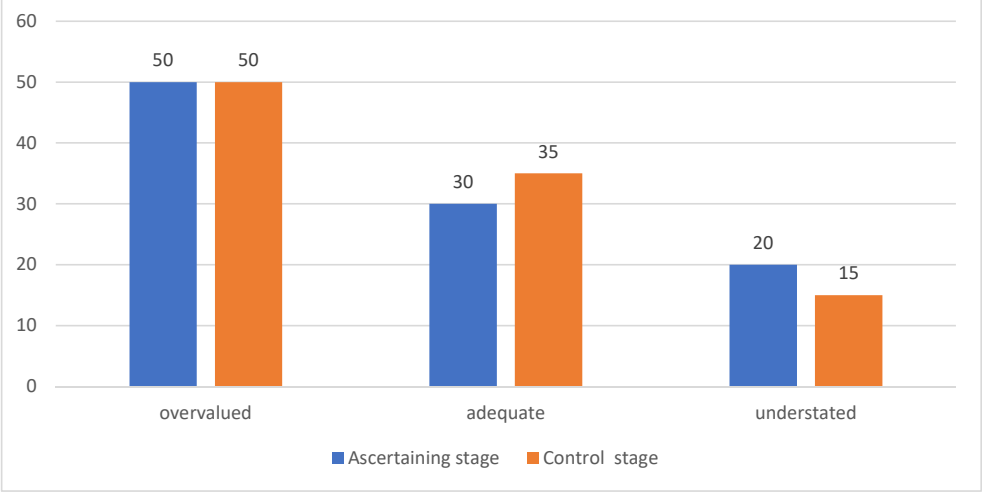

Figure 8: Results of the dynamics of self-esteem development among primary school students using the "Subtest No. 1" methodology in the 2 "B" class (control group)

The level of adequate self-esteem increased by 5% (1 person), the level of inflated self-esteem remained unchanged at 50%, and the level of diminished self-esteem stands at 15% (3 persons). The third methodology is "Determining the Quantitative Expression of Self-Esteem" by S.A. Budassi. The dynamics of the diagnostic indicators in the 2 "A" class are shown in Figure 9.

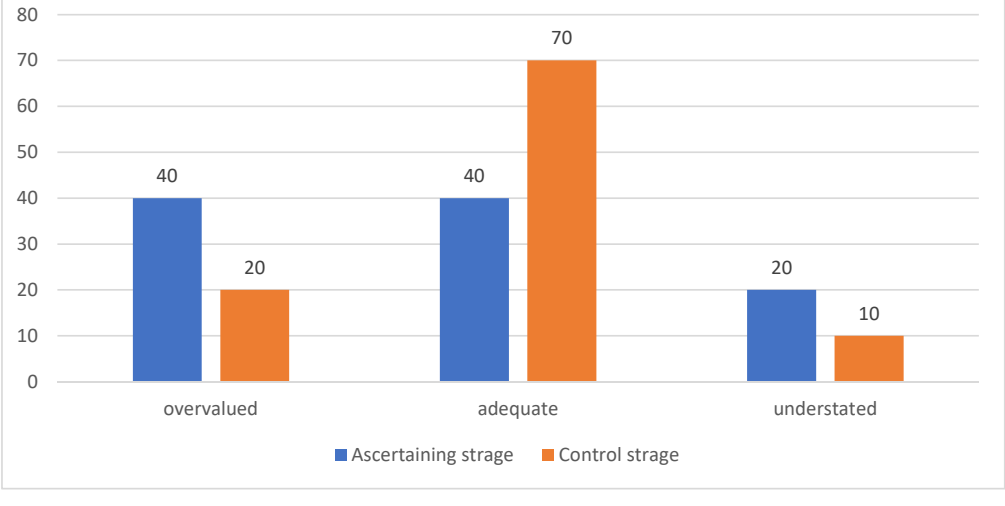

Figure 9: Results of the dynamics of self-esteem development among primary school students using the "Determining the Quantitative Expression of Self-Esteem" methodology in the 2 "A" class (experimental group)

According to the results of the conducted methodology, we see that in the 2 "A" class the level of adequate self-esteem increased by 30% of the total number of students in the class. The level of inflated self-esteem decreased to 20%, and the level of diminished self-esteem to 10%. After the implementation of the program aimed at forming adequate

self-esteem, primary school children more frequently demonstrated an adequate level of self-esteem. For instance, the students began to evaluate their intellect, authority, and physical appearance significantly more realistically. Figure 10 presents the results of the dynamics of the indicators using this methodology in the 2 “B” class.

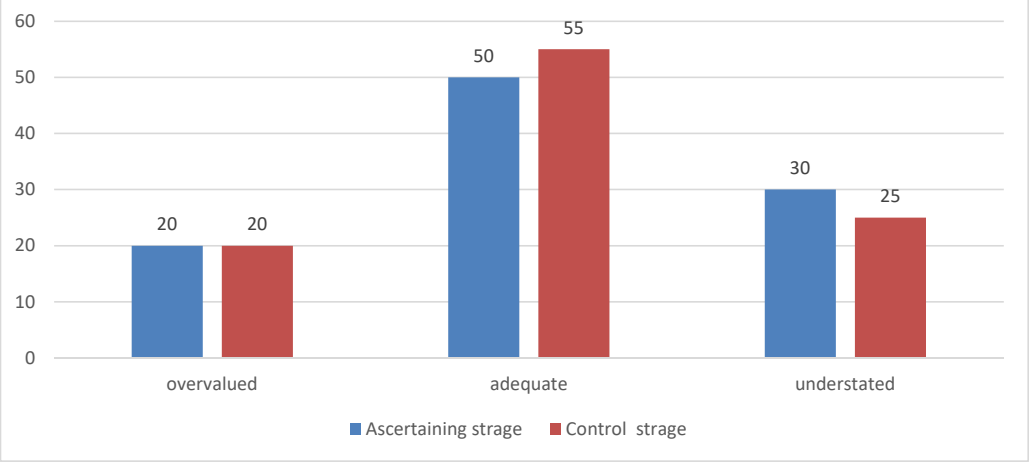

Figure 10: Results of the dynamics of self-esteem development among primary school students using the “Determining the Quantitative Expression of Self-Esteem” methodology in the 2 “B” class (control group)

In the diagram, we can see that the level of adequate self-esteem increased by 5%. The level of inflated self-esteem remained unchanged, while the level of diminished self-esteem decreased by 5%. To assess the effectiveness of the set of tasks aimed at forming adequate self-esteem among primary school children, it is necessary to analyze the dynamics of the indicators in the experimental class at the control stage. Figure 11 reflects the indicators of the 2 “A” class at the initial and control stages of the experiment.

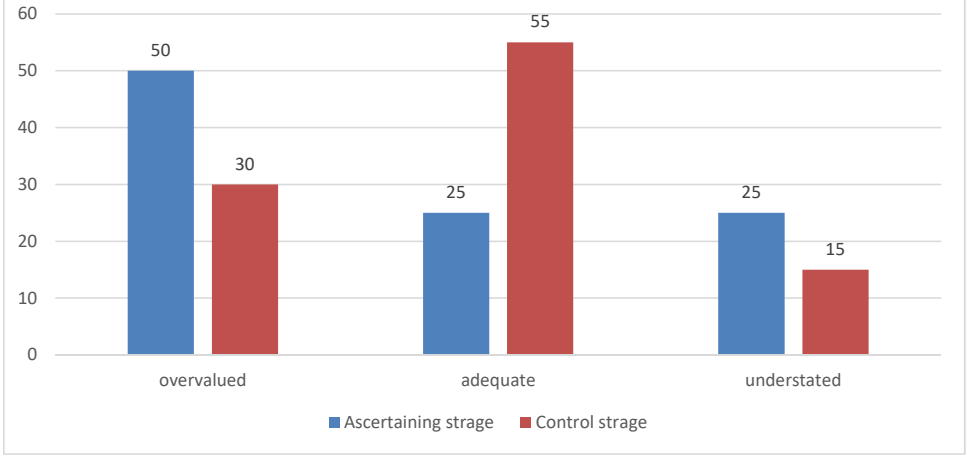

Figure 11: Dynamics of the Overall Self-Esteem Formation Indicator in the Experimental Group

Thus, the obtained data indicate that the dynamics of the adequate self-esteem indicator in Class 2 “A” reached 30%. The inflated self-esteem level at the control stage was 35%, which is 15% lower than at the initial stage, while the diminished self-esteem indicator decreased by 15%. It can therefore be concluded that at the control stage of the study a larger number of children exhibited an adequate level of self-esteem, accompanied by a good development of

communicative skills and a low degree of anxiety. Notably, the self-esteem dynamics of younger schoolchildren at the control stage reveal an increased number of children with adequate self-esteem and a reduced number with low self-esteem. It is evident that the intervention-a set of tasks aimed at fostering adequate self-esteem-contributed to the normalization of self-esteem among primary school children. It is also worthwhile to examine the dynamics of the overall self-esteem development indicators in the control group, as presented in Figure 12.

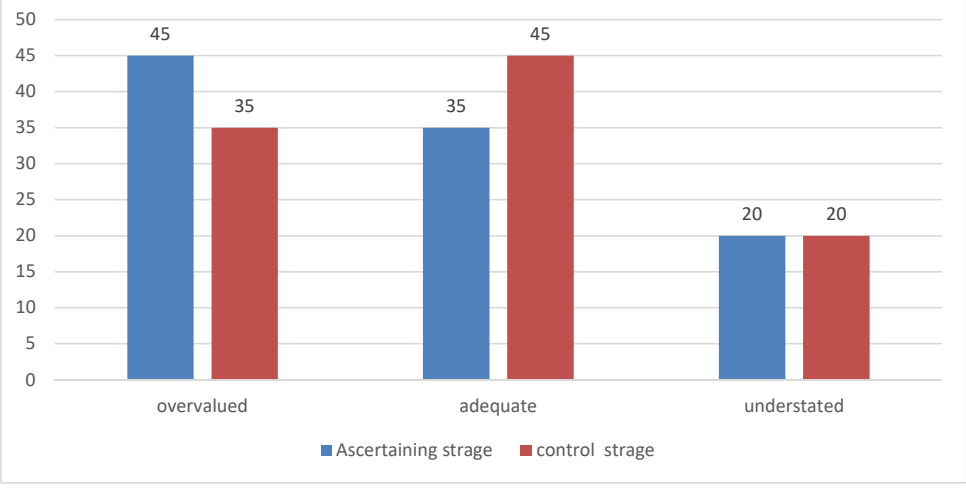

Figure 12: Dynamics of the Overall Self-Esteem Formation Indicator in the Control Group

In the control group, we also observe a positive dynamic in the development of adequate self-esteem, albeit a modest one: the level of adequate self-esteem increased by 10% (2 individuals), the inflated self-esteem level decreased by 10%, and the low self-esteem level remained unchanged at 20% (4 individuals). To determine the peculiarities of forming adequate self-esteem in younger schoolchildren, an experimental study was organized and conducted.

Discussion. In our study, we define adequate self-esteem as an individual's ability to realistically assess their abilities, achievements, and shortcomings across various spheres (such as academics, social interactions, sports, etc.), as well as their behavior, aligning these evaluations with generally accepted norms and expectations-without undue overconfidence or self-deprecation. Since adequate self-esteem is only beginning to develop in primary school children, it is more amenable to intervention and adjustment than in adults. Therefore, understanding a child's self-esteem is crucial for establishing relationships and facilitating effective communication (Rogov, 2015). Throughout the process of upbringing and education, under the influence of evaluative judgments from peers and teachers, children internalize certain norms and values. They develop a tendency to assess their own capabilities, which is an essential component of self-esteem. Primary school students initially learn well within the framework of family relationships, and sometimes even perform better when guided by team dynamics. Personal motivation also plays a key role-striving for high grades and seeking approval from teachers and parents (Kohut, 2015).

The teacher's significant pedagogical influence on younger schoolchildren stems from the fact that, from the outset of their education, the teacher becomes their unquestionable authority. This authority is a fundamental prerequisite for the formation of adequate self-esteem in young children. A child's self-esteem is particularly affected by the evaluation given by their teacher. In assigning a grade, the teacher appears to assess not only the child's performance but also their overall personality, potential, and place in the world. Thus, children take the grades assigned by the teacher very seriously. Based

on these evaluations, they position themselves and their classmates within a social hierarchy. This may result in categorization into high achievers, those who lag behind, or those who perform averagely. They may also be divided into groups such as the lazy versus the diligent, those who answer or do not answer questions, discipline offenders versus obedient students. Typically, assessment is carried out through formal grades recorded in a diary or log, though verbal assessments also occur. It is important to note the significant differences between these two forms of evaluation.

A grade recorded in a journal is an official document; therefore, the teacher assigns it based on specific criteria and societal standards. In contrast, a verbal assessment is informal, shaped by general societal expectations that are not strictly regulated, although they must not contradict humanistic principles or hinder the student's development. For a teacher, a verbal evaluation is often more consequential than a recorded grade. Typically, high-achieving students develop a high-and often inflated-self-esteem, whereas weaker students tend to develop low, mostly diminished self-esteem. However, even successful students may struggle to accept low evaluations of their performance and personal qualities, leading to conflicts that intensify emotional stress, anxiety, and confusion.

Weaker students gradually develop insecurity, worry, and shyness; they often feel out of place among their peers and exhibit caution toward adults. In contrast, self-assured children who strive to independently tackle academic challenges and build relationships with their peers generally do not fear school. On the other hand, when it comes to an exaggerated level of self-demands, children may also fear failing to meet others' expectations, experiencing difficulties adapting to the school environment. In the early school years, the process of self-discovery and the formation of one's self-image continues, alongside the emergence of new needs that enable the student to act in accordance with their goals, moral standards, and emotions. The development of adequate self-esteem in primary school children is linked to their inclusion in a systematic learning process, which becomes increasingly complex in content and form through interactions with adults and peers. A young schoolchild is constantly evaluated in every action, a process that cultivates the ability to consider others' perspectives during self-assessment and leads to realistic perceptions of one's abilities (Borozdina, 2014).

The emerging adequate self-esteem in primary school children, as a product of self-awareness and self-realization, becomes an intrinsic and organic aspect of their personality. Adequate self-esteem instills confidence, facilitates the setting and achieving of career, personal, and creative goals, and fosters valuable qualities such as initiative, enterprise, and the ability to adapt to different social conditions (Vitushkina, 2014). In fostering self-esteem, educators should adhere to two principles: moderation and systematicity. The principle of moderation is based on the idea that any personal quality is beneficial only up to a certain point. Excess in this quality can lead to an inflated sense of self, a lack of self-criticism, and an inability to recognize one's shortcomings-resulting in a failure to pursue self-improvement. A child who believes they must always be first in everything, an impossibility, experiences internal conflict and distress. In such cases, it is crucial to teach the child to relieve both muscular and emotional tension (Kondratiev, 2008).

To boost a child's low self-esteem, adults should follow certain guidelines:

- praise the child in the presence of other children (but not excessively);
- avoid pressuring the child to perform tasks faster than necessary;
- do not assign tasks with strict time limits;
- teach the child techniques for relieving tension;
- use relaxation exercises;
- allow the child to make choices;
- provide opportunities for the child to evaluate themselves positively during play and social interactions.

To develop adequate self-esteem among primary school students, teachers should:

- methodically design evaluative activities that help the child understand the positive and negative aspects of their performance;

- place the child in situations where they must make choices-a fundamental educational requirement for fostering individuality. When a teacher encourages a student to make a conscious, desired choice, it helps them develop their own uniqueness;

- conduct relaxation games and exercises to alleviate muscular tension, partially or fully relax the body, and strengthen the nervous system. It is recommended to engage in physical activities after periods of intense concentration. It is also important to remember that the self-esteem formed in childhood will have a lasting impact, influencing academic performance and future achievements.

The study demonstrated that targeted self-esteem development during the pedagogical process-using relaxation games, reflective exercises, self-assessment sheets, peer evaluations, as well as praise and support-contributed significantly to the formation of adequate self-esteem in primary school children.

Conclusion. The development of adequate self-esteem in primary school children is a key factor in their successful adaptation to academic activities and social life. The conducted study shows that adequate self-esteem enhances self-confidence and boosts motivation to learn. Underestimating or overestimating one's abilities can lead to various problems, ranging from poor academic performance and anxiety to aggressive behavior and difficulties in peer interactions. It is essential to create environments in which children can realistically assess their achievements and failures, receiving support and constructive feedback from both teachers and parents. Effective methods for fostering adequate self-esteem include: encouraging effort rather than just results, creating an atmosphere of security and trust, developing reflection and self-analysis, and providing opportunities for independent decision-making and responsibility. Successfully forming adequate self-esteem in primary school children is the foundation for their harmonious development and future success. The development of adequate self-esteem is a continuous process that requires the attention and consistency of adults. It is important to remember that every child is unique and requires an individual approach. Even small successes, when supported and recognized, reinforce self-confidence and stimulate further development.

Utilizing game-based methods and specially designed classroom activities related to self-esteem, peer evaluation, and reflection contributes to the development of adequate self-esteem among primary school children. Through interactions with peers, children learn to assess themselves relative to others, which helps form a more realistic understanding of their abilities. Parents and teachers should avoid comparing children with one another; instead, they should focus on each child's personal achievements and progress. This approach prevents feelings of envy and competition, promoting healthy self-esteem and a positive self-image. Research on the adequate self-esteem of primary school children holds immense practical significance for the educational system and the psychological well-being of children. Understanding the peculiarities of self-esteem formation at this age enables the development of effective programs and methodologies aimed at supporting and enhancing positive self-perception. The comprehensive set of games and exercises proposed by the authors will assist teachers in adapting the educational process to create a conducive environment for every child's success. Future research in this area may explore the impact of the digital environment and social media on the self-esteem of primary school children, as well as the development of innovative methods for diagnosing and correcting self-esteem using modern technologies.

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Pedagogical Assessment of the Speech Activity of Modern Schoolchildren

Abstract

Introduction. The study addresses the need to reconsider approaches to developing speech activity among primary school students in the modern socio-cultural context, particularly focusing on the growing pedagogical problem of students experiencing "having much knowledge without understanding" and "awareness without a speech-based foundation of comprehension." The research examines the characteristics of speech activity development in "Literary Reading" lessons among students in inclusive education settings. *Methodology and Methods*. The research employs integration of theoretical-methodological and experimental-practical approaches with a focus on student personality and understanding patterns of speech development. Research methods include modified methodology by V.P. Glukhov for assessing the level of speech activity development among schoolchildren, and methodology for evaluating speech coherence by V.K. Vorobyeva and A.A. Leontiev. Pedagogical assessment involves identifying students' abilities to perform factual and semantic analysis of communicative interaction. *Results.* The study identifies specific features and patterns of speech development in primary school students, establishing indicators and criteria for pedagogical assessment of speech activity. The research reveals characteristics of the speech activity development process in inclusive educational settings, providing insights into effective approaches for modern socio-cultural contexts. *Scientific novelty*. The research contributes to rethinking the essence and content of "speech activity of modern students," offering innovative solutions that integrate theoretical understanding with practical application in inclusive education environments, addressing contemporary challenges in speech development. *Practical significance*. The findings provide educators with evidence-based approaches for developing speech activity in "Literary Reading" lessons, offering practical assessment tools and methodological guidelines that can be effectively implemented in inclusive education settings to address the identified pedagogical challenges.

Keywords: speech activity, pedagogical assessment, student personality, literary reading, pedagogical diagnostics.

Introduction. At the current stage of scientific knowledge, within the context of inclusive education, the problem of studying the processes of speech activity development in hard of hearing primary school students has not been sufficiently explored, which, in turn, necessitates targeted, specialized scientific research. In the context of inclusive education, the need for a unified system of literary education for hard-of-hearing students from first to eleventh grade is recognized as evident. Educators have developed various literary education programs for young schoolchildren, unified by the concept of developing speech activity during «Literary reading» lessons. (L.F. Klimanova, V.G. Goretsky, R.N. Buneev, E.V. Buneeva, M.P. Voyushina).

Synthesizing the research of T.V. Nesterovich, E.N. Marcinovskaya, E.G. Rechitskaya, and N.B. Zhienbayeva, we observe that the essence of the speech activity development process in deaf children lies in the implementation of pedagogical technologies within specially organized conditions. While acknowledging the significance of the research conducted, it should be noted that the issues related to the

development of speech activity in this category of students have not been sufficiently explored. Specifically: the features of the development and qualitative manifestation of the content components of speech activity have not been identified; the pedagogical conditions and technologies for the effective development of speech activity in grades 2–4 within the context of inclusive education have not been fully substantiated with regard to the characteristics of primary school age; and the significance of "Literary Reading" lessons has not been adequately revealed.

Furthermore, as is well known, «Literary reading» lessons continue to be regarded as preparatory for the systematic study of literature in special (remedial) educational institutions of Type II. According to N.E. Grash, E.L. Goncharova (2018) a significant improvement is required in the mechanism for assessing the quality of speech activity of hearing-impaired students. In applied research (M.I. Nikitina, N.B. Zhienbayeva, 2021), issues based on methodological approaches of activity theory based on the architecture of primary schools, where the communicative paradigm of speech activity development is a conceptual model of a «communicative subject» deployed in the speech activity dimension of the educational process, are considered.

The hard-of-hearing reader is considered as a subject who has formed a spiritual need for reading as a means of cognition of the world. (H.H. Svetlovskaya, L.E. Streltsova, N.D. Tamarchenko, 2004). Performing this task in a school for hearing-impaired children is fraught with great difficulties. This circumstance also determines the fact that a violation of the auditory analyzer leads to a complication of the ability of a hearing-impaired primary school student to learn the pronunciation that a student with normative development achieves. The specifics of speech activity development in hard-of-hearing children within the context of inclusive education, as well as the difficulties they face in comprehending what they read, are reflected in the fundamental works of A.G. Zikeev and K.V. Komarov. The ways and means of correctional work in literary reading lessons are described in sufficient detail in the research of J.B. Nikolaev, A.F. Pongilskaya.

The transformation of reading lessons into literary reading lessons with new tasks and an updated methodology is reflected in modern research in the field of special education. (V.G.Marantsman, 2006; E.G.Matveeva, 2001; I.A. Shapoval, 2000; Krasilnikova O.A., 2005). "Speech activity of a primary school student in the context of inclusive education" is a dynamic process of purposeful interaction, mediated by language and determined by the communication situation of real-life interaction. According to foreign researchers, the effectiveness of pedagogical approaches to the development of speech activity in modern students within the context of inclusive education lies in the following:

1. Integration of pedagogical technologies (computer-assisted language learning (CALL), can provide technical support to promote speech development (Driscoll, C., Kei, J., & McPherson, B. 2023).

2. Personalized development of speech activity, including visual aids, interactive classes (Psillas G., Psifidis, A., Antoniadou-Hitoglou, M., & Kouloulas, A. (2023);

3. The content of literary reading lessons significantly enhances the learning process of children in the context of inclusive education. (Vetter et al., 2020; Simkina, M. L., & Maltsevab, I. A. (2020);

4. The inclusion of literary reading in the process of developing speech activity, studying in order to form beliefs about the usefulness of mastering speaking (Markides, 2023; Saad Gad, Ibrahim Ahmed, & Abo Bakr Abd-Ellatef, 2020);

5. Interdisciplinary approaches can effectively influence the development of students' speech activity in the context of inclusive education, improve overall understanding of spoken and written language, and support long-term retention of information. (Elliott, Hirsh, & Simmons, 2021). Moreover, we find confirmation of this from domestic researchers: interdisciplinary integration is a strategy that has proven to be effective (Chulembayeva, M. Kulesza, A. Autayeva, 2019).

The use of standard psychological and innovative computer methods to study the effectiveness of screening logical and grammatical constructions in children with phonetic and speech impairments of basic literacy (Utepbayeva, A., Tapalova, O. 2024) is also a successful indicator of the introduction of integration pedagogical technologies. The specificity of speech activity is presented as the basis for the personal development of speech activity and is characterized by distinctive aspects in the process of exchanging informative components when exposed to behavioral transformations in communication relationships (Yeleussizkyzy, M., Zhiyenbayeva N, 2023).

As L.S. Vygotsky claimed: «The whole history of a child's mental development teaches us that from the very first days his adaptation to the environment is achieved through social means through others». In speech activity, the child forms his own inner world, his «self-image», appropriates and creates cultural values, acquires a circle of significant people, while acting as an active subject of interaction.

A.A. Leontiev's activity theory is «direct interpersonal communication in the process of speech activity».

Let us summarize the key points of the discussion on the theoretical aspects concerning the origins of speech activity in primary school students within the context of inclusive education.

Based on a comparative analysis of pedagogical research, speech activity is characterized by the following indicators:

1. Structural organization (external and internal).

2. Subject matter (literary reading lessons).

3. The unity of the content and form of speech activity of children with hard of hearing.

The structural organization of speech activity in students with special needs within the context of inclusive education is defined by its three-phase nature:

1. The incentive-motivational phase as the source of the essence of speech activity and becomes a cognitive motive. The motive determines the dynamics and nature of speech activity.

2. The tentative research phase involves the organization of means, conditions, and means as a substrate for the emergence of a positive effect of speech activity.

3. The external attributes of performing the expressed ones are speaking and writing in the performing phase and listening and reading through the unexpressed ones.

The meaningful subject of speech activity lies in the fact that thought is a mirror image of objects and phenomena of reality in their relationship. In this interpretation, it is logical to consider thought as a unit of thinking of the speaker through a measure of reproduction or productivity. The subject-based productive type of speech activity is determined by the mental operations of the communicant. In order for the process of producing mental activity to occur, expressing through the perception of one's own and the perception of another thought, speech activity will be directed. The form and content are unified in the production of various types of speech activity. The content of speech and its activity is the reproduction of a mental image of a reversible utterance. The form of speech and its activity is perception, memory when creating an active, effective act of internal and external thought.

Directions of speech activity of hearing-impaired primary school students: the nature of the speech action: «Thought-Word» or «Word-Thought». Expressed types of speech activity: «Speaking-Listening», «Writing-Reading». The structure of the interdependence of the complex of forms and species diversity of speech activity is determined by:

- «Speaking - Writing» mediates and implements the expression of feelings, moods;

- «Listening - Reading» implements the expression of meaningful techniques, assessment, analysis and interaction of types of speech activity.

Table 1. *Essential characteristics of speech activity (classification by I.A. Zimnaya)*

1.Oral and written communication (types of speech activity - SA):	
«Speaking-Listening»	- mechanisms and tools of oral communication
« Reading- Writing »	- mechanisms and tools of written communication
2. Productive activity of the speech relationship:	
«Listening - Reading»	uditory and visual sensory systems are used for speech activity.
«Speaking - Writing»	speech-auditory motor and visual apparatus for speech activity and relationships.
3. Reactivity and initiative of speech interaction:	
«Speaking - Writing»	- activity of the communication act, determines listening and reading;
«Listening - Reading»	- the effectiveness and qualitative characteristics of speaking and writing
4. The specifics and nature of the relationship between speech and thinking:	
«Speaking»	an external attribute of the formation and formulation of a thought act;
«Writing»	fixation and transmission of thought formation.
5. Types of speech activity: the external essence.	
«Speaking - Writing»	external attributes and active productive diversity of the processes of mental recognition of the speech of the «Other»;
«Listening - Reading»	the procedure of external non-expressed and internal speech activity and activity conditioned by the desire to work in the cognitive and mental (verbally within oneself) spheres
6. Feedback types in the process of speech activity:	
«Speaking - Writing»	the implementation of kinesthetic biofeedback from the stimulated executive organ of the performer – the hand to the person responsible for the software of a specific part of the brain.

Summarizing the characterological aspect of speech activity, we come to the following conclusion. The speech activity of a hearing–impaired primary school student is a structural and meaningful activity that has its own focus and motivation, actively improving the process of creating, living, directing and receiving through thought expressed in words, subsequently through social means; language and method – speech, help to form in order to understand each other through speech.

Materials and Methods. The study as conducted in two institutions: MPI «Regional special complex «Kindergarten-boarding school №1 Taldykorgan» and «Special Boarding School №5» of the Department of Education of Almaty. To ensure the reliability of the study, the sample sizes were increased beyond the minimum requirements. Assuming an effect size (Cohen's d coefficient) of 0.5, a power 0.8, and an alpha level 0.05, the initial required sample size was approximately 64 students per group, for a total of 78 participants. The participants were hearing-impaired students from grades 3 to 4. The distribution of participants by class was as follows: 41 3rd grade students (20 in the control group and 21 in the experimental group), 37 4th grade students (20 in the control group and 17 in the experimental group).

We carried out a comparative analysis of the levels of speech activity that we had previously determined, as in the ascertaining experiment (AE1). Based on the data shown in Table 2, it can be concluded that the majority of the experimental group studied had "relatively high" and "average" levels of speech communication at the time of the control experiment (CE2). While the majority of the subjects in the control group turned out to be at "low" and "medium" levels. Although initially in both groups, for the most part, they were at a "low" level.

Table 2. Levels of speech activity of hearing-impaired students (control stage), %

Group	Class	Number of people	Relatively high level		The average level		Low level	
			AE 1	CE 2	AE 1	CE 2	AE 1	CE 2
EG	3 «А»	21	—	4	3	6	7	0
	4 «А»	17	2	0	4	4	7	0
CG	3 «Б»	20	3	2	10	3	2	3
	4 «Б»	20	1	3	4	4	1	2

The level of speech activity of the participants in the experimental group significantly exceeds the communicative skills of the participants in the control group. The majority of EG participants (87.3%) are characterized by a relatively high level of speech communication, 28% of children in CG reached this level. There were no students in the experimental group with a low level of speech communication at the control stage of the experiment. Basically, the level of speech communication increased significantly among the participants of EG (grades 3 “A”, grades 4), whereas in CG (grades 3 “B”, grades 4). The positive changes in the formation of communication skills were insignificant. The quality of teaching was measured using an integrated assessment, which was formed by the following approaches (Table 1). A point system in which each indicator is assigned a certain score. The integral indicator is obtained by simply summing up the scores. The assessment of the teaching quality is an average weighted average assessment based on the totality of the identified factors. This takes into account the external assessment from interested consumers - students, as well as the self-assessment of the teacher himself.

Results and Discussion. Table 3 shows the mechanisms of pedagogical assessment of the speech activity of hearing-impaired students, such an assessment is relatively new in educational practice, since the following mechanisms are considered: the conditions of the process of organizing lessons «Literary reading»; the implementation of the process of awareness; the level of development of speech activity.

Table 3. *Mechanisms of pedagogical assessment of speech activity of hearing-impaired students*

Baseline assessment	clarifying the content of a story through understanding the meanings of words and phrases.	explanation of words and phrases, play dramatization, children’s illustration
The teacher’s organization of the «Literary reading» lesson	organization of speech activity at the lesson	assessment of the preparation of the hearing-impaired for the «Literary reading» lesson
Illustrated text analysis	the effectiveness of using techniques aimed at the development of speech communication	the presence of motivation for speech activity
The level of awareness	the influence of the «Literary reading» lesson on the development of speech activity	satisfaction

The assessment objects shown in table 3 are the most important from the point of view of ensuring the quality of speech activity of hearing-impaired students. Baseline assessment: clarifying and comprehending the actual content of the work through understanding the meanings of words, phrases, individual phrases and passages. Such techniques include explaining words and phrases, dramatizing individual episodes, working on a constructive picture, illustrating children, and having a conversation of a reproducing nature. Illustrated text analysis. The text is analyzed according to logically completed parts, which are

determined by the teacher based on the content and structure of the work. Deep text analysis is facilitated by lexical and stylistic exercises, analytical conversation, selective reading, verbal drawing, working on a plan, and various types of retelling. Constructing your own monologue utterance. Retelling is one of the main types of coherent utterance that prepares students to construct their own utterances. First, it is suggested to prepare a retelling by analogy with the sample. Creative work. Composing dialogues, conjecturing the continuation of the text, composing stories based on an imaginary situation and on a given topic, acting out scenes from works, composing riddles, jokes and counting-out rhymes. Expressing your own impression of the work you have read. Students should be consistently prepared for it. To begin with, students repeat the rules by which the text is constructed, but they do this not in the form of reproducing formulations, but during the analysis of the sample text.

Table 4 shows the indicators for assessing the speech activity of primary school students in the lessons of «Literary reading». The content of the evaluation indicators is presented: vocabulary, the sequence of text content, the features of coherent speech in the composition of a story, independent planning of a monologue, correct reproduction of the text being read, perception of a literary character, awareness of the idea of the story.

Table 4. *Pedagogical assessment of speech activity in primary school students during "Literary Reading" lessons*

Evaluation indicators	The content of the estimated indicators
Vocabulary	inaccurate and incorrect use of words, persistent violations in the construction of different types of sentence types, the predominance of the same type of memorized patterns (questions and answers).
Reproduction of the sequence of text content	breaking the storyline, reproducing individual fragments and «getting stuck» on listing individual details
Features of coherent speech in the composition of a story	incorrect reproduction of cause-and-effect relationships, the lack of links to achieve the semantic integrity of the story.
Self-planning of a monologue	the monologue consists of simple sentences that have structural and semantic incompleteness, while retelling incomplete information, a violation of the sequence of the storyline and omission of significant parts and details.
Correct reproduction of readable text	understanding the characters of the main characters, an adequate assessment of the emotional coloring of the work.
Perception of a literary character	the behavior of the hero and the qualities of his character are subjective; the evaluation of a literary hero is influenced by an emotional attitude towards him (like or dislike); a critical attitude towards the character is introduced; when studying the character of a literary character, analysis prevails over synthesis.
Awareness of the idea of the story	comprehend the plot of the work rather than its ideological intent; they can retell the plot of the story, understanding the situation and the actions of the character.

The results of the diagnostic study carried out on the basis of the MPI «Regional special complex «Kindergarten-boarding school №1 Taldykorgan» and «Special Boarding School № 5» of the Department of Education of Almaty with the participation of students in grades 3-4 showed that the greatest difficulties are noted in vocabulary. In the process of experimental research, we recorded the substitution of non-verbal means of communication as an act of compensation for the poverty of vocabulary. Inaccurate and incorrect use of words, persistent violations in the construction of different types of sentence types, the predominance of the same type of memorized patterns (questions and answers).

The reproduction of the sequence of text content (100%), which is manifested in the

violation of the storyline by reproducing individual fragments and «getting stuck» on the enumeration of individual details, was a great difficulty for primary school students with hard of hearing. The vocabulary of hearing-impaired primary school children was low in terms of its quantitative and qualitative values compared to the age norm, and the passive vocabulary was wider than the active one. Incorrect forms of words were noted in the formation of possessive, qualitative and relative adjectives – 84%. During the performance of this task, visual material was used to facilitate the most correct answer after self-correction.

During the diagnosis, it was revealed that 84% of children have a predominant nominative vocabulary, and attributive and predicative vocabulary is used less frequently. It should be noted that all children (100%) were characterized by the predominance of everyday vocabulary, which primary school students encounter on a daily basis. A characteristic feature was that in some cases the students used words in too broad a meaning, in others, on the contrary, they used a narrow meaning of the word in speech. Among the predominant verbal paraphasias in the nominative dictionary, we note the substitutions of words included in the same generic concept. Paraphasias among attributive vocabulary were associated with the inability of primary school students to identify and differentiate the distinctive features, qualities and characteristics of objects. Having studied the features of coherent speech in this category of children in the composition of a story, 60.2% of children had minor distortions of actions, incorrect reproduction of cause-and-effect relationships, and the lack of links to achieve the semantic integrity of the story.

During the retelling of the text, agrammatism (100%), stereotyping in the design of speech utterances (67.4%), numerous verbal repetitions (57.8%), and the inclusion of extraneous information in the retelling (37%) were noted. Children with hard of hearing experience difficulties in self-planning a monologue, the operational side suffers: the monologue consists of simple sentences that have structural and semantic incompleteness, incomplete information is provided during the retelling, the sequence of the storyline is disrupted and significant parts and details are omitted. The predominant type of sentence among the students was a simple, non-extended sentence (100%).

Hearing-impaired primary school students understand the plot of a work better than its ideological intent. They can retell the plot of a story, revealing at the same time a complete understanding of the situation and the actions of the character, but they cannot independently draw a conclusion about what the story teaches. A literary character is perceived naively and realistically, and the analysis of the hero's behavior and the qualities of his character turns out to be very simplified and superficial. The evaluation of a literary hero is done under the influence of an emotional attitude towards him (like or dislike), but gradually, during the training, a critical attitude towards the character is introduced.

When studying the character of a literary character, analysis prevails over synthesis. The students list the hero's actions, but they find it difficult to draw a conclusion about his character. The inner world of the hero - his reflections, experiences - are interpreted worse than the external signs of behavior. Questions aimed at clarifying the mood of a literary character cause difficulties and even bewilderment among schoolchildren. The understanding of the emotional state of the characters in a literary work by hard-of-hearing primary school students largely depends on the way they are portrayed. Hearing-impaired people perceive the description of experiences conveyed using verbs quite clearly. The dynamism and clarity of the presentation, expressed by verbs, contribute to a better understanding of the episode and understanding the author's attitude towards the character. For hard-of-hearing children, it is most difficult to understand those literary characters whose experiences are conveyed in the form of a description of an inner state, for example, the heart began to pound, capture the spirit, catch breath.

Hearing-impaired primary school students find it difficult to formulate the idea of the work

they read. They are able to generalize only the specific situation presented in the text, but they cannot go beyond the context. The plots of the stories are interpreted with very different degrees of completeness, depth and consistency. Gross errors are noted in the reproduction of the order of actions of the characters and in the systematization of facts around definitions, synonyms, antonyms, specific and generic concepts, logical definition, and the use of context. These techniques for explaining unknown words are recommended for use in all lessons where vocabulary work has to be applied.

Conclusion. Based on the conducted analysis of pedagogical research on speech activity, a system of system-forming characteristics of the phenomenon under consideration was identified. Speech represents a unique life-affirming activity that serves as an activator of personality's mental development and is characterized by a multifunctional nature, including communicative, indicative, intellectual, and semantic functions. The polymorphic structure of speech activity manifests itself in the existence of external and internal forms capable of mutual transformation, while speech is characterized by a pronounced psychosemantic component, where the word serves as a subjectively correlative unit of speech communication. The process of speech development exists in a state of mutual interdependence with the development of thinking and consciousness, emphasizing the importance of the pedagogical process in the comprehensive development of speaking, listening, reading, and writing skills.

The implementation of the identified theoretical principles in practical pedagogical activities with hearing-impaired primary school students was carried out in accordance with the standard curriculum for primary education for this category of children. During experimental instruction in literary reading lessons, teachers required each student to verbally articulate all educational material, paying particular attention to the prosodic organization of speech. Hearing-impaired students purposefully developed motives for mastering oral speech, which contributed to achieving high results in the process of its perception and reproduction in active oral communication.

The results of the control stage of the experiment demonstrated the effectiveness of the proposed methodology: the overall level of speech communication increased, manifesting in students' improved understanding of the meaning of oral speech and more frequent use of words and phrases in dialogical and monological speech, while participation in text retelling acquired a more meaningful and active character. Thus, the development of speech activity in hearing-impaired primary school students through literary reading lessons represents a comprehensive process that ensures the formation of skills in perceiving artistic words, creating independent creative utterances, and developing dialogical and monological forms of speech, which confirms the practical significance of the identified theoretical principles regarding the nature of speech activity.

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Case Method in Professional Language Education at Universities

Abstract

Introduction. The study explores the case method as an instructional strategy in foreign language education, addressing the need to enhance language acquisition and professional competence among students while bridging the gap between theoretical knowledge and practical application in professional communication scenarios. *Methodology and Methods.* The research employed a competence-based approach focusing on developing students' professional worldview and competencies. The study utilized theoretical methods including relevant literature review, and empirical methods encompassing pedagogical observation and analysis of the author's teaching experience with second-year students in professional foreign language education settings. *Results.* The findings indicate that employing the case method in foreign language studies effectively develops professional competence, improves students' ability to analyze situations, evaluate alternatives, and select optimal problem solutions. The research demonstrates that implementing the case method creates conditions closely resembling real-life scenarios and fosters development of foreign language professional competence. Teaching Professional Foreign Language through case methodology extends beyond mandatory curriculum topics by grounding instruction in current problem situations from practice, serving as a valuable tool for achieving objectives in professional communication scenarios. *Scientific novelty.* The research contributes to advancing pedagogical practices in professional foreign language education by establishing the theoretical framework for integrating case methodology with competence-based approaches, demonstrating how case studies can effectively bridge linguistic and professional development needs. *Practical significance.* The study provides evidence-based insights for educators to enhance foreign language teaching practices, offering practical approaches for implementing case methodology in university settings to improve formation and development of students' foreign language professional competence while addressing the linguistic needs of future specialists.

Keywords: interactive learning, case method, foreign language, professional competence, competence-based approach, professional activities.

Introduction. Learning a foreign language is a mandatory component of professional training for future specialists in medical universities. The contemporary approach to language education focuses on providing professionally oriented instruction in foreign languages, aimed at developing the necessary competencies for effective communication in the students' future careers. The state compulsory educational standard for higher education mandates the incorporation of professional specifications into the foreign language curriculum to enhance communicative competence in foreign languages within particular professional fields (State compulsory educational standards, 2025).

The case method (Hammond, 1980; Barnes, 1994; Christensen, 1994) is recognized as one of the most effective interactive learning strategies for teaching a professional foreign language. This method emphasizes students' independent activities within a simulated professional environment, where they engage with both theoretical knowledge and practical skills essential for their future roles (Kalust'yants, 2020). The case method incorporates real social, economic, and business scenarios, requiring students to analyze situations, identify

problems, propose potential solutions, and select the most effective one. These cases are grounded in factual material or closely resemble professional situations.

Originally developed at Harvard Business School in the 1820s, the case method was first applied in the fields of law and medicine during the 19th century (Harvard Business School (HBS), 216). Over time, it has been adopted in various disciplines, including psychology, pedagogy, and language learning (Tcurkan, 2021). The problems of the case study method have been examined by researchers such as S.M. Gass, L. Selinker, A.L. George, E. Bennett, M.V. Kuimova, V.V. Filonova, and others, whose contributions have led to significant advancements in this field. However, the issue of effectively utilizing case studies in the education of university students remains unresolved.

The case method (George, 2019; Rashid, 2019; Priya, 2021) offers numerous advantages for learning a foreign language. It enhances language proficiency and facilitates its application in professional contexts, fosters creative thinking, encourages students to think in the target language, and develops skills in public speaking, questioning, discussion, and argumentation. Additionally, it improves students' abilities to read professional literature in a foreign language and process information relevant to their field, while promoting teamwork and collaborative problem-solving. The method also supports both individual and group independent work among students (McLean, 2016). By studying real or hypothetical scenarios that future specialists may encounter in their fields, the case method enables students to analyze complex situations, devise problem-solving strategies, and engage in discussions about their solutions. This approach not only deepens students' understanding of the language but also allows them to apply their knowledge in practical contexts. However, it is crucial for educators to recognize the distinctions between cases and situational tasks (Vinokurova et al., 2020, p. 89).

Creating a case involves a complex pedagogical process. When developing a case, it is essential to clearly define the objectives and select materials that align with the students' proficiency levels. Cases should be relevant and illustrative, presenting situations that can only be resolved through discussion and analysis. Students are presented with a case that includes an unresolved problem, structured with a clear framework comprising a problem situation, discussion questions, and tasks, along with supplementary information in appendices (Torres et al., 2023). Contemporary scholars assert that employing the case method in foreign language studies enhances overall language proficiency, fosters the development of linguistic and communicative competencies, and improves students' abilities to analyze situations, evaluate alternatives, and select optimal solutions. Vocabulary and grammatical structures are introduced and practiced within the context of professional communication scenarios, rather than through traditional general exercises, which actively engages students and positively influences their motivation and attitudes toward language learning. The application of case method technology is particularly relevant in the current landscape of higher medical education (Makusheva, 2020).

Materials and Methods. The analysis of the use of this methodology on the example of teaching medical students a foreign language was carried out on the basis of a competence-based methodological approach, which made it possible to consider the research problem taking into account the formation of a professional worldview, as well as professional competencies of future specialists. The theoretical methods were the analysis and generalization of the scientific literature on the use of the case method in the educational process of a modern university. Empirical methods included pedagogical observation, heuristic method (selection and analysis of clinical and linguistic material), analysis of the author's own experience as a teacher of a foreign language to 2nd-year students of the Medicine Faculty at the S.Zh. Asfendiyarov Kazakh National Medical University. Additionally, a survey was conducted to assess respondents' reactions to the case method. Forty-five second-

year students from the Faculty of Medicine at S.Zh. Asfendiyarov Kazakh National Medical University participated in the survey. The questionnaire was administered online, allowing participants to complete it remotely via a digital platform.

The questionnaire was carefully designed to effectively gather participants' perceptions of the case method. The questions were selected based on relevant literature and previous studies to ensure they addressed key aspects of respondents' attitudes and experiences. The final questionnaire consisted of 7 questions, primarily structured as closed-ended items to facilitate quantitative analysis. These included Likert-scale questions, where participants could choose from options such as Strongly Agree, Agree, Neutral, and Disagree, allowing for straightforward measurement of their opinions. The design aimed to be clear and concise, ensuring that participants could easily understand and respond accurately.

Results and Discussion. The educational process in modern universities is complex, involving not just knowledge transfer but also the education and social adaptation of students. Teachers need extensive subject expertise, organizational skills, and effective communication abilities. They play a vital role in building positive relationships with students and fostering a productive learning environment. To improve education quality, it is important to analyze the educational process and promote effective teacher-student interactions based on psychological and pedagogical principles. Interactive methods like surveys and questionnaires help assess teaching performance, identify challenges, and gather student feedback, ultimately enhancing the educational experience (Togizbayev et al., 2024).

The following areas of communication in the professional activities of medical university graduates can be identified:

- discussion of professional situations using medical terms;
- preparation and translation of medical documentation, including descriptions of diseases, treatment methods, techniques, experiments, procedures, drugs, technical means;
- participation in international professional conferences, seminars etc.;
- communication with a patient in English in emergency situations (Bryksina et al., 2023).

Work with this case was organized in four stages:

1. Stage of preparation.
2. Stage of immersion in the communication situation.
3. Stage of analysis of tasks and solution methods.
4. Stage of control.

The online survey was proposed to determine the respondents' reaction to a case method. Forty-five 2nd-year students of the Faculty of Medicine of S.Zh. Asfendiyarov Kazakh National Medical University took part in the survey. Students chose an answer from four proposed options (Strongly agree, Agree, Neutral, Disagree). The results of the student survey upon completion of using the case method in the course "Professional Foreign Language" are presented in Figures 2-7. Summarizing the data obtained as a result of the survey allowed us to draw the following conclusions: A significant majority of participants responded positively to the question regarding the enhancement of motivation for learning a foreign language in professional communication contexts, with 73.3% indicating "Strongly agree" and 23.3% selecting "Agree" (Figure 1). For the second question, concerning the encouragement of communication in a foreign language through the use of case studies, 63.3% of respondents answered "Strongly agree" (Figure 2).

Table 1. *A questionnaire on the use of case method*

The case method helps	Strongly agree	Agree	Neutral	Disagree
increase motivation for learning a foreign language taking into account professional interests and needs				
stimulate communication in a foreign language				
integrate theoretical knowledge and practical actions				
acquire teamwork skills				
overcome the "language barrier"				
develop the ability to make independent decisions				
master spontaneous speech skills				

The third survey question, which focused on the effectiveness of the case method in merging theoretical knowledge with practical application, received responses indicating that 56.7% of students "Strongly agree", 33.3% "Agree", 6.7% were "Neutral," and 3.3% "Disagree". This suggests that students are largely satisfied with the case method's effectiveness in developing the mentioned skills.

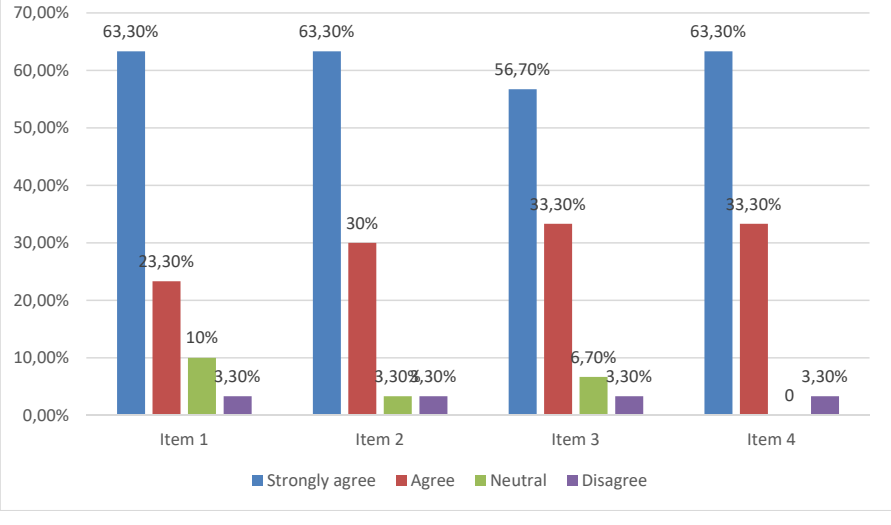

Figure 1: Results of the questionnaire – Items 1-4

According to just over half of the students, the case method aids in the development of teamwork skills, with 63.3% responding "Strongly agree" and 3.3% expressing disagreement. When asked about the effectiveness of the case method in overcoming the "language barrier" and enhancing language skills for discussing professional issues in a foreign language context, a majority of students responded positively, with 56.7% indicating "Strongly agree", 6.7% being "Neutral", and 3.3% disagreeing with the statement. 66.7% of respondents reported that they are developing their ability to make independent decisions (Figure 2).

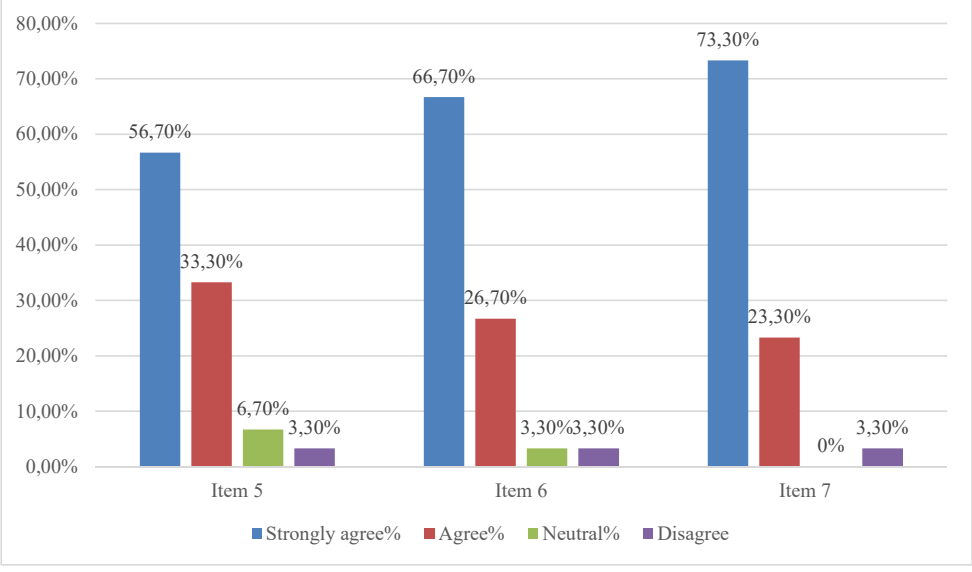

Figure 2: Results of the questionnaire – Items 5-7

A large portion of students (73.3%) strongly agreed that they are improving their spontaneous speaking skills through the case method. The case method possesses several didactic properties. Students are presented with a case (situation) that includes an unresolved problem. Each case has a clear structure, comprising a problem situation, discussion questions and tasks, as well as appendices containing additional information. Multiple students can engage in the discussion of the situation simultaneously (Table 1).

Table 2. *Case Study Example for Medical Students*

Title: Managing a Patient with Asthma in a Multicultural Context	
Background: Maria, a 30-year-old female patient, visits the clinic for a follow-up appointment. She is originally from Mexico and has been living in the United States for the past 5 years. Maria has a history of asthma, which she was diagnosed with at age 10. She speaks limited English and often brings her sister to help translate during medical visits.	Management Plan: What recommendations would you make regarding her medication regimen? How can you encourage Maria to use her fluticasone inhaler consistently?
Presenting Complaints: Increased shortness of breath, especially at night Frequent coughing, particularly in the early morning Use of her rescue inhaler (albuterol) more than twice a week	Patient Education: What key points should be included in the education plan for Maria regarding asthma management? How can you ensure that the information is understood, given the language barrier?
Discussion Questions: Cultural Considerations: How might Maria's cultural background influence her understanding of asthma and its management? What strategies can be employed to ensure effective communication with Maria, considering her limited English proficiency?	Follow-Up: What follow-up appointments or tests should be scheduled to monitor Maria's asthma control? How often should her peak flow measurements be taken, and what should she do if her readings are low?
Diagnosis: Based on Maria's symptoms and history, what is the current status of her asthma? Are there any potential triggers for her asthma that should be explored?	Interdisciplinary Approach: Which healthcare professionals (e.g., respiratory therapist, social worker, interpreter) should be involved in Maria's care, and what roles would they play?

Based on the data obtained, we can conclude that the use of case studies gives an effective result in the formation and improvement of the foreign language professional competence. Thus, the results of the study showed that the case method is an effective tool for achieving the set goals in professional communication situations. The created collection of exercises includes five themes, with each theme featuring two medical cases designed to enhance professional competence in a foreign language.

The findings of this study raise important questions about the role of the case method in transforming the traditional model of language education in medical universities. High motivation indicators (73.3% "strongly agree") may reflect not only the effectiveness of the method itself but also the novelty effect, which requires longitudinal studies to confirm the sustainability of the obtained results. Questions arise regarding the validity of student self-assessment as the sole criterion for method effectiveness. Subjective perception of improved language skills does not always correlate with objective indicators of linguistic competence, which points to the need for developing a comprehensive assessment system. It is necessary to include both quantitative and qualitative parameters of language development to obtain a more reliable picture of educational outcomes. Critical analysis also reveals the need for a deeper understanding of the mechanisms by which the case method affects learners' cognitive processes, since positive perception does not always indicate genuine enhancement of professional linguistic competence.

The question of adapting the case method to the specifics of various stages of medical education and the cultural characteristics of the educational environment merits detailed consideration. The presented research is limited to experience working with second-year students from one university, which calls into question the possibility of generalising the obtained conclusions to a broader population. The cultural context of Kazakhstan is characterised by multilingualism and specific features in the perception of interactive teaching methods, which may significantly influence the effectiveness of case technologies. Integration of the case method into the existing medical education system requires revision of traditional approaches to assessment and may encounter resistance from lecturers who are not prepared for radical changes in pedagogical practice. The question remains open regarding resource expenditure for preparing quality cases that correspond to rapidly changing standards of medical practice, and the necessity of constant updating of educational content to maintain its relevance and professional applicability.

Conclusion. The use of the case method in professional foreign language training at higher educational institutions has proven to be an effective and innovative pedagogical approach. By integrating real-world professional scenarios into language instruction, the case method allows students to engage in meaningful communication, develop critical thinking skills, and enhance their problem-solving abilities. This approach transforms passive language learning into an active process where learners must analyze information, make decisions, defend their viewpoints, and collaborate with peers - all within the context of their future medical profession. Through consistent application of the case method, students not only improve their foreign language proficiency, but also cultivate essential soft skills such as teamwork, leadership, time management, and intercultural competence. These skills are indispensable in the context of globalized healthcare systems, where medical professionals are expected to interact effectively with diverse populations and multidisciplinary teams.

Moreover, the case method bridges the gap between theory and practice by creating authentic learning experiences that mirror real-life clinical environments. Medical students are exposed to language tasks that simulate patient consultations, interprofessional dialogues, case documentation, and emergency communication - thereby preparing them to operate confidently in high-pressure, multilingual medical settings. The integration of case-based teaching in English language classes at medical universities supports the development of professional foreign language competence and

fosters deeper cognitive and communicative engagement. This method encourages students to become active participants in their own learning process, which increases motivation and retention of material. In conclusion, the case method can be considered not merely as a technique for language acquisition, but as a comprehensive educational strategy that enhances the overall quality of professional preparation. Its implementation in medical education contributes significantly to the readiness of graduates to meet the challenges of modern healthcare and successfully integrate into the international professional community.

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Teacher Initiative: A Catalyst for Effectiveness of Continuous Professional Development

Abstract

Introduction. The study addresses teacher initiative as a measurable indicator of continuous professional development (CPD) effectiveness in the context of global educational transformations, where CPD has become a strategic priority for ensuring educational quality and adaptability to change. The research aims to conceptualize teacher initiative as reflecting professional maturity, autonomy, and readiness for innovation. *Methodology and Methods*. This theoretical and analytical study employs content analysis, comparative analysis, and systematization methods to analyze international frameworks (CPD, OECD, UNESCO), educational policies, and empirical research. The research develops an evaluation algorithm for assessing educational initiatives implemented by teachers through systematic examination of existing literature and policy documents. *Results*. The study establishes that teacher initiative, demonstrated through development and implementation of original methodologies, participation in professional communities, and project-based activities, contributes to both individual professional growth and institutional advancement. An evaluation model integrating quantitative and qualitative criteria was developed, emphasizing the importance of motivation, creativity, and reflection in teachers' developmental trajectory. The research identifies key components of teacher initiative and their measurable indicators for CPD assessment. *Scientific novelty*. The research provides theoretical conceptualization of teacher initiative as a core measurable indicator of CPD effectiveness, offering a comprehensive framework that bridges international standards with practical evaluation approaches and establishing the theoretical foundation for integrating initiative assessment into professional development systems. *Practical significance*. The findings support integration of initiative as a core element in teacher evaluation and professional growth systems, providing educational administrators and policymakers with evidence-based tools for assessing and promoting teacher professional development effectiveness in contemporary educational contexts.

Keywords: teacher initiative, continuous professional development, professional autonomy, educational initiatives, effectiveness assessment, professional maturity.

Introduction. In the context of rapidly changing socio-cultural and technological environments, education is increasingly gaining the status of a continuous process aimed at developing sustainable professional and personal competencies. Continuous professional development (CPD) of teachers has become a key mechanism for ensuring the quality of education by promoting the ongoing renewal of knowledge, improvement of teaching methodologies, advancement of digital literacy, and the formation of reflective teaching practices (Ambon et al, 2024). The modern CPD paradigm encompasses a wide range of formats: participation in methodological seminars, online courses, advanced training programs, teaching internships, professional competitions, maintenance of digital portfolios, as well as engagement in research and project initiatives. The effectiveness of these formats is determined not only by their content but also by the teacher's active involvement, motivation for

growth, and readiness for self-transformation and innovation.

One of the crucial factors defining the success of CPD is teacher initiative. This phenomenon reflects the teacher's level of professional maturity, ability to independently plan their development trajectory, explore and master new approaches, and generate and implement pedagogical ideas. In educational systems oriented toward sustainable and transformative outcomes, initiative is considered a critical indicator of professional growth quality. First, the shift in CPD systems from formal participation in training activities toward practical and results-oriented outcomes makes pedagogical initiative a determining condition for implementing changes in educational practice. Second, initiative is an expression of professional autonomy- the capacity to make conscious choices in teaching methods, strategies, and formats, as well as to creatively solve pedagogical challenges. Third, active participation in research, project, and methodological activities contributes not only to individual professional development but also to the overall effectiveness of the educational institution. Fourth, in several international and national assessment models (e.g., CPD frameworks, OECD tools, and UNESCO recommendations), teacher initiative is recognized as a valid indicator of professional growth, measurable through collaboration, engagement in innovative projects, publication activity, and influence on the educational environment (UNESCO, 2021; OECD, 2020). Thus, teacher initiative serves as an essential and objective indicator of effective professional development, reflecting not only the degree of competence acquisition but also the capacity for sustainable professional renewal and transformation of educational practices.

Materials and Methods. This study is a theoretical and analytical investigation that explores teacher initiative as a critical indicator of the effectiveness of continuous professional development (CPD). The research is grounded in a structured process of collecting and analyzing secondary data obtained from scholarly literature, policy documents, and international educational frameworks.

Data were gathered through a systematic review of relevant literature and official documentation. The process consisted of the following stages:

Academic databases including Scopus, Web of Science, ERIC, and Google Scholar, along with institutional websites such as those of the OECD, UNESCO, and the Ministry of Education of the Republic of Kazakhstan, were used to identify pertinent sources.

A set of keywords was used to guide the search, including "teacher initiative", "continuous professional development", "professional autonomy", "teacher evaluation", and "educational innovation". The review focused exclusively on peer-reviewed journal articles, analytical policy reports, national standards, and conceptual frameworks published within the last 10 years to ensure currency and relevance. A total of over 17 sources were selected based on their academic credibility, relevance to the study topic, and their contribution to the conceptualization of teacher initiative within CPD contexts. The collected data were examined using qualitative methods appropriate for theoretical research: Documents were manually coded to identify recurring references to teacher initiative, professional maturity, and evaluation criteria. Codes were organized into thematic categories such as motivation, innovation, self-regulation, and autonomy. Models of CPD and teacher evaluation frameworks from different countries and educational institutions were compared to identify shared indicators, particularly those recognizing initiative as a measure of professional growth. Emerging themes were synthesized to construct a conceptual framework illustrating how teacher initiative functions as an indicator of CPD effectiveness. Identified forms of initiative-such as participation in educational projects, professional competitions, digital tool development, and mentoring-were categorized and structured into a proposed evaluation algorithm, detailed in the Results section.

The Results section presents findings derived from the analytical procedures described above:

- a five-step algorithm for assessing teacher initiative was developed based on the literature and policy analysis;

- each phase of the algorithm such as documentation, criteria development, and evidence collection was directly linked to the indicators extracted through content and comparative analysis.

The final model integrates both qualitative dimensions (e.g., creativity, intrinsic motivation) and quantitative components (e.g., rubric-based assessment, documented evidence), as further elaborated in the Discussion section. Through this rigorous theoretical methodology, the study constructs a comprehensive model in which teacher initiative is not only viewed as a manifestation of professional competence but also as a measurable and valid indicator for evaluating CPD effectiveness across diverse educational systems.

Results. Continuous professional development (CPD) of teachers is a vital element of the modern educational system, contributing not only to the enhancement of qualifications but also to the development of professional autonomy and readiness for innovation. According to educational change theories (Fullan, 2016), CPD plays a key role in helping teachers adapt to the evolving demands of the educational environment and society. Importantly, CPD involves not only the acquisition of new knowledge but also its application in professional practice through initiative-driven actions (Senge, 2013). Educational initiative is considered a central component of effective professional development. It is reflected in the teacher's ability not only to generate new ideas and methodologies but also to implement them effectively within specific educational contexts. Manifestations of pedagogical initiative-such as the development of original programs, the creation of digital resources, and the implementation of research and project-based activities-can significantly transform educational processes both at the level of individual schools and across the broader system (LaClair, 2015; Saleem et al., 2021).

Based on the theoretical analysis, an algorithm was developed for assessing the effectiveness of CPD through teacher-led educational initiatives (see Figure 1).

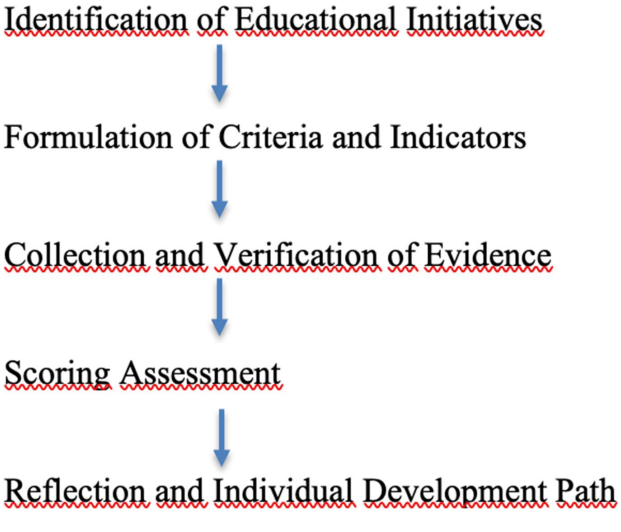

Figure 1: Algorithm for Assessing the Effectiveness of CPD

1. Identification of Educational Initiatives

The first step involves documenting the specific initiatives implemented by the teacher, such as participation in professional competitions, publications, methodological developments, integration of digital tools, and project activities. Special attention is paid to the impact of these initiatives on the learning process.

2. Formulation of Evaluation Criteria and Indicators

This stage assesses the relevance, novelty, scale of implementation, effectiveness, and the degree of teacher autonomy in realizing the

initiatives. These parameters help to objectively evaluate the teacher's professional maturity.

3. Collection and Verification of Evidence

Supporting materials are gathered, including certificates, reports, expert reviews, and feedback from colleagues and students. Verification of these documents ensures the reliability of the evaluation.

4. Scoring Assessment

A scoring system (e.g., from 0 to 5 points for each criterion) is used to quantitatively assess the effectiveness of each educational initiative. This helps to systematize the results and identify areas for professional growth.

5. Reflection and Individual Development Path

The teacher conducts a self-assessment of achievements and challenges, formulates corrective goals, and plans future development strategies, including the acquisition of new competencies.

The approach to assessing CPD effectiveness based on educational initiatives aligns with the principles of the competency-based model. According to Shulman (2004), teachers who demonstrate high levels of initiative exhibit greater professional maturity, critical thinking, and the ability to transform educational environments.

As a result of theoretical analysis and the review of regulatory documents, the following key findings were identified:

- Teacher initiative reflects a willingness for professional renewal and the integration of new practices, as demonstrated through active participation in training courses, digital learning, projects, and research.

- Professional autonomy, as a related quality, is revealed in the teacher's ability to independently design their development path and apply effective teaching strategies.

- The diversity of initiative manifestations includes participation in competitions and methodological work, mentoring, publication activity, engagement in professional communities, and implementation of educational innovations.

- International assessment models (CPD, OECD, UNESCO) recognize initiative as a valid indicator of professional growth, alongside productivity, engagement, and peer impact.

- A teacher with a proactive and initiative-driven stance becomes an agent of change-both in personal professional development and in the transformation of the educational environment.

- Thus, initiative can be considered an integral and measurable indicator of CPD effectiveness and should be incorporated into teacher evaluation, monitoring, and professional growth support systems.

Discussion. Research highlights that the effectiveness of continuous professional development (CPD) should be assessed not only through formal indicators-such as training hours or course participation-but also by evaluating the teacher's level of engagement in the educational environment, their capacity to initiate change, and their ability to implement innovations (LaClair, 2015; Srinivasacharlu, 2019). Teacher initiative emerges as a key indicator that reflects intrinsic motivation, creativity, and a focus on sustainable professional growth (OECD, 2020).

In this regard, it is essential to develop and validate assessment methods that can capture and interpret educational initiatives as evidence of CPD effectiveness. Such assessment should be comprehensive, combining both quantitative and qualitative approaches, and should consider not only individual development trajectories but also the institutional impact of implemented initiatives (Zeer, 2025; Van der Klink, 2017; Ambon, 2024).

The evaluation of CPD effectiveness gains particular importance amid the transformation of the educational environment and growing expectations for teacher professional autonomy (Singh & Gupta, 2021). One of the most relevant indicators of CPD success is the teacher's educational initiative, which reflects their capacity for conscious, independent, and innovative action within professional practice. From this perspective, CPD evaluation methods should aim to determine the teacher's level of activity in designing, implementing, and disseminating their own educational ideas.

In this context, it is appropriate to apply a combination of qualitative and quantitative methods for assessing CPD effectiveness (Table 1).

Table 1. *Methods for Assessing the Effectiveness of CPD*

Description of the Evaluation Method	Role in Assessing CPD Effectiveness	Example of Application
Portfolio Analysis Method	Used to collect and analyze a teacher's professional achievements. The portfolio includes projects, publications, developments, participation in events, as well as self-assessments and reflections. It captures both quantitative and qualitative indicators such as innovation, creativity, and degree of professional growth.	Helps evaluate how the teacher develops and implements their own initiatives, adopts innovative approaches, and uses new educational technologies. Used during certification, where the teacher presents a portfolio with materials such as lesson plans, academic publications, and records of professional participation.
Content Analysis of Educational Products and Documentation	Evaluates the content, structure, and quality of educational materials created by the teacher. Also examines documentation reflecting professional activity. Focuses on innovation, methodological rigor, compliance with modern standards, and the use of new educational technologies.	Objectively assesses the quality and novelty of educational initiatives and the teacher's capacity to adapt and implement new methods. Applied to review instructional materials, digital courses, or presentations. Identifies innovation, independence, and relevance.
Expert Evaluation Method	A qualitative method based on expert judgment about the presence of specific characteristics in teaching outcomes. Experts use defined criteria and scales to assess professional growth, initiative, innovation, and sustainability of pedagogical decisions.	Useful for evaluating complex educational initiatives, such as original programs, innovative projects, or publications. Includes stages such as selecting the object of evaluation, developing criteria, training experts, conducting assessment, and compiling conclusions.
Case Analysis and Monitoring Observation	Case studies provide in-depth examination of specific teacher-led innovations. Monitoring tracks changes in the educational environment over time. These methods analyze the impact of pedagogical actions on learning outcomes, the professional environment, and student motivation.	Includes descriptive case reports, observation checklists, surveys, indicators of professional activity dynamics, and video recordings of lessons. Captures real-time implementation and effects of teacher initiatives.
Self-Assessment and Reflective Analysis Methods	Focused on the teacher's awareness of their professional experience, achievements, and challenges. Encourages critical reflection, self-directed learning, and improvement.	Uses reflective journals, self-assessment cards, SWOT analysis, and personal development maps to assess progress, motivation, and adaptability-particularly relevant in the digital transformation of education.

Thus, methods for assessing the effectiveness of continuous professional development (CPD) in the context of teacher initiative should ensure both the objectivity of measurement and consideration of the subjective, reflective components of professional growth. A comprehensive approach makes it possible to evaluate not only actual achievements but also the potential for further development (LaClair, 2015; Selevko, 2005, Adipat, 2023).

Amid the renewal of educational content and the growing importance of teacher initiative as a driving force of professional growth, there is an increasing demand for a multifaceted and valid system for assessing the effectiveness of CPD. A teacher's educational initiatives become a key indicator of their professional maturity, innovativeness, and readiness for self-development (Fernandez-Manzanal, 2015; Tyagi, 2021; Abakah, 2023).

Given the complex nature of CPD, assessment methods should be complemented by a variety of tools and clearly defined indicators that reflect both the quantitative and qualitative aspects of a teacher's initiative. Research shows that objectivity and comprehensiveness in evaluation are achieved through a combination of methods, including portfolio analysis, expert evaluation, self-reflection, case analysis, and monitoring observation (Geldenhuys & Oosthuizen, 2015; Selevko, 2005).

The selection of assessment tools should be based on the following principles (Figure 2):

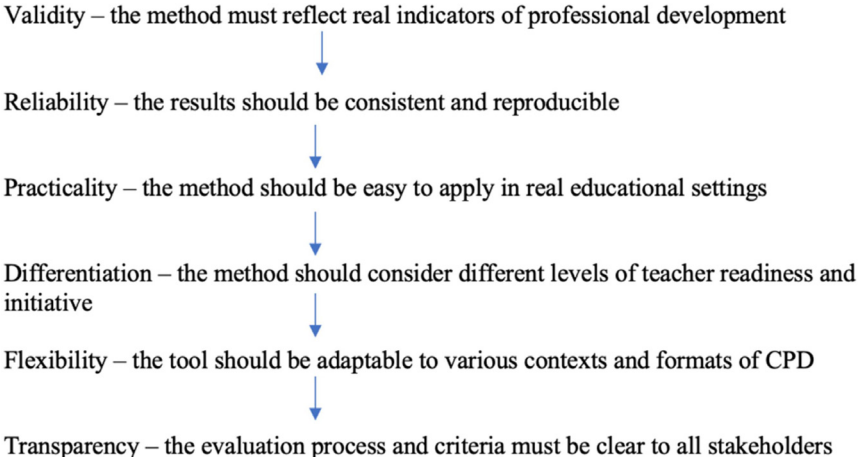

Figure 2: Principles for Selecting CPD Evaluation Tools

For example, portfolio analysis allows for the assessment of initiative effectiveness through documented achievements and educational products. Content analysis helps reveal the depth and innovativeness of the teacher's original developments. Expert evaluation provides external validation of the quality of initiatives. Self-assessment methods foster a culture of reflection, while monitoring captures the dynamics of professional development. Accordingly, each evaluation tool is linked to specific indicators that represent measurable signs of effectiveness: novelty, sustainability, scalability, impact on educational outcomes, level of awareness, and so on. These indicators are formalized into metrics that make it possible to quantitatively express the level of effectiveness (using 1–5 scales, Likert scales, binary or qualitative indicators). Thus, the integrated use of evidence-based methods, valid tools, and well-defined indicators makes it possible to establish a comprehensive CPD evaluation system. This system is aimed not only at documenting achievements but also at fostering teacher initiative as a key indicator of sustainable professional growth (OECD, 2020). The components of educational initiatives can be assessed through motivational-value, operational-activity, and reflective-evaluative dimensions, each of which includes specific criteria and indicators (Issabayeva et al., 2024).

Conclusion. The conducted theoretical and analytical review confirms that teacher initiative serves as a key indicator of the effectiveness of continuous professional development (CPD). It reflects not only the degree of a teacher's professional maturity and autonomy, but also demonstrates their readiness for innovative thinking, the design of educational change, and the conscious transformation of their own teaching practice. Educational initiatives implemented by teachers act as markers of intrinsic motivation, commitment to self-development, and responsibility for the quality of the educational process. Integrating teacher initiative into CPD evaluation systems allows for consideration of not only formal indicators but also the deeper personal and professional processes that take place in a teacher's work. The findings suggest that enhancing the validity

and effectiveness of CPD assessment requires a comprehensive approach that combines both quantitative and qualitative methods. Especially valuable are tools that capture individual achievements, creative practices, reflective thinking, and the impact of teacher initiatives on the educational environment. Looking ahead, it is recommended to further develop valid models and metrics for assessing teacher initiative, and to integrate these approaches into systems of professional development, certification, and internal quality monitoring. This will support the creation of a sustainable and evolving professional environment in which each teacher becomes an agent of change and an active contributor to educational innovation.

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Graded Characteristics of Emotional Empathy of Future Teachers

Abstract

Introduction. The study examines the features of emotional empathy in future teachers' professional development, addressing the need to significantly update content and ensure quality of professional training with focus on international standards, high teaching profession status, and modernized teacher education. The research recognizes professional development as a long-term process with targeted competence content at different levels and stages of pedagogical activity. *Methodology and Methods.* The study was conducted using a sample of 3rd and 4th year undergraduate students from Akhmet Yassawi International Kazakh-Turkish University and Peoples' Friendship University named after Academician A. Kuatbekov. The research employed systematic assessment of professionally significant personal qualities, focusing on emotional and social empathy levels, with correlation analysis examining relationships between different empathy channels. *Results.* The main feature of future teachers' professional training was identified as systematic work on assessing and improving levels of professionally significant personal qualities, particularly emotional and social empathy. The study revealed that the relationship of the intuitive channel of empathy is connected to identification and the emotional channel of empathy. A negative correlation was found between emotional and empathic abilities, providing insights into the complex nature of empathic development in future educators. *Scientific novelty.* The research contributes to understanding the specific features of emotional empathy development in future teachers' professional preparation, establishing the relationship between different empathy channels and identifying previously unknown negative correlations between emotional and empathic abilities in pedagogical education contexts. *Practical significance.* The findings provide evidence-based approaches for improving teacher education programs by incorporating systematic assessment and development of emotional empathy, offering practical tools for enhancing professionally significant personal qualities and ensuring quality professional training aligned with international standards.

Keywords: emotional empathy, graduation, empathic attitudes, future teachers, personal qualities, professional qualities, professional development.

Introduction. Awareness of the importance that a professionally significant property of a future teacher is the presence of empathy or emotional sensitivity symbolizes it's self-worth and uniqueness. The categorical status of the phenomenon of «emotional empathy» is determined by the ability to consistently demonstrate an understanding of a person's inner world in speech and action in order to predict and adequately influence their behavior. Emotional empathy as a unique tool of the psychological and pedagogical process enables the future teacher to continuously form value meanings and the ability to interpret professional experience in a reflective form. Emotional empathy motivates future teachers to self-development, personal and professional growth, and the search for fresh resources in their pedagogical and emotional development. An empathic teacher is a person with developed skills to feel and sympathize, communicate and predict the emotional states of their students, aimed at improving emotional well–being. As is known, the fundamental feature of the professional training of a future teacher is the systematic work on assessing and improving

the levels of professionally significant personal qualities.

The formation of a teacher as a professional is associated with the development of various spheres of personality – intellectual (professional thinking, professional knowledge and methods of activity; I.F. Isaev, S.G. Kosaretsky), operational-activity (practical readiness, professional experience, skill; I.A. Zyazyun, V.A. Slastenin), emotional-volitional (emotional state, volitional self-regulation; L.M. Mitina, I.A.Zimnaya), spiritual and moral (value orientations, reflexive culture (L.F. Obukhova, V.A. Tolochek), professional and personal qualities (V.V. Ignatova, N.V. Kuzmina); development of professional self-awareness (I.V. Vachkov). The main philosophy of vocational training is to encourage students to engage in useful learning, which significantly improves the quality of emotional empathy (Holt & Kysilka, 2016; Kornell & Bjork, 2017). The vector of the developing subject, according to Obsuth I., Murray A. L., & Malti T (2016), should be the values of a multicultural educational environment for the professional training of a future specialist. In the context of the stated purpose of this article, it is necessary to consider the psychological and pedagogical essence of the phenomenon of «Emotional empathy».

In the scientific literature, there is a clear understanding of emotional empathy as:

1. The ability of an individual to respond emotionally to the experiences of another - a phenomenon that is characterized by: emotional penetration, empathy with the interlocutor, the establishment of emotional identification, the expression of empathy, sympathy and complicity (K.D. Ushinsky, P.F. Kapterev, V.A. Sukhomlinsky).

2. The process of non-evaluative empathy of one with the real and actual experiences of the other while observing the empathic condition «as if» in the process of awareness of one's experiences by the empathized (S.B. Borisenko, T.P. Gavrilova, G.F. Mikhalchenko).

3. Professionally significant personality quality, considered in the following aspects of pedagogical activity (understanding, acceptance, recognition of personality (I.M. Yusupov, O.I. Tsvetkova, T.V. Romanova).

Kazakhstani scientists and practitioners: a mechanism for introducing a personalized learning environment, the key role of which is assigned to the personal development of future teachers; a set of educational tools and applications created taking into account the needs and capabilities of students; a personalized learning profile that actualizes the creation of adaptive systems that provide them with support and resources for self-development (O. Tapalova & N. Zhienbayeva, 2022); the design of an educational environment that focuses on the condition of adapting learning to the preferences and needs of future teachers, including expanded access to 21st-century working skills and the creation of pedagogical communities that promote support, which positively affects the personal and professional development of future teachers (U. Abdigapbarova & N. Zhienbayeva, 2021).

Despite the fact that there is a huge amount of research on certain aspects of the problem under consideration, in our opinion, there are no studies that reveal the specifics of personal and professional development, formation and growth of future teachers.

In the process of professional development, the future teacher, a priori, has legitimate questions:

- what is the optimal and productive level of emotional empathy for teaching?

- how well-developed is emotional empathy among functioning teachers in reality?

- is it critical to develop emotional empathy?

Scientific interest in the study of the influence of emotional empathy development on the process of professional development of teachers is reflected in the research of foreign scientists, who have become classics in this field:

1. In the study «Transforming Pedagogy Using Mobile Web 2.0», Cochrane, T., Flitta, I., & Bateman, R. (2009) demonstrate the effectiveness of the web platform 2.0, which radically changes the didactics of teachers' professional development.

2. Damianidou E. & Phlataka H. A. (2016) reveal the process aimed at the algorithm of

professional development of a teacher through the process of developing empathy as a phenomenon of psychological origin, which is of great importance for professional activity.

3. Scientific research by Warren C. (2013) in the field of «Technology Integration», they focus on the experimental effect of emotional empathy on the professional development of teachers.

4. Alnuaim, A., Caleb-Solly, P., & Perry, C. (2009) examined the impact of innovative technologies on professional competencies, psychological and pedagogical conditions of professional development of future teachers; the formation of determinants of professional development (psychological factor, psychological condition, mechanism and form of manifestation).

5. In the study «Motivation for increasing creativity, innovation and entrepreneurship», Barroso-Tanoira, F. G. (2017) reveals the innovativeness of a teacher's motivational and emotional development and offers practical results and methodological recommendations.

The results of a theoretical analysis of research (R.A. Valeeva & I.R. Gafurov, 2017) devoted to the study of conceptual approaches to the process of professional development of a teacher have shown that the humanistic, based on emotional empathy of a teacher as a universal characteristic of a personality is a complexly organized system that includes the ability to realize one's potential (competencies, experience, personal qualities) demonstrated in practice.) for professional growth, awareness of its social significance and responsibility, the need for its continuous improvement. For the organization of the applied aspect of research in this regard, the most significant were the works of domestic scientists: the duality of professional and personal positions is shown through the mechanisms of reflection and emotional empathy (G.J. Lekerova, O.S. Sangilbaev, M.A. Perlenbetov); the scientific potential of the teacher as a professionally important personal resource with a multicomponent structure.

Based on the above, it can be stated that in the system of professional development of a future teacher as a technological process of entering his profession, during which qualitative personality transformations occur, leading to the development and change of personal and professional qualities, to the formation of a positive attitude towards the profession, the methodological basis for modeling the professional development of subjects of the educational process in the context of formation of professionally significant and personal qualities and how, the consequence is not properly reflected in Kazakhstani pedagogical research.

Most of the existing concepts describe the most important aspects of professional development.

1. The developing concept of professional development as an integral process by Mitina L.M. (1998), embodying the unity of personal and professional development, the object of which is the integral characteristics of personality: orientation, competence, emotional and behavioral flexibility. According to the author's definition, «the essence of a person's professional development is the process of formation, development and realization in pedagogical activity of professionally significant personal qualities and abilities, professional knowledge and skills, qualitative transformation by a person of his inner world, leading to a fundamentally new structure and method».

2. The acmeological concept of professional development of a personality (Derkach A.A., 2006) is defined as an integral psychological characteristic reflecting the level and nature of mastering a profession at the level of high standards established in professional activity.

3. The concept of professional development as a dynamic, multilevel process of personality development from the initial manifestations of the formation of professional intentions to the full realization of oneself in professional activity by T. Kudryavtseva (1986).

4. The concept of professional development as a consistent solution to a set of professional development tasks that a subject sets for himself on the basis of knowledge and acceptance of the social situation of professional development, taking into account his life and professional goals of Yu. P. Povarenkov (2002).

5. The concept of formation of a creative professional N.V. Kharina (2013), I.I. Burlakova (2013), G.S. Korytova (2014). The authors understand the professional development of a personality as the process of professionalization, the results of which can be considered the formation of a professional, the development of new professionally important qualities, the transition of a personality to the level of professionalism.

6. Psychological determinants of the success of professional development of G.N. Skudarev's (2008) personality. The researcher highlights the implementation of targeted programs that ensure:

- the integrity and sustainability of the educational space, the integration and breadth of interaction of its subjects;
- the development of positive motivation; the need to consider empathy not as an isolated phenomenon, but in direct connection with a number of professionally significant qualities of a future teacher;
- the development of a system of professionally significant qualities occurring in the process of teacher training;
- the development of experience, self-analysis of the formation of professionally significant qualities and awareness of the place of emotional empathy in the structure of the individual style of pedagogical activity.

7. Psychological determinants that increase the effectiveness of professional self-determination depending on the course (year) of study according to M.G. Ugarova (2006). The effectiveness of students' professional self-determination is determined in the first year of study by positive academic motivation, the need for professional development, and in the second year by the development of professional pedagogical orientation and approval from significant individuals. The stability of professional development and awareness of the social significance of teaching are crucial for third-year students. In the fourth year, it is important to focus on professional realization, personal development, and the manifestation of creative abilities. Finally, for graduate students of a pedagogical university, orientation towards social professions is most significant in terms of professional self-determination.

8. I.Yu. Antipina's (2007) concept of professional development is a high degree of development of a number of important professional and personal qualities (competence, professionalism, leadership, sociability, empathy, tolerance, communication culture, organizational skills, self-criticism, fairness, the ability to work in extreme situations, the desire for self-improvement, non-conflict, emotional stability, mastery of public speaking). Thus, the formation of external ways of expressing emotional empathy triggers a process of personal change for future teachers, which results in an internal acceptance of the function of empathic communication. At the same time, it is essential to actualize the development of a teacher's high professional empathy based on an empathic approach, which involves: the use of a diagnostic component in pedagogical activity that ensures personal cognition, taking into account knowledge of psychological and pedagogical sciences; reflection of stable integral personality traits; identification of causes and motives; understanding actions based on knowledge about personality; the ability to positively and controllably influence further development.

In addition, training focused on professional development has improved the traditional format of education, focused especially on the profession of a teacher. In student-centered learning, students can be viewed from the perspective of «creators», whereas the role of a university teacher is to determine the awareness of their choice of profession (Partanen, 2020), which implies the importance of forming their professional intentions. At the same time, it is noted (Gustavsson, 2016) that traditional approaches are little focused on the development of critical thinking. It should be noted that when mastering the system of professional competencies, socially significant and professionally important qualities are formed. The process of professional training is seen as an active process in which students are active creators of feelings, striving to gain consistent and organized knowledge».

In educational activities focused on developing the ability to introspect, the ability to notice, distinguish and label affective states, the ability to separate one's own emotional states from the experiences of others, the management of these states, the availability of resources to help others - all these factors are very important for the development of empathy, although they are extremely energy-consuming both mentally and physically (Degago, Adinew Tadesse, Luckson Muganyizi Kaino, 2016).

Materials and Methods. A number of psychological tests were used to diagnose the current state of compliance with the criteria under study:

Table 1. *Diagnostic tools for assessing indicators of empathic abilities and social empathy*

The task of experimental research	Diagnostic tools for assessing empathy indicators
Identification of the levels of formation of empathic abilities and emotional empathy.	1. Assessment of I.M. Yusupov's emotional empathy; 2. A. Mehrabyan's emotional response scale adapted by N. Epstein; 3. Empathy test by V.V. Boyko; 4. N.P. Fetiskin's emotional empathy index.

The content of the criterion apparatus, which included component-by-component diagnostics, assessment and characterization of future teachers. The *empathy component* was assessed through anonymous online testing. The online testing was compiled on the basis of the following psychodiagnostic complex:

- the methodology «Diagnostics of I.M. Yusupov's emotional empathy level», which is aimed at identifying the psychological features of students' empathic development;
- A. Mehrabyan's emotional response scale methodology, modified by N. Epstein, which allows analyzing students' empathic tendencies: the level of emotional feedback abilities; the ability to experience;
- the method of diagnosing the level of empathic abilities (empathy test) by V.V. Boyko is used by us to assess the ability to empathize and try to mentally understand another;
- N.P. Fetiskin's method of diagnosing emotional empathy, which allowed us to determine the empathy index.

Results and Discussion. Experimental research base: Akhmet Yassawi International Kazakh-Turkish University and Peoples' Friendship University named after Academician A. Kuatbekov.

Research sample: 3rd and 4th year undergraduate students, the total number of respondents is 200 people. The choice of 3rd year students as an experimental group is not accidental, and is explained by the fact that this period coincides with the formative stage of the future teacher's professional training and is the most favorable period for the purposeful formation of its components, including professional and personal qualities. As part of the experiment, at the stage of diagnosis of the initial level of empathy, the respondents' empathic abilities and levels of emotional empathy were revealed using psychodiagnostic methods. A number of psychological tests were used to diagnose the current state of compliance with the criteria under study. According to the first component, the state of the initial level of the empathy component, the results of the experiment made it possible to identify the levels (low, medium, high) of the development of emotional empathy among students.

We were able to identify the leading channel of empathy (rational, emotional, intuitive, attitudes that promote empathy, the penetrating ability to empathize, identification in empathy). The analysis made it possible to identify three levels of empathy among students. For the 3rd year students, the levels were high (20%), medium (68%) and low (12%). The 4th year students showed high (28%), medium (62%) and low (10%) empathy scores. The high level of empathy indicated that the students showed plasticity, emotional responsiveness, sympathy and empathy for children. The presence of a low level of empathy indicated introversion,

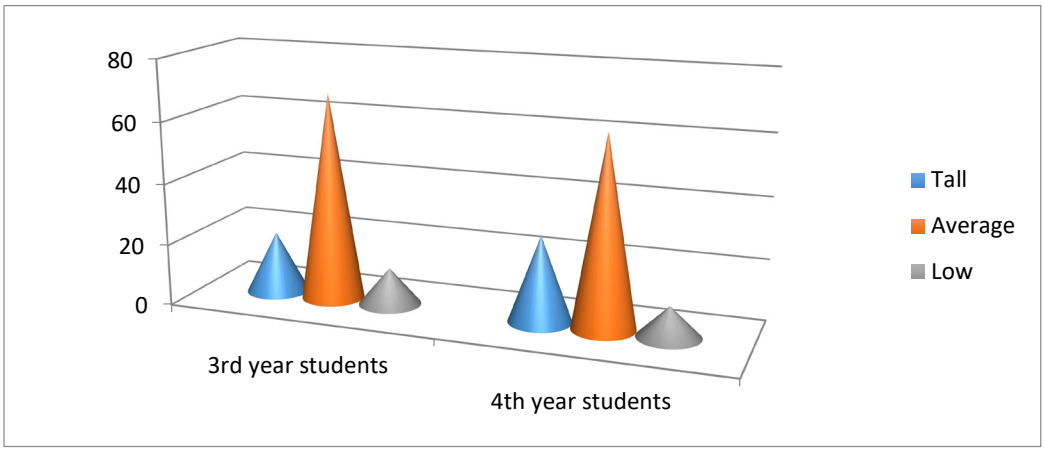

Figure 1: Average indicators of the empathy component in 3rd and 4th year students

rigidity, and selfishness. A larger number of 3rd and 4th year students turned out to be at an average level of empathy, which demonstrates that the mechanism of social perception of a future teacher is not sufficiently developed. We also found that future teachers had a high level of empathy characterized by the empathic abilities of such attitudes that promote empathy (3.52) and identification in empathy (3.45 out of 6 points).

The experimental results obtained at a high level indicate the predominance of the strengths of students with an extended range of responsiveness and empathy. The low level of empathy revealed in the students testified to the ability to empathize in the form of a channel of penetrating ability - 2.9 points; the intuitive channel also showed 2.9 points. It is quite possible that such low rates can be explained by a lack of teaching experience. The average level of emotional empathy indicates students' interpersonal relationships and their judgments based solely on actions, subjecting everything to self-control.

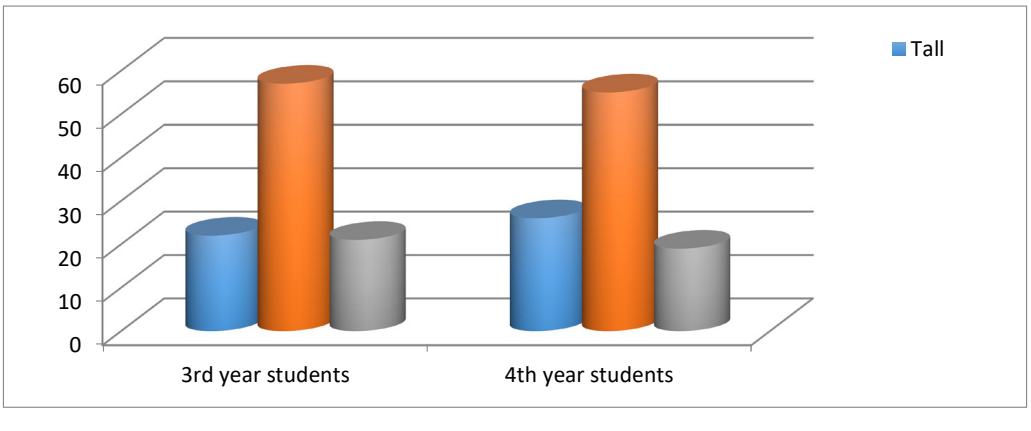

Figure 2: Indicators of the diagnosis of emotional empathy of students according to the method of A. Mehrabyan modified by N. Epstein

The levels of emotional empathy show a tendency towards low and medium levels (50%), which is not expressed by the ability of future teachers to «penetrate» into the world of other people's feelings. Identification is the ability to empathize, to be able to put oneself in the place of another, which is based on the lightness and plasticity of emotions, the ability to feel the mood of another. The rational channel of empathy determines the focus of the future teacher's attention and thinking on understanding the student's behavior. Figure 2

shows the results of the diagnosis of empathy according to the method of A. Mehrabyan. Most students also have an average level, which indicates an insufficiently developed empathy, whereas this phenomenon is a professionally significant personal quality for a future teacher.

Empathy is a phenomenon of psychological and pedagogical origin that arises in pedagogical activity between a teacher and a student, therefore, in its absence, the pedagogical process will be depersonalized.

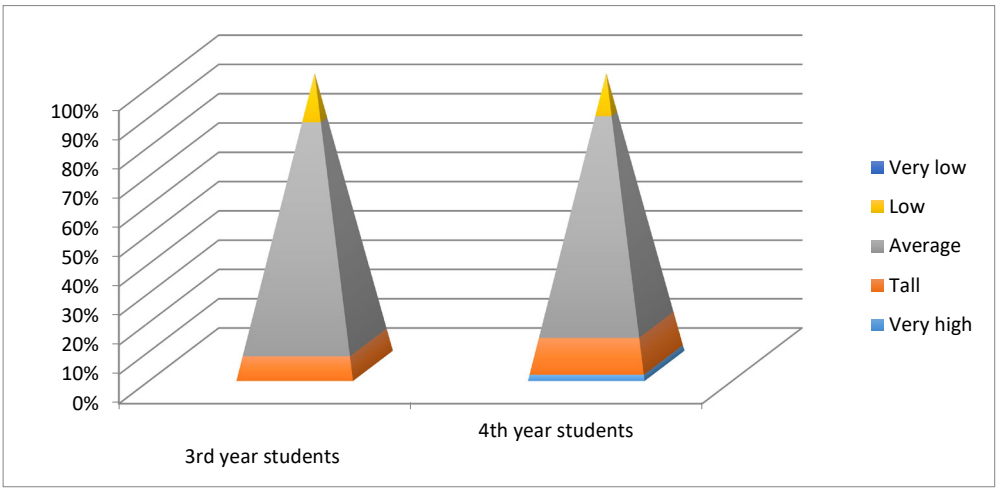

Figure 3: Shows the results obtained by the method of diagnosing emotional empathy in 3rd and 4th year students

Future teachers who have shown a high and very high level (4th year) of emotional empathy are emotionally responsive, sociable, and able to find compromises. But there are minor drawbacks to representatives of a very high level – they desire constant emotional and social approval, they are easily upset, as they do not like painstaking work, which is unacceptable in the pedagogical process. There is also a very low level among 3rd and 4th year students, which indicates that students who study in this specialty do not have problems with being the first to start a conversation, and try to find contacts with people. Figure 4 shows the results of the emotional empathy shown by the future teacher, its main components.

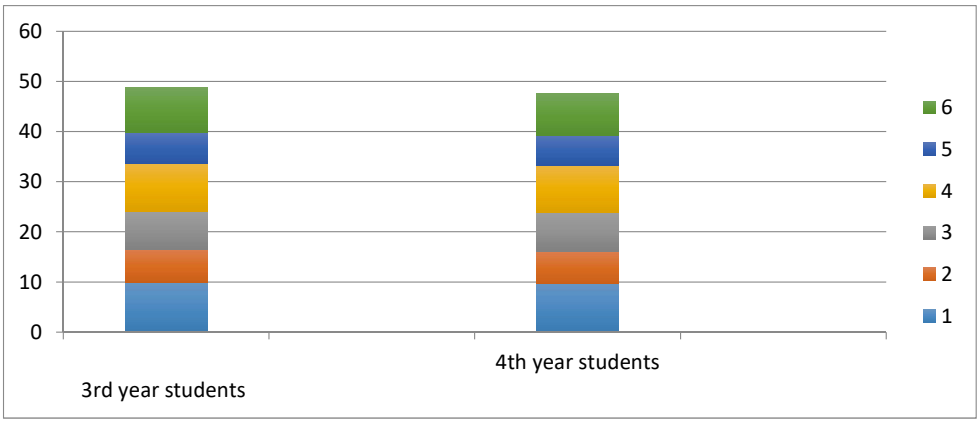

Figure 4: Average values of emotional empathy among 3rd and 4th year students

Thus, the study of emotional empathy indicates an average level of empathy among students, they are not very sensitive, they subject everything to self-control, they are too delicate. Students who have shown a low level of empathic abilities and emotional empathy are

more rational, they need to work on showing sensitivity, understanding and responsiveness, as their absence complicates the establishment of interpersonal contacts and the desire to retire more often. Such students need psychological training to teach them to «open up» to children, to be attentive to the behavior of loved ones and children. Figure 5 shows the results of V.V. Boyko's method of identifying emotional abilities, where the numbers indicate the scales of the questionnaire: 1 – rational channel of empathy; 2 – emotional channel of empathy; 3 – intuitive channel of empathy; 4 – attitudes that promote empathy; 5 – penetrating ability to empathize; 6 – identification in empathy.

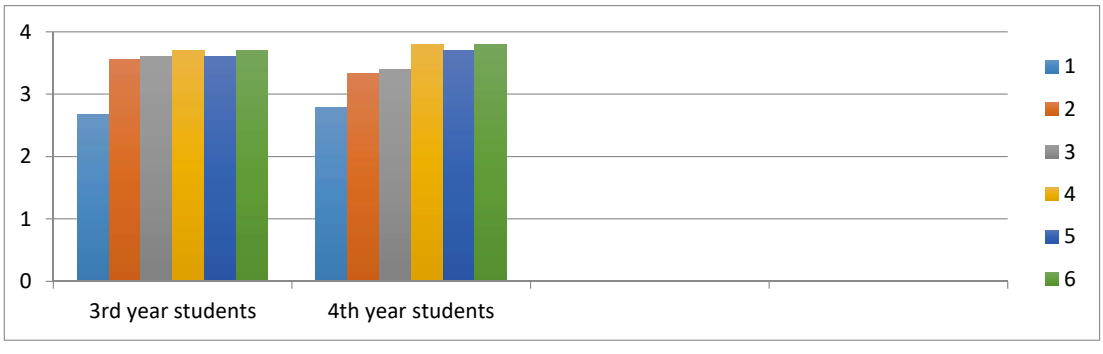

Figure 5: The results of the assessment of the initial state of readiness of future teachers: the empathic component

Correlation analysis provided significant strong links (statistical significance $p \leq 0,01$) between social empathy and empathic attitudes. The relationship of the intuitive channel of empathy is related to identification and the emotional channel of empathy. A negative correlation has been found between emotional and empathic abilities. Thus, evaluating the emotional-empathic component, we can say that students' empathy is in the process of developing, and it would be logical and timely to conduct an experiment to develop the emotional-empathic component. It should be noted the importance of including elective courses in educational programs, which consider pedagogical forms and methods of interaction between subjects of the educational process for the development of two-way empathy. Such forms usually include problem-based learning, the inclusion of educational technologies, role-playing games, discussions, and trainings.

Conclusion. The results of the study clearly demonstrate the importance of the formation of emotional empathy in the process of professional development of future teachers. It has been experimentally established that undergraduate students of the Akhmet Yassawi International Kazakh-Turkish University and the Peoples' Friendship University named after Academician A. Kuatbekov are characterized by a high level of empathy and empathic abilities as a professional competence. They are characterized by the willingness and ability to understand and adequately assess both their own emotional state and the emotional state of others. The high level of empathy of future teachers was characterized by the empathic abilities of such attitudes that promote empathy, and identification in empathy. The subjects showed an obvious desire to be empathic even with an average/low level of emotional intelligence. The average level of emotional empathy and empathic ability is justified by us as a positive, expected result of the study. This fact is confirmed by correlation analysis, which presents significant strong links between emotional empathy and empathic attitudes.

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Formation of Future Primary School Teachers' Readiness for Conducting Pedagogical Diagnostics Based on ICT

Abstract

Introduction. The study addresses the issue of preparing future primary education teachers for conducting pedagogical diagnostics based on information and communication technologies, identifying the main possibilities of ICT-based preparation in universities for effective diagnostic practices in primary education settings. *Methodology and Methods.* The research employed analysis of scientific literature to examine the current state of preparing future primary education teachers for conducting pedagogical diagnostics using information and communication technologies. A survey was conducted among teachers working in primary grades at secondary school № 185 in Almaty to determine their opinions and views on the possibilities of using information technologies for conducting pedagogical diagnostics. *Results.* Based on the literature study, the current state analysis revealed the relevance of ICT-based pedagogical diagnostics preparation for future primary education teachers. The survey results demonstrated specific opportunities that need to be provided when preparing future primary school teachers for pedagogical diagnostics based on information and communication technologies. Teachers' opinions and views provided insights into practical requirements and possibilities for implementing ICT-based diagnostic approaches in primary education. *Scientific novelty.* The research contributes to understanding the specific requirements and possibilities for preparing future primary education teachers in ICT-based pedagogical diagnostics, establishing the theoretical foundation for integrating information technologies into diagnostic preparation programs and identifying key areas for improvement in teacher education. *Practical significance.* The findings provide evidence-based recommendations for universities preparing future primary education teachers, offering insights into necessary opportunities and approaches for effective ICT-based pedagogical diagnostics training that can enhance the quality of diagnostic practices in primary education settings.

Keywords: future primary school teacher, primary education, information and communication technology, pedagogical diagnostics, training.

Introduction. The modernization of general education, which is currently being carried out in Kazakhstan, puts at the forefront the tasks of developing the individuality of the child, his abilities and inclinations, revealing the creative potential of the individual from the moment he enters the 1st grade of a comprehensive school. Therefore, a modern teacher of primary education should carry out training, development and education based on the individual characteristics of the student. It is necessary to be able to control the process of constant change of the student and ensure his rise to a high level of development, conduct research pedagogical searches, solving the problems of the formation of the child's personality on a scientific basis (State program, 2021).

A modern teacher of primary education in the scientific and methodological region should organize scientific and methodological work, self-analysis, self-assessment in order to improve his pedagogical skills. And pedagogical diagnostics allows you to successfully solve these problems in practical professional and pedagogical activities. With the help of pedagogical diagnostics, it determines the causes of possible failures of students in the process of obtaining knowledge from the subject, evaluates the student not only according to the achieved results, but also according to the cognitive

approaches used in obtaining a specific result, determines the pace of the student's progress in the learning process, personal orientation in its development, etc (Vilenskaya, 2020). And this increases the need for the formation of the subject of the learning process, the skills of organizing and conducting pedagogical diagnostics are formed (Ivanova, 2020). In this regard, the relevance of the formation of diagnostic training of future primary education teachers working in primary school increases. Because a teacher armed with knowledge and skills in the field of pedagogical diagnostics has access to detailed information based on criteria for the student's full mastery of the educational material. Provides access to information about the state of the pedagogical process, the quality of education and upbringing, processes, analyzes, evaluates these data, predicts the development of the pedagogical process and makes adjustments possible (Sweller, 2016). A thorough study of the individual characteristics, interests and needs of each child, communication skills, professional identification of successful mastery of the studied discipline, optimal ways, methods of education and development, formation of their own development trajectory, competent work (Reis et al., 2021).

However, at present, it has been shown that the problem under consideration, that is, teachers of primary education, in fact, do not have the knowledge, skills and abilities to conduct pedagogical diagnostics on the basis of information and technology, they do not see the need for pedagogical diagnostics. After all, there is an opinion that pedagogical Diagnostics is not a mandatory function of teachers of primary education. Despite the fact that, according to research, some professional difficulties of a teacher are explained by their inability to carry out pedagogical diagnostics, draw conclusions from its results, master the methods, the university does not require special training. This problem was not first developed methodological and organizational foundations for the formation of diagnostic readiness of future teachers of primary education. Secondly, the lack of identification of the reasons for the difficulties in forming the readiness of future primary education teachers to conduct diagnostics makes it necessary to study this issue from a theoretical and practical point of view. Therefore, finding theoretical and practical solutions for the formation of diagnostic readiness of future teachers of primary education on the basis of information and Communication Technologies is becoming an urgent problem.

Materials and Methods. In general, information and communication technology is a popular concept in pedagogical science. Information and communication technologies are aimed at ensuring information processes. Usually, the means of information and communication technologies include software and hardware tools and techniques operating on the basis of microprocessor technology, modern means and systems of the telecommunications industry, information exchange, audio and video technology, providing operations for collecting, extracting, collecting, storing, processing and transmitting information. In the traditional understanding of didactics, information and communication technologies are an analogue of technical means of education. Pedagogical technologies are created on the basis of these tools with the active participation of the teacher. There are a lot of information technology tools, which include computers of all groups, their complementary apparatus, software, virtual reality systems, and information systems (Komar, 2020).

The above-mentioned information and communication technologies contribute to the solution of the tasks of strengthening all levels of educational processes, multilateral development of students, preparing graduates of higher educational institutions for life in the conditions of the information society in the future, the implementation of social orders arising in accordance with the informatization processes of modern society. It is clear that the use of information and communication technologies is one of the main conditions for informatization of education. Today, many scientists who are studying the issue of introducing these technologies into education believe that their use will change the entire educational process. (Afroz et al., 2016).

The study highlights the transformative potential of ICT in the field of pedagogical diagnostics. With the advent of sophisticated assessment tools and digital platforms, teachers now have unprecedented opportunities to adapt diagnostic assessments to the diverse needs of elementary school students. The literature says that the effective use of ICT in diagnostics not only simplifies the assessment process, but also increases the accuracy and detail of understanding the learning process of students. (Hoth, 2016). Scientists advocate the integration of knowledge about technological pedagogical content (TPACK) into teacher training programs, emphasizing the need for teachers to have a fine understanding of both content and pedagogy enhanced by technology (Neethiperumal, 2022).

According to Kiselev, a significant number of teachers feel unprepared for the effective integration of technology into their teaching practice, especially in the context of diagnostic assessment. The literature highlights the urgency of bridging this gap to provide future teachers with the skills they need in the digital age (Kiselev, 2023). Several studies have identified common problems and barriers to integrating ICT into teacher training. Significant obstacles are created by factors such as lack of institutional support, limited access to technology and resistance to change among teachers. Understanding and addressing these issues is crucial to developing effective strategies in teacher training programs (Wiyono et al., 2021). Based on successful case studies, the literature highlights the best practices of integrating ICT into pedagogical diagnostics. The work demonstrates examples where teacher training programs have successfully incorporated ICT tools for diagnostic purposes, leading to improved student learning outcomes. These success stories provide valuable insights into the potential impact of well-designed teacher training initiatives (Wiyono et al., 2022).

Some literature emphasizes the need to change the paradigm of pedagogical approaches, the transition from traditional methods to more dynamic, technologically advanced strategies. Teshaboev and others argue that the training of future teachers involves the formation of a mindset that considers technology not as an addition, but as an integral component of effective teaching and diagnostic assessment (Teshaboev et al., 2023). The work of Altynnikova et al. highlights the importance of supportive policies and collaborative efforts between educational institutions and policy makers to create an environment conducive to the effective training of future teachers (Altynnikova et al., 2022).

The central place in the discussion is occupied by the impact of pedagogical diagnostics using ICT on student learning outcomes. Yarullin's research shows that smart technology integration not only improves diagnostic accuracy, but also promotes more engaging and personalized learning for elementary school students. Understanding the nuances of this impact is crucial for the formation of effective teacher training programs (Yarullin, 2016). The study of best practices and exemplary models for integrating ICT into pedagogical diagnostics is crucial to inform teacher training programs. Chirva's work demonstrates how innovative approaches, including the use of digital portfolios and interactive assessment tools, can improve diagnostic practice in primary education. These models provide valuable information about the practical implementation of ICT in the classroom (Chirva, 2018).

While the benefits of integrating ICT into pedagogical diagnostics are obvious, scholars such as Makarenko have highlighted the challenges teachers face in this process. Problems such as limited access to technology, resistance to change and the need for continuous professional development are becoming crucial factors influencing the successful implementation of ICT in primary education. Understanding and solving these problems are important components of preparing future teachers to navigate the digital landscape of pedagogical diagnostics (Makarenko, 2020). Recognition of the cultural context in which pedagogical diagnosis takes place is of paramount importance for effective teacher training. Vaganova emphasizes the importance of taking cultural nuances into account when implementing ICT, ensuring that diagnostic

assessments are culturally sensitive and inclusive. Future teachers need to develop cultural competence in integrating technology, creating a fair and enriching learning environment for different groups of students (Vaganova, 2019).

In addition to technical competencies, the literature highlights the importance of addressing ethical issues and promoting digital literacy among future teachers (Bolick et al., 2019). Understanding issues related to data privacy, responsible use of technology, and the development of digital citizenship is becoming a crucial factor in preparing teachers to address the ethical challenges inherent in the technological educational landscape. Although the existing literature provides a substantial basis, gaps remain, especially in understanding the nuances of how ICT integration affects pedagogical diagnostics specific to primary education. Future research should explore context-specific issues, diverse implementation models, and the long-term impact on student learning outcomes.

The literature review highlights the urgent need to review teacher training programs, putting ICT at the forefront of pedagogical diagnostics. Understanding the current situation, challenges and best practices, this article aims to contribute to an ongoing dialogue on equipping future teachers with the skills necessary for effective pedagogical diagnostics based on ICT in primary education. In accordance with the requirements of the document "Typical qualification characteristics of teacher positions", it is noted that "primary school teacher – determines and contributes to the development of the individual abilities of the student, applies new approaches, effective types, methods and means of teaching, develops tasks for the summative assessment of sections and quarters, studies the individual abilities, interests and inclinations of students, pupils".

The main idea of the study is to identify the possibilities of preparing future teachers of primary education on the basis of information technologies in universities for conducting pedagogical diagnostics. In the implementation of the idea, the following basic provisions were guided:

- scientific and theoretical research on the problem of preparing future teachers of primary education for conducting pedagogical diagnostics on the basis of information technologies;

- information received from students as a result of a survey to determine their opinions and views on the possibilities of using information technologies for conducting pedagogical diagnostics.

Based on the above works, a brief survey of students was conducted in order to determine their opinions and views on the possibilities of using information technologies for conducting pedagogical diagnostics.

In the study, data collection was analyzed using SPSS software. As a research methodology, we used quantitative and qualitative methods. In the quantitative part, the research survey approach was used, and in the qualitative part, the phenomenological approach was used. The survey was conducted by primary school teachers of secondary school №185 in Almaty. 20 teachers took part in the survey.

The content of the questionnaire consisted of the following questions:

1. How do you assess the importance of pedagogical diagnostics on a scale from 1 to 10 in improving the quality of Education?

2. To what extent, in your opinion, ICT can contribute to the effectiveness of pedagogical diagnostics?

3. Do you currently use any ICT in your teaching or learning environment to conduct pedagogical diagnostics?

4. If yes, specify the types of acts you use.

5. What problems did you face when integrating ICT into pedagogical diagnostics?

6. What is your level of knowledge in using ICT for pedagogical diagnosis?

7. What do you think are the potential advantages of using ICT in conducting pedagogical diagnostics?

Results. *"How do you assess the importance of pedagogical diagnostics on a scale from 1 to 10 in improving the quality of Education?"* to question 1, the respondents rated "3" - 45%, "4" - 5%, "5" - 30%, "8" - 20%.

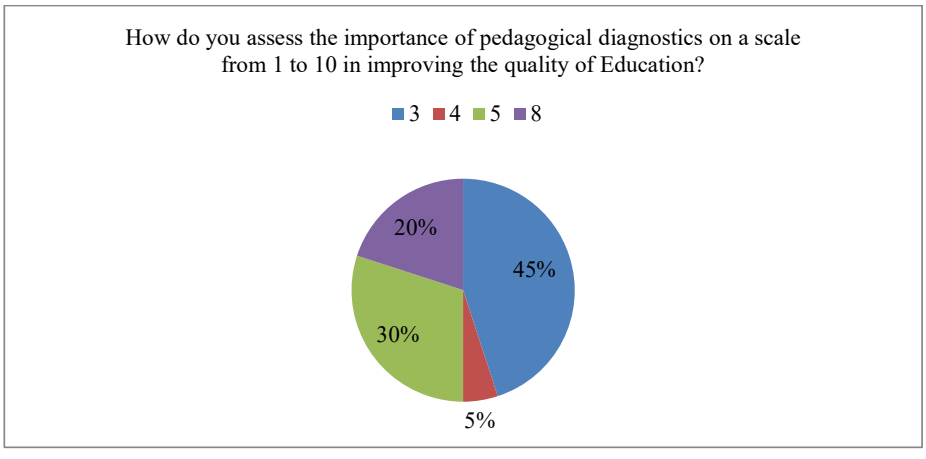

Figure 1: Result on the question 1 of the questionnaire

The majority of respondents (45%) rated the importance of pedagogical diagnostics relatively low, suggesting that they perceive it as having a minimal impact on improving the quality of education. This could indicate a segment of respondents who may not fully recognize the value of pedagogical diagnostics in enhancing educational outcomes.

A small percentage (5%) assigned a score of 4, indicating a somewhat higher but still limited belief in the importance of pedagogical diagnostics. These respondents may see some significance but may not fully appreciate its potential impact. A significant portion (30%) rated the importance of pedagogical diagnostics right in the middle of the scale. This suggests a group of respondents who acknowledge its relevance to a moderate extent but may not consider it a highly influential factor in improving education quality. A notable 20% of respondents assigned a score of 8, indicating a high level of importance attributed to pedagogical diagnostics. These individuals view it as a critical factor in enhancing the quality of education and recognize its potential to significantly impact teaching and learning outcomes.

"To what extent, in your opinion, ICT can contribute to the effectiveness of pedagogical diagnostics?" Question 2 was answered by "none" - 5%, "very little" - 30%, "average" - 25%, "important" - 25%, "I am not sure" - 15%.

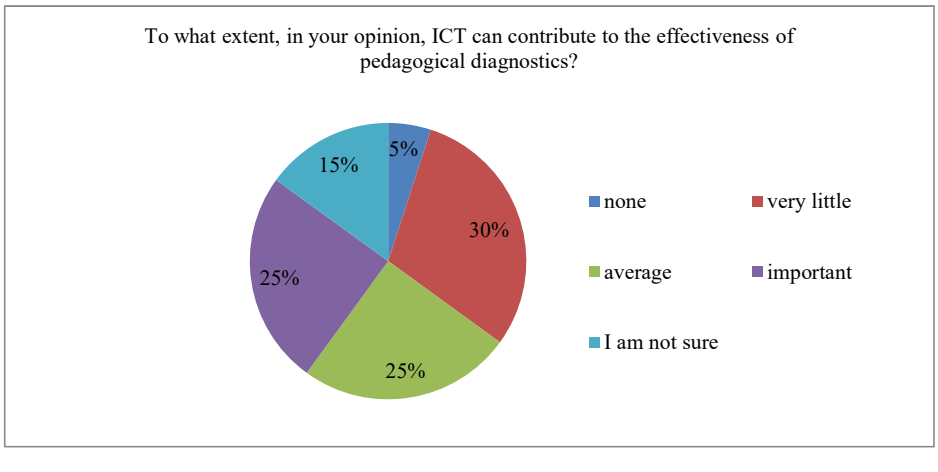

Figure 2: Result on the question 2 of the questionnaire

Let's analyze the responses to the question about the extent to which ICT can contribute to the effectiveness of pedagogical diagnostics, based on the provided percentages. A small percentage of respondents (5%) firmly believe that ICT does not contribute to the

effectiveness of pedagogical diagnostics. This could suggest a segment of individuals who might be skeptical or unaware of the potential benefits of integrating technology into educational assessment practices. The largest portion of respondents (30%) expressed the opinion that ICT has a minimal impact on the effectiveness of pedagogical diagnostics. This group acknowledges some contribution but perceives it to be relatively insignificant in comparison to other factors. A quarter of respondents (25%) believes that ICT has an average level of contribution to the effectiveness of pedagogical diagnostics. This group recognizes a moderate impact but may not view technology as a transformative element in this context. Another 25% of respondents consider ICT to be important in contributing to the effectiveness of pedagogical diagnostics. This indicates a substantial portion of individuals who recognize the significance of technology in enhancing the diagnostic processes in education. A minority of respondents (15%) indicated uncertainty regarding the contribution of ICT to the effectiveness of pedagogical diagnostics. This group may require more information or education about the potential benefits and applications of technology in this context.

"Do you currently use any ICT in your teaching or learning environment to conduct pedagogical diagnostics?" 25% answered yes to question 3, 75% answered no.

A quarter of respondents (25%) indicated that they currently use ICT in conducting pedagogical diagnostics. This suggests that there is a segment of educators who actively incorporate technology into their diagnostic practices, potentially leveraging digital tools for assessment and analysis. The majority of respondents (75%) stated that they do not currently use ICT in conducting pedagogical diagnostics. This indicates a significant portion of individuals who may not have integrated technology into their diagnostic processes or are not utilizing it to its full potential in this context.

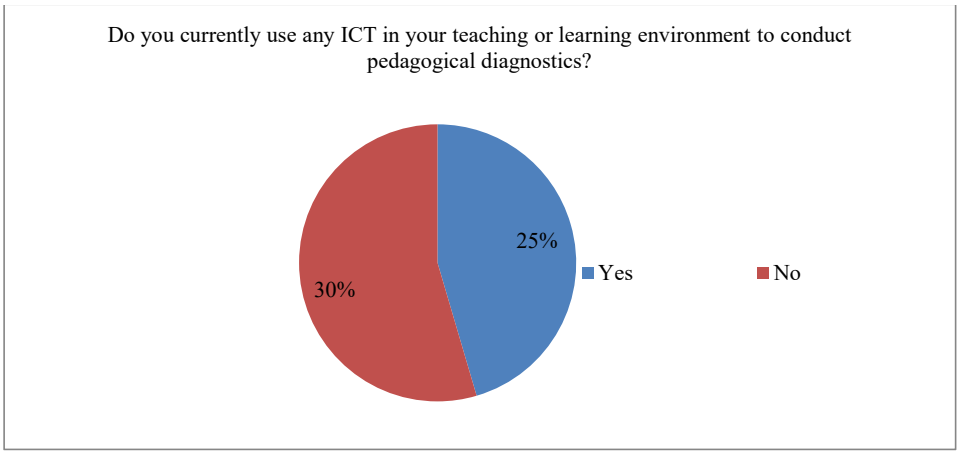

Figure 3: Result on the question 3 of the questionnaire

In Question 4, *"If yes, specify the types of acts you use"*, Excel, Google tables, and platforms are displayed. Edpuzzle, Kahoot. Tools that collect real-time data on student understanding during lessons through quizzes or polls. Excel, Google Sheets. While general-purpose, spreadsheet software is often used for basic data analysis in education settings. By actively using ICT in pedagogical diagnostics, teachers can streamline assessment processes, gain deeper insights into student learning, and provide more personalized and effective support. The specific tools and technologies chosen will depend on the preferences of individual educators, the resources available, and the unique needs of their students.

"What problems did you face when integrating ICT into pedagogical diagnostics?" we received answers to 5 questions: lack of access to technologies, lack of knowledge and

professional development on the use of ICT, lack of readiness for change, confidentiality and security issues, diversity of technological skills.

" What is your level of knowledge in using ICT for pedagogical diagnosis?" for 6 questions "low " – 20%," medium " – 60%," high " – 20%.

A minority of respondents (20%) indicated that they have a low level of knowledge in using ICT for pedagogical diagnostics. This suggests that there is a segment of individuals who may feel less confident or experienced in leveraging technology for diagnostic purposes. The majority of respondents (60%) reported having a medium level of knowledge in using ICT for pedagogical diagnostics. This indicates a substantial portion of individuals who feel reasonably confident and proficient in integrating technology into their diagnostic practices. Another minority of respondents (20%) expressed having a high level of knowledge in using ICT for pedagogical diagnostics. This suggests that there is a smaller but still significant group of individuals who feel very confident and well-versed in leveraging advanced technology for diagnostic assessments.

"What do you think are the potential advantages of using ICT in conducting pedagogical diagnostics?" to 7 questions respondents will give the following answers:

- ICT allows for the automation of assessment processes, reducing manual grading time and providing instant feedback. This efficiency enables teachers to focus more on personalized instruction;

-by leveraging ICT tools, educators can tailor diagnostic assessments to individual student needs. This personalization fosters a more adaptive and engaging learning experience for each student;

-ICT facilitates the collection and analysis of data related to student performance. This data-driven approach enables teachers to make informed decisions about instructional strategies, interventions, and curriculum design;

-using ICT in diagnostics allows for real-time monitoring of student progress. Teachers can identify learning gaps early, enabling timely intervention and providing targeted support to students who need it;

-ICT provides access to a wealth of multimedia resources, such as videos, simulations, and interactive content. Integrating these resources into diagnostics enhances the variety of assessment methods and caters to diverse learning styles.

Discussion. The findings of this study highlight a significant gap between the theoretical recognition of ICT's role in pedagogical diagnostics and its actual implementation by future primary school teachers. This is consistent with the results of Wiyono et al. (2022), who also identified a low frequency of ICT usage among teachers for instructional supervision and diagnostic purposes, despite the availability of technological resources. One of the most striking results from our survey is that only 25% of respondents currently use ICT in pedagogical diagnostics, and 75% do not integrate digital tools at all. This aligns with the international findings of Demirtaş and Aksoy (2023), who noted that a large proportion of pre-service teachers lack practical experience and confidence in applying ICT for assessment, even though they support its potential in theory.

Additionally, the low perception of the importance of pedagogical diagnostics (with 45% rating it as "3" out of 10) parallels the results of the study by Teshaboev et al. (2023), which found that many primary teachers undervalue diagnostic tasks due to insufficient training and a lack of institutional emphasis on formative assessment. These findings underscore the need for rethinking university programs to better emphasize the scientific and practical value of pedagogical diagnostics. In contrast, some respondents in our study (20%) did recognize the high importance of diagnostics and ICT integration. This group's understanding and attitude are in line with the findings of Neethiperumal (2022), who demonstrated that integrating TPACK (Technological Pedagogical Content Knowledge) frameworks into teacher education significantly improves pre-service teachers' ability to apply ICT in diagnostic and instructional tasks. Despite moderate self-reported ICT competence (60% claimed "medium" knowledge), actual usage remains limited, reinforcing the discrepancy

identified by Kiselev (2023), who emphasized that declarative knowledge about ICT does not always translate into applied competence. The need for context-based, hands-on training with real diagnostic scenarios is apparent.

Furthermore, our study confirmed key advantages of ICT-supported diagnostics, such as data automation, personalization, and real-time feedback - findings echoed in the work of Yarullin et al. (2016), who argued that smart diagnostic technologies increase learning accuracy and engagement. However, our respondents also faced barriers like lack of access to technology, limited training, and resistance to change, as also noted in Makarenko et al. (2020). Thus, the scientific value of our study lies in uncovering the current mismatch between teacher perceptions, competencies, and actual practices regarding ICT in pedagogical diagnostics. These results support the argument that teacher education programs must incorporate systematic, practical training in ICT tools, as also recommended by Wiyono et al. (2021) and Altynnikova et al. (2022). To sum up, the integration of ICT into pedagogical diagnostics remains underdeveloped among future teachers despite its recognized benefits. By comparing our findings with recent international studies, we emphasize the urgent need for systemic educational reforms that address both technological infrastructure and pedagogical culture in teacher training.

Conclusion. In conclusion, the responses to the questionnaire on the integration of ICT into pedagogical diagnostics reveal a nuanced landscape. While a significant proportion of educators acknowledge a medium level of knowledge in utilizing ICT for diagnostic purposes, there exists a diverse range of opinions regarding the importance and effectiveness of such integration. Challenges, including limited access to technology and resistance to change, underscore the need for targeted professional development and collaborative efforts to bridge knowledge gaps. Notably, the majority of respondents currently do not employ ICT in pedagogical diagnostics, signaling a potential opportunity for comprehensive training initiatives. The potential advantages of ICT, such as enhanced efficiency and personalized learning experiences, underscore the importance of strategically navigating these challenges to unlock the full benefits of technology in optimizing educational practices and improving student outcomes.

The results of the survey show that in preparing future teachers of primary education for pedagogical diagnostics based on information and communication technologies, it is necessary to provide the following opportunities.

- conduct workshops, training sessions, or awareness campaigns to highlight the benefits of pedagogical diagnostics;
- encourage dialogue among educators to share success stories and best practices related to the implementation of effective pedagogical diagnostics;
- incorporate information on the importance of pedagogical diagnostics in teacher training programs and professional development initiatives.

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Professional-Oriented Competence of Future Teachers in the Context of Digital Adaptive Learning

Abstract

Introduction. The study addresses the critical importance of teacher skills and competences in shaping educational quality and future generations, focusing on revealing the essence and structure of professionally-based competences that prospective foreign language teachers should acquire to work effectively with digital adaptive technologies in their future profession. The research recognizes that improving teacher training programs and maintaining high teaching standards are essential for sustainable national development. *Methodology and Methods.* Data was collected using a structured Likert Scale questionnaire administered to 68 participants who rated a set of 25 competences. The research employed descriptive statistical analysis as the primary analytical approach, with the Friedman test utilized to reveal essential differences between professionally-based competences of prospective foreign language teachers. *Results.* The findings demonstrated that in-service teachers considered methodical competence as the most important professionally-based competence. The Friedman test revealed significant differences between various competences, with highest ranks assigned to competences related to effective lesson planning and classroom time management, while contemporary approaches such as hybrid learning models received the lowest rankings. The lower ranking of competences related to adaptive learning models indicated gaps in current teacher training programs. *Scientific novelty.* The research provides comprehensive analysis of the competence structure required for prospective foreign language teachers working with digital adaptive technologies, establishing a hierarchy of professional competences and identifying previously unrecognized gaps between traditional teaching skills and contemporary digital approaches in teacher preparation. *Practical significance.* The study reveals the need for focused professional development in teacher training programs, particularly in areas related to adaptive learning models and hybrid teaching approaches, providing evidence-based recommendations for improving the quality of foreign language teacher preparation to meet modern educational demands.

Keywords: EFL teacher competences, professionally-based competence, digital learning tools, adaptive learning technologies, digital teaching skills, pre-service teacher training.

Introduction. Training highly qualified specialists plays a crucial role in strengthening a country's competitiveness on the global stage. Quality education and professional training not only enhance the standard of living but also contribute to Kazakhstan's successful integration into the global community. It is no coincidence that President Kassym-Jomart Tokayev, in his address to the people of Kazakhstan titled *"*A Just Kazakhstan: Rule of Law, Economic Growth, Public Optimism," emphasized the importance of training specialists in line with modern economic development trends: "Providing qualified personnel is the most pressing task... Professionalism must always come first in our society. The new quality of our nation is being shaped by specialists in their respective fields" (Tokayev, 2024). In this regard, the further development of the pedagogical education system based on the best domestic and international practices remains a burning issue. It is necessary to improve the training

level of pre-service teachers, prepare competent specialists who meet modern requirements, and establish a high-quality education system.

In today's rapidly evolving educational landscape, there is a growing demand for teachers who can effectively integrate cutting-edge technologies and digital learning platforms into their instructional practices. Educators must not only be proficient in using these tools but also possess the ability to adapt the learning process to meet the diverse needs of each learner. The shift toward student-centered learning underscores the necessity for teachers who can personalize instruction, foster student motivation, and create engaging, interactive learning experiences (Levin et al, 2024). Therefore, higher education institutions must prioritize the training future educators who are equipped with the skills and competences required to navigate and leverage digital platforms, ensuring a more inclusive and effective learning environment.

This increasing demand is in line with the competency based approach which shifts the focus from the simple measurement of a learner's knowledge to the assessment of his or her ability to use it in the real world. The main purpose of this framework is to guarantee that the education system is able to address the changing needs of the labor market by training graduates who are fully-equipped and competent to meet the requirements of the workplace (Kunanbayeva, 2010). Mineyeva et al (2022) are right that in the 21st century-the era of digital reality-it is wrong to consider a teacher as just a "supplier of knowledge". On the contrary, a teacher has to enable every learner and bring out the best in every learner. Due to the dynamics in the education system, it is important to establish the professionally-based competences that a foreign language teacher should acquire in the 21st century.

Taking into consideration the relevance of the competency based approach in training future teachers and the needs of the labor market, the purpose of this paper is to identify the professional competences of the future foreign language teacher in the context of digital adaptive learning. The article looks at the theoretical foundations of professional competences in foreign language teaching and reports on the perceptions of in-service foreign language teachers on these competences.

This study poses two research questions:

1. What is the meaning and structure of the term 'professionally-based competence of future foreign language teachers'?

2. Which professional competences of foreign language teachers are required in the context of digital adaptive learning?

The competency based approach enhances the primary purpose of foreign language teaching to train professionals who are not only knowledgeable but also competent to face the challenges of the world of work. This approach helps graduates to be ready for future career, easy transition to society and enhanced mobility (Orynbayeva, 2024). The professional competence of English as a Foreign Language (EFL) teachers is a complex and evolving concept that plays a critical role in affecting teaching effectiveness and students' learning outcomes. Professional competence means the improvement of educational and instructional practices where the main attention is paid to the quality of teaching. It is essential for the development and improvement of the field of education.

Beside subject matter and pedagogical knowledge and skills, teachers are expected to demonstrate professional competence. This includes regulating the process of learning and teaching, from classroom discipline to integrating the latest pedagogical strategies, using new and creative ways of presenting lessons, and evaluating learners' achievements. Teachers should always be ready to incorporate new materials that are in conformity with the current educational trends. Improving teaching practices is an urgent issue that requires immediate attention. (Channa et al., 2024) The development of professional competence is a process of teacher education, integrating technology into teaching and professional reflection (Marisa et al., 2024). There are various interpretations of the concept of "professional competence" of a teacher in pedagogical literature. Before exploring the essence of the concept "professional competence", we decided

to look up the definition of this word in the Collins dictionary, which states that competence is the ability to do something well or effectively (Collins Dictionary, n.d.).

According to Turlybekov et al (2024) the professional pedagogical competence of future EFL teachers is a comprehensive combination of attributes that encompass their personal and socio-moral background. It also demonstrates their ability to cultivate motivation, knowledge, and practical skills within their professional field. Fakhrutdinova et al (2020) explains that professional competence of a teacher can be considered as a professional or personal characteristic of a teacher that guarantees high scientific and pedagogical activity. Similarly, Belonozhkina (2009) writes that the professional competence of a foreign language teacher expresses the unity of their theoretical and practical readiness to carry out pedagogical activities. Bondar et al (2024) sticks to the idea that the professional competence of a teacher is a fusion of expertise (specialized, methodical, psychological, and pedagogical training), creativity (innovative approaches to the learning process, and the effective use of teaching tools and methods) and art (performance and public speaking).

Thus, the analysis of sources has allowed us to define the concept of professional competence of a future foreign language teacher as a combination of knowledge, skills, abilities, and readiness for future teaching activities, as well as for the application of innovative approaches, methods, and teaching tools. In addition, we have identified that there are various classifications of the professional competences of a future foreign language teacher. According to Kunanbayeva (2015), the competency model comprises four sequentially integrated blocks of competences within the educational process: Professionally-oriented, Professionally-based, Professionally-identifying competences and Intercultural-international professional communication.

The professionally-based competences block is represented by the "basic competences," which reflects the ability and readiness to engage in a specific professional activity (such as pedagogical, philological, etc.). This block includes the formation of the following sub-competences: contextual-communicative, pragma-actualizing, conceptual competences and so on. Mendekenova et al (2024) claim that this block of competences can be considered as the primary one within this model-that is, these competences foster the preparedness and capability of future foreign language teachers to develop effective pedagogical practices, so they play a crucial role in their professional development. They are primarily formed during the third year of study. Therefore, at this stage, students should mainly focus on finding theoretical information about up-to-date teaching tools and methods. They should also read authentic and professional materials and learn to design teaching methods using modern educational technologies.

Several other researchers have also attempted to systematize the components of EFL teachers' professional competence. For instance, Andreyeva (2022) defines six main components: communicative, linguistic, methodical, psychological-pedagogical, personal, and digital competences. Similarly, Titova (2022) identifies four core competences necessary for foreign language teachers in the digital era: professional-communicative, methodical-pedagogical, information-communicative, and universal competences. Among these, Evstigneyeva et al (2013) underscore methodical competence as the most critical, arguing that a well-chosen methodology bridges a future EFL teacher's professional competences with effective instructional strategies. It encompasses the selection of teaching strategies, tools, instructional formats, and pedagogical approaches aimed at fostering learners' knowledge, skills, abilities, and attitudes, emphasizing its practical application.

According to Koknova (2019), the methodical competence of a foreign language teacher includes:

- *Gnostic and Planning Component*: Accumulating linguistic and methodological knowledge, selecting and organizing educational materials, planning lessons, choosing effective teaching strategies, and fostering students' communicative skills.

- *Communicative and Organizing Component*: Collaborating within the educational environment, engaging in teamwork, resolving conflicts, and applying communication strategies to structure learning effectively.

- *Diagnostic and Correction Component*: Assessing and adjusting learners' progress using evaluation criteria, diagnostic techniques, and assessment methods.

- *Motivational Developing Component*: Integrating advancements in pedagogy, engaging in continuous self-education, and utilizing ICT in teaching.

- *Reflexive Component*: Critically analyzing teaching effectiveness, refining methods, and maintaining work-life balance to prevent stress and burnout.

In the scientific literature, another competence that is regarded as one of the components of professional competences is digital competence. According to Kizrina et al (2022) digital competence of a EFL teacher is a set of specialized competences that enables teacher to integrate digital technologies into foreign language learning strategies, and ability to work successfully in a constantly evolving digital educational environment. With the advent of educational technologies like adaptive platforms, learning environments are no longer restricted by time or place. Consequently, it is essential for prospective teachers to become adept at using smart technologies as dynamic and interactive teaching tools (Ally, 2019).

Organizational competence involves the ability and readiness to set educational goals, plan their development, and take responsibility for achieving them. A future foreign language teacher should be able to:

- define clear and achievable educational objectives aimed at improving professional skills;

- strategically plan the development of these objectives by outlining action steps, focusing on results, and understanding the purpose and impact of their decisions;

- approach tasks responsibly by setting realistic goals, meeting deadlines, tracking progress, ensuring completion, and presenting achievements for evaluation and further application;

- regularly monitor students' progress at the beginning, middle, and end of the learning process to stay aware of their development and challenges (Vysotskaya, 2017).

Teacher conceptual competence implies the understanding of educational theories, subject matter, and pedagogical principles to design and implement instruction that supports student learning. It is the capacity to translate theoretical concepts into practice, to adapt concepts for different classroom situations, and to engage in reflective practice to develop educational outcomes. From this, it is clear that conceptual competence helps teachers to be able to make decisions, use new teaching strategies, and meet the diverse needs of learners. Shulman (2013) explained that conceptual competence is related to pedagogical content knowledge (PCK), which combines the knowledge of the subject matter and the ways of delivering it to engage students in learning. Thus, the analysis of the literature on the research problem shows that there are currently various types of professional competences for future foreign language teachers, including communicative, linguistic, methodical, psychological-pedagogical, personal, digital, professional-communicative, methodical-pedagogical, information-communicative, universal, contextual-communicative, pragma-actualizing, conceptual competences and so on. This variety of professional competences directs the design of the training content for prospective EFL teachers at universities toward specific learning outcomes. They also characterize the graduate's readiness for successful work in a specific field of pedagogical activity and their ability to solve pedagogical tasks in a timely and high-quality manner.

Based on existing approaches to the classification of professional competences and taking into account the goals and objectives of digital adaptive learning, we identified the following professionally-based competences of a future EFL teacher (Figure 1):

1) methodical competence;
2) digital (ICT) competence;
3) organizational competence;
4) conceptual competence.

Figure 1: Professionally-based competences of future foreign language teachers in the context of digital adaptive learning

Overall, the professional competence framework of prospective EFL teachers is a multifaceted construct that integrates pedagogical expertise and digital proficiency. The literature underscores that successful teacher training relies on a holistic approach that fosters both theoretical knowledge and practical skills, ensuring EFL educators are well-equipped to meet the evolving demands of modern language education.

Materials and Methods. This study employed a quantitative research method. The quantitative approach is a research method that relies on numerical data. It is often based on assumptions associated with realism, empiricism, and positivism. Social scientists using the quantitative approach rely on available data and survey techniques when studying and capturing human life realities (O'Leary, 2020). Surveys are the most common method of collecting quantitative data, allowing for statistical analysis of the obtained data. They involve verbal or written communication with respondents to gather responses, thereby aiding in the investigation of a given issue (Sagintayeva, 2022).

A questionnaire was used as a main tool in gathering the data, which was conducted online using Google Forms. The participants indicated their level of agreement with the survey statements on a 5-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree". The sample for this study consisted of 68 people (Table 1): 24 school teachers (35.3%) and 44 University teachers (64.7%). The participants' age ranged from 24 to 69, with a mean of 38.97 years of age (SD=9.7). The teaching experience of the respondents ranges from 2 to 44 years, with an average of 15.6 years and a standard deviation of 9.1.

Table 1. *Participants*

Occupation	*n*	%
School teacher	24	35.3
University teacher	44	64.7
total	68	100

For the development of the instrument, four professionally-based competences were considered: methodical, digital, organizational, and conceptual competences. These broad areas of future teacher professional competence were defined based on previous research studies (Kunanbayeva,2015; Andreyeva, 2022; Titova, 2022; Evstigneyeva et al, 2013). The questionnaire was prepared in English and distributed digitally. Demographic data aimed to create a profile of the experts in foreign language education. A total of 25 items were included, and participants rated each item on a scale from 1 to 5, indicating how important they believe each competence is for prospective foreign language teachers in the context of digital adaptive learning. The Cronbach's alpha for the survey was 0.942, which shows strong internal consistency. For data analysis, the researchers primarily used descriptive statistics within SPSS (Statistical Package for Social Sciences). In addition, the Friedman test was

employed to rank the competence items. This test assigns ranks to values provided by the respondents. The mean rank for each item was then computed to determine the overall ranking of competences.

Results. The survey results offer valuable insights into the professionally-based competences that in-service teachers consider essential for the next generation of EFL educators. These competences span four main domains: methodical, digital, organizational, and conceptual.

Data on methodical competences as perceived by in-service teachers are depicted in Table 2.

Table 2. *Data on methodical competences*

Indicator A future teacher should be	mean	SD
- able to prepare supplementary materials using adaptive technologies	4.60	.522
- capable of using a variety of teaching methods to accommodate different learning styles	4.56	.557
- confident in using technology-driven assessment tools to track students' language progress and provide individualized feedback	4.62	.490
- able to make Speaking and Listening tasks using adaptive technologies	4.60	.550
- able to plan the lesson effectively	4.78	.484
- able to create engaging digital lessons that tailored to each student's language level	4.44	.655
- able to make Reading and Writing tasks using adaptive technologies	4.57	.581
- able to differentiate instruction to accommodate students with special educational needs	4.49	.611

The analysis of methodical competences highlighted several key strengths. On average, the overall mean score for all methodical competences was 4.58. The highest-rated competence was 'A future teacher should be able to plan the lesson effectively' (M = 4.78, SD = 0.484), underscoring the critical importance of thorough lesson planning. Next comes competence related to 'being confident in using technology-driven assessment tools' (M = 4.62, SD = 0.490) and 'preparing supplementary materials using adaptive technologies' (M = 4.60, SD = 0.522), reflecting the growing emphasis on digital tools in education. Competences involving the use of adaptive technologies for Speaking and Listening tasks (M = 4.60, SD = 0.550) and Reading and Writing tasks (M = 4.57, SD = 0.581) were also well-regarded by participants. However, the lowest-rated one among methodical competences is 'creating engaging digital lessons tailored to each student's language level' (M = 4.44, SD = 0.655), which suggests a potential area for improvement. The experts' assessment of digital competences is shown in Table 3.

Table 3. *Data on digital competences*

Indicator A future teacher should be	mean	SD
-ready to integrate modern technology (e.g., interactive tools, online resources) into lessons	4.62	.547
- able to use AI-Powered Learning Tools to enhance language learning	4.49	.658
- familiar with adaptive platforms and resources for teaching foreign languages	4.47	.610
- aware of digital safety and ethical issues related to using technology in education	4.54	.558
- demonstrate the ability to critically evaluate and select digital resources (e.g., apps, platforms, AI tools) for effective foreign language teaching	4.56	.655
- ready to use learning management systems (LMS) to organize course materials and communicate with students	4.50	.702

Digital competences were generally rated positively, with all mean scores above 4.4 (average mean for all digital competences is 4.53). The highest-rated item was "integrating modern technology (e.g., interactive tools, online resources) into lessons" (M = 4.62, SD = 0.547). Skills related to 'using AI-powered learning tools' (M = 4.49, SD = 0.658) and 'familiarity with adaptive platforms' (M = 4.47, SD = 0.610) were next highly appreciated ones by the participants. Additionally, respondents identified 'the ability to critically evaluate and select digital resources' (M = 4.56, SD = 0.655) and 'the use of learning management systems (LMS)' (M = 4.50, SD = 0.702) as valuable skills for pre-service teachers, highlighting the growing importance of digital proficiency in education. An overview of organizational competences according to experts is illustrated in Table 4.

Table 4. *Data on organizational competences*

Indicator A future teacher should be able to	mean	SD
- organize extra-curricular activities using Adaptive Learning platforms	4.38	.734
- organize a lesson using Hybrid Learning Models with Adaptive Techniques	4.24	.794
- organize a lesson using Blended Learning Models with Adaptive Techniques	4.40	.756
- build positive relationships with students and encourage confidence	4.65	.567
- manage classroom time effectively to maximize student learning	4.72	.514
- adapt lesson plans to meet the needs of diverse learners	4.57	.630

When it comes to organizational competences, 'managing classroom time effectively' comes top of the list (M = 4.72, SD = 0.514), highlighting the importance of efficient time management in teaching. Close behind was 'building positive relationships with students' (M = 4.65, SD = 0.567), emphasizing the value of strong teacher-student connections. Flexibility in 'adapting lesson plans to diverse learners' also received solid support (M = 4.57, SD = 0.630), showing that adaptability is a key skill for educators. However, competences related to innovative teaching methodologies, such as 'organizing lessons using Blended Learning Models' (M = 4.40, SD = 0.756) and 'Hybrid Learning Models' (M = 4.24, SD = 0.794), were rated lower. This discrepancy might indicate a potential gap in practical experience with these new approaches. Overall, the average mean for organizational competences was 4.49. The information on how respondents perceive conceptual competences is given in Table 5.

Table 5. *Conceptual competences*

Indicator A future teacher should	mean	SD
-comprehend the concept of Digital Adaptive Learning	4.47	.743
- be familiar with psychological and pedagogical theories behind adaptive learning	4.51	.723
- be familiar with the principles of foreign language acquisition and their implications for teaching	4.62	.599
- be aware of current trends and research in foreign language teaching	4.59	.674
- be able to foster students' critical thinking skills through language learning activities	4.63	.621

In case of conceptual competences, it is apparently seen that "familiarity with principles of foreign language acquisition" (M = 4.62, SD = 0.599) and "foster students' critical thinking skills through language learning activities" (M = 4.63, SD = 0.621) are highly rated among respondents. Correspondingly, "being aware of current trends in foreign language teaching" is recognized as a vital skill too (M = 4.59, SD = 0.674). However, competences related

to "comprehending the concept of Digital Adaptive Learning" (M = 4.47, SD = 0.743) and understanding the "psychological and pedagogical theories behind adaptive learning" (M = 4.51, SD = 0.723) had more moderate ratings. The average mean for conceptual competences is 4.56. The mean ranks of 25 professionally-based competences for future foreign language teachers, as evaluated by 68 participants, are presented in Table 6. The competences were ranked based on their perceived importance in teaching practice. The Friedman test was utilized to calculate the rankings to ensure statistical reliability.

Table 6. *Mean ranks of competences* (n=68)

	Competences	Mean rank
1	Ability to plan the lesson effectively	15,38
2	Ability to manage classroom time effectively to maximize student learning	14,95
3	Ability to foster students' critical thinking skills through language learning activities	14,18
4	Ability to build positive relationships with students and encourage confidence	14,12
5	Being familiar with the principles of foreign language acquisition and their implications for teaching	13,88
6	Ability to integrate modern technology (e.g., interactive tools, online resources) into lessons	13,60
7	Being aware of current trends and research in foreign language teaching	13,57
8	Ability to make Speaking and Listening tasks using adaptive technologies	13,54
9	Ability to prepare supplementary materials using adaptive technologies	13,49
10	Readiness to use technology-driven assessment tools to track students' language progress and provide individualized feedback	13,46
11	Ability to critically evaluate and select digital resources (e.g., apps, platforms, AI tools) for effective foreign language teaching	13,32
12	Ability to make Reading and Writing tasks using adaptive technologies	13,29
13	Ability to adapt lesson plans to meet the needs of diverse learners	13,24
14	Capability of using a variety of teaching methods to accommodate different learning styles	13,03
15	Being familiar with psychological and pedagogical theories behind adaptive learning	12,90
16	Being aware of digital safety and ethical issues related to using technology in education	12,87
17	Ability to use learning management systems (LMS) to organize course materials and communicate with students	12,57
18	Ability to comprehend the concept of Digital Adaptive Learning	12,41
19	Ability to use AI-Powered Learning Tools to enhance language learning	12,32
20	Ability to differentiate instruction to accommodate students with special educational needs	12,24
21	Being familiar with adaptive platforms and resources for teaching foreign languages	12,07
22	Ability to create engaging digital lessons that are tailored to each student's language level	11,86
23	Ability to organize a lesson using Blended Learning Models with Adaptive Techniques	11,55
24	Ability to organize extra-curricular activities using Adaptive Learning platforms	11,38
25	Ability to organize a lesson using Hybrid Learning Models with Adaptive Techniques	9,79

The Friedman test made it possible to reveal essential differences between the professionally-based competences of prospective foreign language teachers (χ^2 = 79.561, df = 24, p = 0.01). The highest ranks were assigned to competences related to effective lesson planning and classroom time management, while the use of contemporary

approaches such as hybrid learning models received the lowest rank.

Discussion. The study focused on four components of the professionally-based competences: methodical, organizational, digital, and conceptual. The results show that on average, methodical competences were rated higher than the other ones (M=4.58). This result is in line with Evstigneyeva et al. (2022) who argued that methodical competence is the most important for prospective EFL teachers. Conceptual competences are the next essential set of abilities (M=4.56) which indicate that future educators should be knowledgeable and have a correct understanding of the theoretical foundations of pedagogy, language acquisition and teaching. This competence enables the teacher to make rational decisions in teaching practice. Although the digital competences were ranked third with the mean score of 4.53, the difference between them and conceptual competences is very small. This means that both types of competences are considered nearly equally important for the future EFL teachers. It is not surprising because the role of the digital skills in the 21st century is clear. In the contemporary society, digital competence is critical for teachers as it helps them to incorporate technology into the classroom and engage students. According to Nagel et al. (2023), the use of digital tools is no longer a luxury but a necessity for educators. The least graded competences were organizational (M=4.49). That may be due to the uncertainty or lack of practice with implementing the latest instructional strategies, which highlights a major area for improvement.

As a result of Friedman test some valuable insights into the professionally-based competences were provided. In-service foreign language teachers, as experts in foreign language education, had to assess the skills and abilities which are vital for future EFL teachers. The results highlight a clear prioritization of traditional pedagogical skills over digital competences, indicating that respondents are probably rather conservative and prefer the conventional way of teaching than the technology-rich classroom.

The list of competences ranked according to the Friedman test begins with "planning the lesson effectively", "managing classroom time effectively" and "fostering students' critical thinking skills through language learning activities," and concludes with "organizing a lesson using Blended Learning Models with Adaptive Techniques", "organizing extra-curricular activities using Adaptive Learning platforms" and "organizing a lesson using Hybrid Learning Models with Adaptive Techniques". Among the 25 competences examined, "planning the lesson effectively" emerged as the most important professional competence for future EFL teachers. Lesson planning represents a fundamental methodological competence. Naufal et al. (2024) emphasize that an effectively planned lesson serves as a roadmap that provides a clear and appropriate pathway for achieving educational objectives.

Surprisingly, competences that are directly connected to digital adaptive learning such as the ability to incorporate modern technology into teaching (13.60) and the willingness to employ technology-based assessment tools (13.46) were rated lower than expected. This indicates that although technology is viewed as useful, it is not considered as important as basic teaching skills by the participants. It is also important to note that certain competences that are related to adaptive learning such as the ability to make use of AI-powered learning tools (12.32), familiarity with adaptive platforms (12.07), and the ability to create engaging digital lessons tailored to students' language levels (11.86) were even lower. These findings may be explained by the fact that there is a lack of integration of digital adaptive methodologies into current teacher training programs.

Furthermore, the lowest rating is given to organizing a lesson using Blended and Hybrid Learning Models. These models combine in-person and online teaching and incorporate technologies such as artificial intelligence and virtual reality to tailor the learning experience to each student. It is widely recognized that they focus on student-centered learning, flexibility, and active participation; however, they also pose challenges in terms of equity, adaptation

of the instructor, and maintaining students' interest (Mulenga et al., 2024). A possible explanation for these rankings may be teachers' limited awareness of up-to-date instructional methods.

These results indicate that teacher education is still in the process of transition: Traditional pedagogical strengths are still high, but the integration of digital adaptive methodologies is still in the process of development. This is in concurrence with Langreo (2024) who stated that although many educators are talented at conventional teaching, moving to digital tools and adaptive learning technologies needs more assistance and training. Consequently, teacher education is being criticized for not adequately preparing pre-service teachers to incorporate cutting-edge technology into their practice (Nagel et al., 2023). For this reason, teacher education programs should equally focus on the development of traditional teaching skills and the requirements for digital pedagogy.

While lesson planning and classroom management are still considered important priorities, there is a clear scope to enhance teachers' knowledge in the new patterns of instruction and technology assisted learning. This is particularly important as education moves more towards adaptive learning environments, as discussed by Levin et al. (2024). In order to close this gap, teacher training curricula could include specific units on adaptive learning technologies, digital resource identification, and the application of blended and hybrid learning models. The students would also benefit from practical applications of these areas, which would help teachers gain confidence in dealing with the changing educational environment. Simon et al. (2024) also supported this approach, explaining that integrating adaptive learning technologies into the curriculum can improve both teaching and learning processes.

Conclusion. This research aimed at discovering the professionally-based competences that prospective EFL teachers should possess. Methodical and conceptual competences are without a doubt, the most important for future EFL teachers; but, the role of digital technologies in education cannot be ignored, especially in the present world. The results show that though the educators have understood the importance of the digital tools, these tools have not been fully integrated into the teaching processes. The lower ranking of competences related to adaptive learning models shows a gap in the teacher preparation programs and thus the need for focused professional development. To this end, future EFL teachers must be well-positioned to teach in the modern classroom, and teacher education programs should move beyond including these technologies and methods in a more holistic approach with strong foundational teaching skills. This will allow educators to gain actual practice using the latest technologies and teaching models to help them better handle the current language teaching environment. Strengthening these competences will not only increase teaching effectiveness but also improve student learning and productivity in the digital and adaptive learning environment.

Regardless of its contributions, this study is not without its limitations. The restricted sample size (n=68) may limit the generalizability of the results to other teachers. Furthermore, the study used self-reported evaluations, which may lead to response bias. It is a good idea to use a mixed methods approach, including face-to-face interviews with in-service EFL teachers in the future studies. It may offer a better evaluation. Based on the results of the study, the next initiatives should be aimed at the development of the targeted training modules as well as practical workshops on the use of AI powered tools and adaptive learning platforms to enhance the future teachers' readiness to work in a changing classroom environment. In conclusion, if these future directions are addressed and the identified limitations are eliminated, educational institutions can contribute to developing a new generation of EFL teachers who are familiar with both the conventional teaching methods and the digital adaptive learning environment. This balance will enable them to fully meet the needs of their students and provide for better and more interesting language learning processes.

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Model of Developing the Spiritual and Creative Potential of Future Teachers in the "School-University" System

Abstract

Introduction. The research presents a theoretically substantiated model for developing the spiritual and creative potential of future teachers within the "school-university" system, addressing the need for systematic and purposeful development of these essential qualities in modern educational conditions. The study focuses on creating an integrated approach that bridges theoretical preparation with practical implementation in teacher education. *Methodology and Methods.* The research employs theoretical substantiation based on axiological, systemic, person-oriented, cultural, and activity-based approaches, integrated with principles of integration, subjectivity, and spiritual-practical orientation. The methodology includes systematic modeling approach with four interrelated components and sequential developmental stages analysis. *Results.* A comprehensive model was developed comprising four interrelated components: target, content, technological, and assessment-results. The content component consists of motivational-value, cognitive, and activity-reflexive blocks, while the technological component includes forms, methods, tools, and technologies for developing spiritual and creative potential. Four sequential developmental stages were identified and characterized: adaptive-diagnostic, value-semantic, professional-activity, and creative-transformative. Pedagogical conditions were established including creation of integrated spiritual and creative educational environment, development of elective courses, advancement of subject position, and application of innovative pedagogical technologies. The assessment-results component contains criteria and levels for evaluating developmental progress. *Scientific novelty.* The research provides theoretical foundation for integrating spiritual and creative potential development within the "school-university" system, establishing a comprehensive model that systematically addresses the multidimensional nature of teacher preparation through innovative integration of educational environments and developmental approaches. *Practical significance.* The proposed model ensures systematic and purposeful development of future teachers' spiritual and creative potential, providing educational institutions with evidence-based framework and practical tools for implementing integrated teacher preparation programs that address contemporary educational demands and enhance teaching effectiveness.

Keywords: model, spiritual and creative potential, future teacher, "school-university" system.

Introduction. The crisis of spiritual and moral values, the erosion of traditional moral guidelines, and the strengthening of pragmatic tendencies have a negative impact on the education system (Purpel, 2004; Giroux, 2004; Erenchinova, 2018; Ovsiankina, 2020), reducing the educational potential of pedagogical activity. Under these conditions, there is an increasing need for teachers who can resist destructive sociocultural influences and carry out spiritual and moral education of the younger generation. However, the existing system of teacher training is characterized by fragmentation and inconsistency of educational influences, and the absence of a systematic approach to developing the spiritual and creative potential of future teachers.

The problem of ensuring continuity in developing the spiritual and creative potential of teachers at various stages of professional development is of particular relevance. The "school-university" system represents a unique educational trajectory that allows for purposeful and continuous development of the spiritual and

creative potential of future teachers from the early stages of professional self-determination to full entry into the profession.

The relevance of the research is also related to the insufficient development of theoretical and methodological foundations for developing the spiritual and creative potential of teachers, the absence of a holistic concept revealing the essence, structure, and mechanisms of development of this phenomenon in the system of continuous pedagogical education. Creating a scientifically substantiated model for developing the spiritual and creative potential of future teachers in the "school-university" system will fill the existing gap in pedagogical science and practice.

A model is a simplified reflection of a real object, process, or phenomenon that preserves their key properties. In the process of model construction, abstraction from secondary details occurs, allowing researchers to focus on the essential characteristics of the subject being studied. Modeling as a method of scientific research consists of creating, studying, and applying models, providing the possibility of indirect analysis of objects through their conceptual analogues in situations where direct research is difficult or impossible for objective reasons (Boudon, 1979; Wells, 1995).

In the methodology of science, modeling holds a special place, performing a number of important functions. First, it acts as a connecting link between the theoretical and empirical levels of cognition, allowing theoretical hypotheses to be tested without conducting full-scale experiments. Second, modeling possesses significant heuristic potential, facilitating the generation of new ideas and research directions. Third, it provides a prognostic function, making it possible to predict the behavior of studied systems under various conditions. The methodological value of modeling is manifested in its universality – this approach is applicable in all scientific disciplines, contributing to the integration of scientific knowledge and the formation of interdisciplinary research programs. In modern science, characterized by the increasing complexity of studied objects, modeling is a tool of cognition that allows for ordering and systematizing empirical data, formulating and testing theoretical propositions (Zemlyanskaya, 2013; Kinyakin, 2015; Svinarenko 2017).

The model for developing the spiritual and creative potential of future teachers in the "school-university" system is a holistic conceptual structure reflecting the interconnected components and processes of forming professional and personal qualities, value orientations, and creative abilities of teachers at different stages of their professional development in the conditions of continuity between school and higher education. It aims to create optimal conditions for unlocking the internal resources of the individual and developing their capacity for spiritual self-improvement and creative self-realization in pedagogical activity.

The design of the model is necessitated by the need for a systemic solution to the problem of developing spiritual and creative potential in modern pedagogical education. Its significance is determined by the need to create a holistic mechanism for the professional development of future teachers capable of spiritual self-improvement and creative self-realization through reflexive understanding of pedagogical activity. The model performs prognostic, organizational, and technological functions, ensuring the transition from theoretical understanding of the process of developing spiritual and creative potential to its practical implementation in the integrated educational space of the "school-university" system.

The structural-functional model, which includes target, content, technological, and assessment-results components, ensures the systematic and holistic nature of the future teacher's professional and personal development process. A special role in the model is assigned to the integrated spiritual and creative educational environment in the "school-university" system, which serves as an instrumental foundation for developing spiritual and creative potential, providing mechanisms for professional self-knowledge, value-based self-determination, and creative self-development of future teachers.

The significance of the developed model is determined by its potential in addressing the

following tasks of professional preparation of future teachers: forming a holistic understanding of the spiritual and moral foundations of the teaching profession; developing creative thinking and capacities for innovative activity; mastering mechanisms of spiritual and creative self-realization; and establishing the subjective position of future teachers in continuous professional development.

Thus, the model serves as a theoretical-methodological foundation and technological toolkit for developing the spiritual and creative potential of future teachers, ensuring the systematic, purposeful, and effective nature of this process. Its implementation in professional training conditions will create the environment for harmonious professional development of future teachers who are capable of spiritual self-improvement and creative transformation of pedagogical reality based on a deep understanding of humanistic values and meanings in education.

Materials and Methods. The methodology for designing the model was based on a theoretical-methodological analysis of the problem of developing the spiritual and creative potential of future teachers to answer the *research question*: What are the structural and functional components of the model for developing the spiritual and creative potential of future teachers in the "school-university" system? During the model construction process, scientific literature was analyzed, allowing for the identification of key determinants in the formation of the spiritual and creative potential of future teachers and the determination of an optimal model structure. Based on theoretical analysis, basic components were established that ensure the integrity and functionality of the model: target, content, technological, and assessment-results. The methodological approaches used were axiological, systemic, person-oriented, cultural, and activity-based, the integration of which creates a theoretical-methodological foundation for effectively developing the spiritual-moral values and creative abilities of future teachers.

The target component was defined as system-forming based on its key role in determining the direction of the entire process of developing the spiritual and creative potential of future teachers in the "school-university" system. The structure of the content component was determined by the essential characteristics of spiritual and creative potential identified during theoretical analysis and includes motivational-value, cognitive, and activity-reflexive blocks. The technological component was formed based on an analysis of effective mechanisms for developing spiritual and creative potential and includes forms, methods, tools, and technologies for developing spiritual and creative potential. The assessment-results component is integrated into the model to ensure the diagnosability of results and the possibility of monitoring the effectiveness of the process of developing the spiritual and creative potential of future teachers in the "school-university" system.

During the model design process, hierarchical and horizontal connections between components were established, ensuring their systemic interaction. The methodological foundation for the design was provided by axiological, systemic, person-oriented, cultural, and activity-based approaches, allowing for the creation of a holistic, dynamic model for developing the spiritual and creative potential of future teachers in the "school-university" system (figure 1).

In the context of developing the spiritual and creative potential of future teachers in the "school-university" system, the theoretical and methodological necessity of including specific components in the model is determined by a number of fundamental scientific concepts and approaches: the target component is based on axiological and systemic approaches (Antoniuk, 2021; Egorova, 2022; Kaltayeva, 2021), which define goal-setting as a system-forming factor of spiritual and creative development, and the concept of professional development of teachers (Guskey, 2002; Van Veen, 2012; Darling-Hammond, 2017); the content component relies on the theory of value-semantic development of personality (Romanova, 2019) and the concept of spiritual and moral education (Jumaevich, 2021), integrating motivational-value, cognitive, and activity-reflexive aspects of

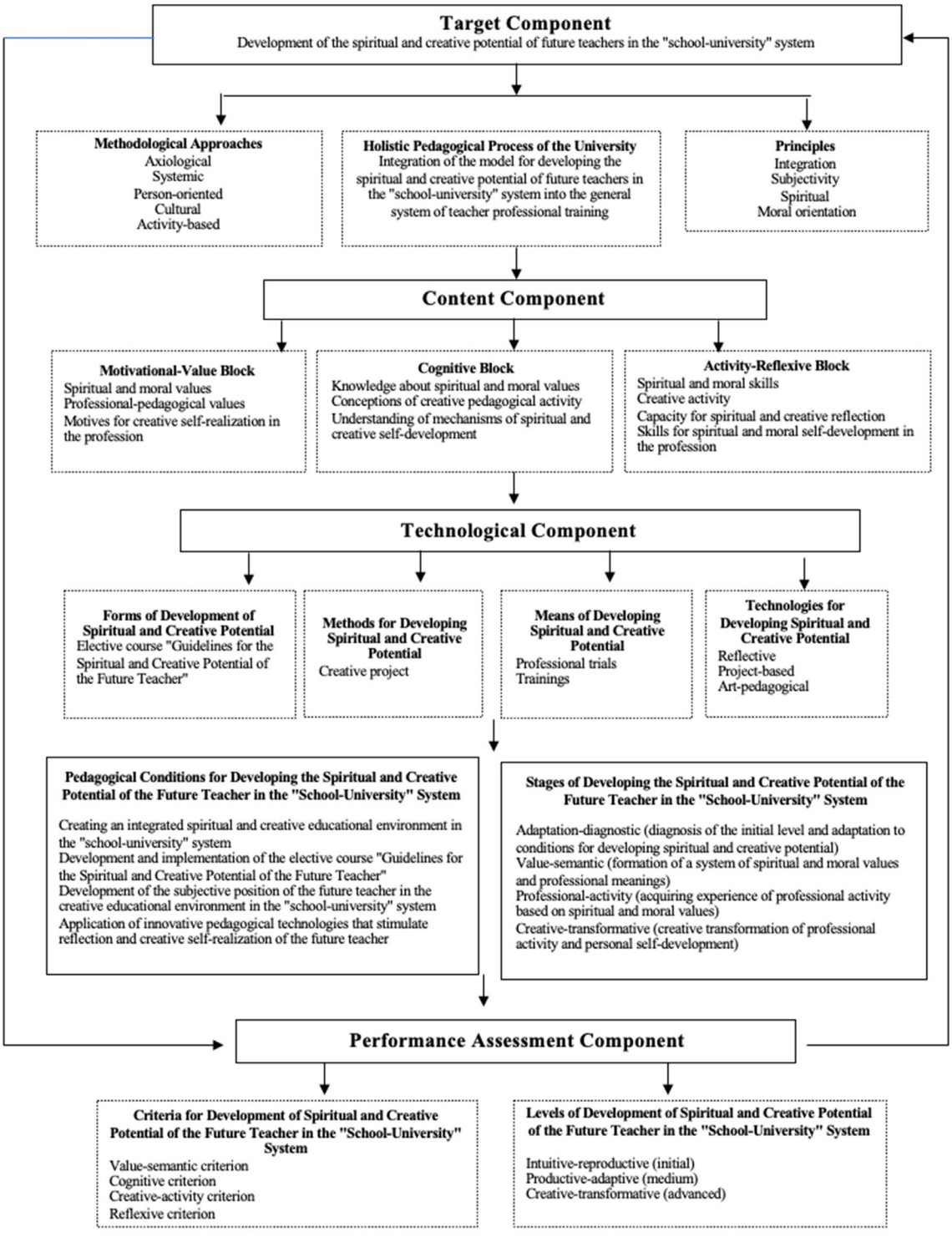

Figure 1: Model for developing the spiritual and creative potential of future teachers in the "school-university" system

teacher formation; the technological component is based on the theory of creative self-realization (Nikulova, 2016; Novikov, 2023) and principles of cultural education (Hytten, 2011), providing mechanisms for spiritual and creative development through various forms, methods, tools, and technologies; the assessment-results component is based on the person-oriented approach (Kharchenko, 2022) and the theory of pedagogical diagnostics (Eshankulovna, 2023), ensuring measurability and controllability of the process of developing spiritual and creative potential. The systemic connections between components are justified

by the principles of integration, subjectivity, and spiritual-moral orientation (Akhmadieva, 2017) and the theory of value-semantic development (Romanova, 2019), which determine the interdependence of all elements of spiritual and creative development and the integral nature of the phenomenon being formed, confirmed by contemporary research in the field of professional development of teachers (Villegas-Reimers, 2003; Postholm, 2012). Let us analyze the proposed model by examining in detail its structural components and functional features.

Results and Discussion. *The Target Component* was defined as system-forming based on its key role in determining the direction of the entire process of developing the spiritual and creative potential of future teachers in the "school-university" system. The purpose of this component is to ensure purposeful, systematic, and value-oriented development of the spiritual and creative qualities of the future teacher's personality, necessary for effective professional activity and personal self-realization in the teaching profession. The structure of the target component presents methodological approaches, the selection of which is determined by the specificity of spiritual and creative potential as an integral personal formation. The axiological approach is necessary due to the value-based nature of spiritual and creative potential, which is based on a system of spiritual and moral guidelines for teachers and manifested in a value-oriented attitude toward pedagogical activity. The systemic approach provides a holistic vision of the process of developing spiritual and creative potential as a multi-component structure with numerous internal and external connections, integrating various aspects of this process into a unified system. The person-oriented approach is justified by the individual nature of spiritual and creative potential, the unique development of which is determined by the subjective experience and personal meanings of each future teacher. The cultural approach is necessary for forming spiritual and creative potential in a cultural context, through the mastery of cultural patterns and traditions that form the basis of the spiritual and moral component of pedagogical activity. The activity-based approach ensures the development of spiritual and creative potential through the active inclusion of future teachers in professional activities requiring creative self-expression and self-realization.

The holistic pedagogical process of the university as a structural element of the target component ensures the integration of the model for developing the spiritual and creative potential of future teachers into the general system of teacher professional training. This holistic pedagogical process has special significance because it allows for overcoming the fragmentation of educational influences and creates conditions for organically embedding the process of developing spiritual and creative potential into the educational paradigm of the pedagogical university. Within the framework of the holistic pedagogical process, all types of student activities, all forms of organization of the educational process, and all stages of professional training are united into a single system. Of particular importance is the establishment of continuity between school and university education, ensuring the continuous development of spiritual and creative potential at all stages of the teacher's professional development. The holistic pedagogical process creates the necessary conditions for a comprehensive impact on the cognitive, emotional, and behavioral spheres of the future teacher's personality, contributing to the harmonious development of all components of their spiritual and creative potential.

Principles define the fundamental provisions regulating the process of developing the spiritual and creative potential of future teachers. The principle of integration ensures the unification of various aspects of the educational process into a single whole, which is particularly significant for the "school-university" system as a continuous educational trajectory. This principle allows for overcoming the gap between theoretical preparation and practical activity, between the educational process and character development work, between school and university education, creating conditions for the holistic development of spiritual and creative potential. The principle of subjectivity affirms the priority of an active,

independent, creative position of future teachers in the process of developing their spiritual and creative potential. The implementation of this principle involves creating an educational environment that stimulates the manifestation of initiative, responsibility, and reflexivity as key qualities of the subject of pedagogical activity. The principle of spiritual and moral orientation determines the value foundation for developing spiritual and creative potential, emphasizing the formation of a system of spiritual and moral values and beliefs that define the professional position of the teacher.

The Content Component of the model for developing the spiritual and creative potential of future teachers represents a complex structure consisting of three interconnected blocks. The motivational-value block establishes the axiological foundation for teacher development and includes spiritual and moral values that form the moral core of the personality; professional-pedagogical values that define ethical and professional guidelines in pedagogical activity; as well as motives for creative self-realization in the profession, which serve as internal drivers for seeking new methods and approaches in pedagogical practice. The cognitive block encompasses the theoretical preparation of future teachers and combines knowledge about spiritual and moral values, their origin, essence, and significance in the modern educational process; conceptions of creative pedagogical activity, including understanding its specifics, methods, and forms of implementation; as well as understanding the mechanisms of spiritual and creative self-development that ensure continuous professional improvement. The activity-reflexive block is aimed at the practical implementation of acquired knowledge and value orientations and contains spiritual and moral skills that allow for the embodiment of ethical principles in everyday pedagogical practice; creative activity manifested in the creation of innovative approaches to the educational process; capacity for spiritual and creative reflection, providing critical understanding of one's own activities from the positions of spirituality and creativity; as well as skills of spiritual and moral self-development in the profession, allowing teachers to continuously improve both professionally and personally. All these components collectively form a holistic system aimed at developing highly qualified teachers capable not only of transmitting knowledge but also of contributing to the spiritual and moral formation of their students.

The Technological Component of the model for developing the spiritual and creative potential of future teachers represents a comprehensive system consisting of four interconnected parts, in which the elective course "Guidelines for the Spiritual and Creative Potential of Future Teachers" is the leading element. Within this course, students study the theoretical foundations of spirituality and creativity in pedagogical activity, become familiar with the pedagogical heritage of outstanding humanist educators, and master practical methods for integrating the spiritual and moral component into the educational process. The course is built on the principles of interactivity, practice-orientation, and individual approach, allowing future teachers not only to acquire knowledge but also to form a personal position regarding spiritual and moral values in the profession.

Within the elective course "Guidelines for the Spiritual and Creative Potential of Future Teachers," a creative project is implemented aimed at addressing a current problem in modern education – the integration of the spiritual and moral component into the digital educational environment. It will allow future teachers to combine traditional spiritual values with innovative technological solutions. Within the project, students: investigate the peculiarities of how modern schoolchildren perceive spiritual and moral values in the context of society's digitalization; develop the concept of an interactive educational resource that includes: a series of multimedia lessons with interactive tasks; virtual discussion platforms for discussing moral dilemmas; gamified elements aimed at developing empathy and moral choice; and creative assignments with opportunities for digital self-expression. The project develops digital competencies that are in demand in the modern labor market and enables

students to implement their own creative ideas in contemporary educational conditions.

Means of Developing Spiritual and Creative Potential include professional trials and trainings. Professional trials represent the modeling of elements of pedagogical activity within the educational process, where students can test various methods and technologies aimed at spiritual and moral education, allowing future teachers to gain experience in solving professional tasks related to the formation of value orientations in learners. Pedagogical trials are organized as a space for collective creativity, where under the guidance of experienced teachers or in a peer-learning mode, innovative methods are mastered and ideas are exchanged. Within these trials, techniques such as analysis of pedagogical situations, development of didactic materials, and modeling of pedagogical systems are used. Trainings are aimed at developing specific skills and qualities necessary for realizing spiritual and creative potential: empathy, reflection, creativity, communication skills, and the ability to work in a team. Role-playing games, psycho-gymnastic exercises, and methods of self-knowledge and self-regulation are widely used in these trainings.

Technologies for Developing Spiritual and Creative Potential are represented by three main groups: reflective, project-based, and art-pedagogical. Reflective technologies are aimed at forming the ability for self-analysis and understanding of one's pedagogical activity. These include keeping reflective journals, compiling portfolios of achievements, self-analysis of conducted lessons, and working with personal and professional qualities through various forms of feedback. Project technologies involve the sequential design of pedagogical activity from goal-setting to evaluation of results. Within the elective course, students master technologies for designing educational programs, lessons, and character-building events with an emphasis on the spiritual and moral component. Art-pedagogical technologies are based on using the potential of art in the educational process: dramatization, musical creativity, visual arts, and literary creativity, which are used both for the self-development of future teachers and as tools for working with students. Within the teaching of the elective course, all these methods, means, and technologies are integrated into a unified system, providing a comprehensive impact on the development of the spiritual and creative potential of future teachers.

The model is based on four interconnected *pedagogical conditions*: the first pedagogical condition – *creating an integrated spiritual and creative educational environment in the "school-university" system* – is justified by the principle of educational continuity and the need for continuity in personal development. L.S. Vygotsky's cultural-historical theory confirms that the environment is the most important factor in the formation of higher mental functions and value orientations (Volkova, 2017). An integrated educational environment provides holistic immersion in the professional culture of teaching throughout the educational journey. Such an environment creates the foundation for implementing the adaptive-diagnostic stage, when initial familiarization with the values of the profession occurs and the personal potential of the future teacher is identified. It is in this environment that effective diagnosis of the initial level of development and adaptation to the conditions of spiritual and creative formation becomes possible.

The second condition – *development and implementation of the elective course "Guidelines for the Spiritual and Creative Potential of Future Teachers"* – relies on research by V.A. Slastenin and I.F. Isaev, who demonstrate that specialized courses significantly increase the effectiveness of professional training (Slastenin, 2013). The elective nature of the course allows for considering individual characteristics of students, corresponding to the person-oriented approach in education. The course provides substantive content for the value-semantic stage, creating a theoretical and practical basis for forming a system of spiritual and moral values and professional meanings. The structured presentation of information and specially organized practical activities within the course contribute to a more conscious formation of the

value core of the future teacher's personality, serving as the foundation for their professional position.

The third condition – *development of the subject position of future teachers in the "school-university" system* – is based on K.A. Abulkhanova-Slavskaya's concept of subjectivity, according to which a person becomes a true subject of their life only with internal motivation and awareness (Dunaeva, 2016). The subject position is necessary for forming responsibility for one's professional path and actively constructing one's professional image. This condition is directly related to the professional-activity stage, when the future teacher transitions from theoretical mastery of values to their practical implementation. It is precisely the subject position that allows for acquiring not formal but personally significant experience of professional activity based on spiritual and moral values, when these values become internal regulators of professional actions and decisions.

The fourth condition – *application of innovative pedagogical technologies that stimulate reflection and creative self-realization* – relies on the professional thinking of the teacher. Reflection as a mechanism for awareness and rethinking of experience is necessary for the development of spirituality, while creative self-realization allows for embodying values in specific pedagogical decisions. This condition is closely related to the creative-transformative stage, at which a qualitative leap occurs in the development of spiritual and creative potential – from following models to creating new methods of pedagogical activity. Innovative technologies create a space for experimentation and creative search, which is necessary for forming readiness to transform professional reality in accordance with spiritual and moral values.

The interconnection of stages in developing spiritual and creative potential is built into a logical sequence, ensuring the gradual deepening and expansion of the spiritual and creative experience of future teachers. The adaptive-diagnostic stage lays the foundation for further development, forming motivation and readiness for conscious work on oneself. The value-semantic stage, the significance of which is revealed in the works of V. Frankl and D.A. Leontiev, ensures the formation of the inner core of the teacher's personality, determining the direction of all their professional activity (Frankl, 1990; Leontiev, 2022). The professional-activity stage, the importance of which is confirmed by A.N. Leontiev's activity approach, allows for translating values from abstract concepts into specific ways of professional behavior (Merezhnikov, 2014). The creative-transformative stage, the validity of which is revealed in J.A. Ponomarev's research on creativity, represents the highest level of development of spiritual and creative potential, at which the personality not only follows existing norms but also creates new forms of professional activity (Glăveanu, 2014).

The pedagogical conditions and stages of developing the spiritual and creative potential of future teachers are interconnected and interdependent, forming a holistic system in which conditions create opportunities for the effective implementation of stages, while stages determine the sequence and direction of applying pedagogical conditions. The integrated educational environment creates a context for implementing all development stages; the elective course provides a substantive basis for forming the value-semantic sphere; the subject position activates the inclusion of the personality in professional activity; and innovative technologies create a space for creative transformation and self-development. Such a systemic model ensures the effective development of the spiritual and creative potential of future teachers in the unity of all its components – motivational-value, cognitive, and activity-reflexive.

The Assessment-Results Component of the model for developing the spiritual and creative potential of future teachers represents a system of criteria and levels that allow for diagnosing and evaluating the degree of potential development in the process of professional training.

The Value-Semantic Criterion reflects the formation of a system of spiritual and moral values and professional meanings in the teacher's personality. This criterion is

characterized by the presence of stable value orientations that determine the humanistic direction of pedagogical activity. The value-semantic component includes awareness of the significance of spiritual and moral principles in education, acceptance of the values of the teaching profession, formation of a professional worldview, and understanding of the spiritual and moral mission of teachers in modern society.

The Cognitive Criterion characterizes the degree of theoretical preparedness of future teachers in the field of spiritual and moral education and creative pedagogical activity, including knowledge of basic concepts of spiritual and moral development of personality, understanding of the essence of creativity in the teaching profession, knowledge of methods and techniques for developing the spiritual and creative potential of students, understanding of the relationship between spirituality and creativity in pedagogical activity, as well as theoretical awareness of ways for one's own spiritual and creative self-improvement.

The Creative-Activity Criterion determines the ability of future teachers to practically implement spiritual and moral values in pedagogical activity and creatively solve professional tasks. It is manifested in the ability to integrate spiritual and moral values into the educational process, the capacity to develop and apply original pedagogical solutions, readiness for innovative activity, and the ability to create an atmosphere of creativity and spiritual-moral search in the educational process.

The Reflective Criterion characterizes the ability of future teachers to self-analyze, evaluate, and correct their own activities in the context of spiritual and moral values, including the ability to analyze their own pedagogical activity from the position of spiritual and moral values, capacity for professional self-improvement, critical thinking, adequate self-assessment, and aspiration for spiritual growth and professional self-improvement.

The presented criteria serve as the basis for a comprehensive assessment of the development of the spiritual and creative potential of future teachers and allow for differentiating three qualitatively distinct levels of its development: intuitive-reproductive, productive-adaptive, and creative-transformative.

The Intuitive-Reproductive (Initial) Level is characterized by unstable value orientations in the professional sphere and superficial ideas about the spiritual and moral foundations of pedagogical activity. The future teacher possesses fragmentary knowledge about the spiritual and creative development of personality and acts predominantly according to models, copying known methods and techniques without creatively rethinking them. Professional reflection is weakly expressed, self-analysis is superficial, and a systemic vision of one's own professional development is absent. Pedagogical tasks are solved intuitively, without deep understanding of their spiritual and moral component.

The Productive-Adaptive (Intermediate) Level is distinguished by a sufficiently stable system of value orientations in the professional sphere and a conscious attitude toward the spiritual and moral foundations of pedagogical activity. The future teacher possesses systematic knowledge about the spiritual and creative development of personality, is capable of adapting known methods and techniques to specific pedagogical situations, and demonstrates elements of creativity in solving professional tasks. Professional reflection is sufficiently developed, regular self-analysis is carried out, and there is an understanding of the prospects for one's own professional development. Pedagogical tasks are solved consciously, taking into account their spiritual and moral component.

The Creative-Transformative (Advanced) Level is characterized by a stable and conscious system of spiritual and moral values that have become internal regulators of professional activity. The future teacher possesses deep and systematic knowledge about the spiritual and creative development of personality, is capable of developing original methods and technologies, and can creatively transform pedagogical reality. Professional reflection is strongly expressed, self-analysis is deep and multi-faceted, and there is a clear vision of the trajectory of one's own professional development. Pedagogical tasks are solved creatively, with a deep understanding of

their spiritual and moral essence and orientation toward developing the spiritual and creative potential of students. The system of criteria and levels allows for comprehensively assessing the development of the spiritual and creative potential of future teachers, identifying strengths and weaknesses of this process, and determining directions for further work on improving the model of developing spiritual and creative potential in the "school-university" system.

Conclusion. The spiritual and creative potential of future teachers in the "school-university" system represents a complex integrative phenomenon requiring a systematic approach to its formation during professional preparation. The conducted research allowed for developing and theoretically substantiating a model that ensures the purposeful development of this professionally significant quality. The effectiveness of the proposed model is determined by the comprehensive integration of pedagogical conditions and sequential stages of developing spiritual and creative potential, creating the necessary prerequisites for the harmonious professional formation of future teachers. A significant advantage of the developed model is its value-oriented character, implemented through a system of specially organized conditions that ensure conscious spiritual and creative development of the personality. The pedagogical conditions identified in the study – creating an integrated spiritual and creative educational environment, developing and implementing an elective course, developing the subject position of future teachers, and applying innovative pedagogical technologies – determine the organizational and pedagogical foundations for effectively implementing the model in the holistic pedagogical process of the university. Of particular importance is the identification of four sequential stages of development (adaptive-diagnostic, value-semantic, professional-activity, and creative-transformative), allowing for ensuring continuity and systematicity in the formation of spiritual and creative potential. Each stage is characterized by specific tasks and mechanisms for their implementation, contributing to the gradual development of spiritual and moral values and creative self-realization of future teachers. The developed system of criteria and levels for evaluating spiritual and creative potential allows for comprehensively diagnosing the effectiveness of formative influence, tracking the dynamics of development, and timely adjusting the educational process. The integration of value-semantic, cognitive, creative-activity, and reflective criteria ensures a holistic approach to assessing the development of spiritual and creative potential, encompassing all its essential characteristics.

Thus, the developed model represents a holistic mechanism for developing the spiritual and creative potential of future teachers, based on the integration of theoretical-methodological approaches and practice-oriented technologies. The implementation of this model in the professional preparation conditions of the "school-university" system will create conditions for the effective professional development of future teachers capable of providing spiritual and moral education to the younger generation and creatively transforming pedagogical reality.

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Psychological and Pedagogical Issues in Developing Media Competence in Professional Training of Education Managers

Abstract

Introduction. The study addresses media competence as a key component of professional preparedness for future education managers in the context of digital transformation of education, responding to the growing demand for professionals capable of critically interpreting, ethically engaging with, and productively generating media content within digital learning environments. *Methodology and Methods.* The research employs a mixed-methods design incorporating an author-developed diagnostic questionnaire for self-assessment of media competence, along with observation, polling, and testing methods. The pedagogical impact of an online course titled "Digital Etiquette" was examined through pre- and post-intervention comparative analysis among control and experimental groups of master's degree students to determine the effectiveness of targeted pedagogical interventions. *Results.* A structural model of media competence was conceptualized and empirically validated, integrating both media-specific and soft skills including critical thinking, motivation, creativity, communicative reflection, and operational readiness. The study demonstrated the effectiveness of targeted pedagogical interventions in developing media competence through systematic comparative analysis between experimental and control groups, revealing significant improvements in participants' media competence levels following the online course intervention. *Scientific novelty.* The research contributes to the development and implementation of an integrated psychological-and-pedagogical programme for cultivating media competence through the fusion of digital tools and reflexive learning strategies, establishing a comprehensive theoretical framework that bridges media-specific competencies with essential soft skills for educational leadership. *Practical significance.* The study provides a validated framework for training education managers capable of leading ethically responsible and media-savvy educational processes in the digital age, offering evidence-based approaches and practical tools for developing media competence in future educational leaders within contemporary digital learning environments.

Keywords: media competence, education manager, digital learning environment, critical thinking, soft skills, digital awareness, media pedagogy.

Introduction. In contemporary educational discourse, media competence is increasingly recognized as a critical dimension of professional identity, shaping not only the effectiveness of communication but also the capacity for social participation and cultural integration in the digital age. For specialists in the field of education management, this competence transcends technical proficiency and emerges as a tool for navigating a multicultural, information-rich environment, fostering personal development, and achieving professional self-realization. Despite growing interest in media education, the role and structure of media competence specifically in the professional profile of future education managers remain underrepresented in scholarly literature. While existing studies underscore the importance of developing digital and critical thinking skills, there is a notable gap in systematizing the pedagogical conditions and components that contribute to the formation of media competence in this specific context.

Media competence involves not only the cognitive ability to interpret media texts but also

the willingness to engage thoughtfully with their content (Baran, 2002). This includes discerning information from emotional appeals, critically evaluating the influence of media on public perception, and recognizing the underlying structures and conventions of media messages.

This study seeks to explore how media competence is formed among future education managers within digital learning environments. The research aims to conceptualize and empirically validate a comprehensive model that integrates both the structural and functional dimensions of media competence, while also offering a contextually grounded definition that reflects the realities of online education. The formation of media competence in the educational context has been actively explored in Kazakhstani pedagogical research over the past decade. Scholars have emphasized the need to integrate media-related skills and knowledge into teacher training (Iskakov, 2013; Kuanisheva, 2021; Tazhenova et al., 2019; Turgunbayeva et al., 2019). These studies conceptualize media competence as a multidimensional construct, comprising not only technical proficiency but also the ability to critically engage with media content, interpret information, and apply media technologies in pedagogical practice. According to a systemic approach, media competence involves the integration of theoretical understanding with applied skills within the broader framework of professional pedagogical competency.

Media competence has been highlighted as a core component of modern teaching expertise, enabling educators to respond effectively to the evolving informational demands of students (Iskakov, 2013). According to Iskakov, teachers increasingly act as education managers and must possess a robust set of media-related competencies to navigate and lead in digital environments. Contemporary trends in teacher education emphasize the necessity of professional self-actualization within open educational ecosystems, where understanding and leveraging media technologies are essential for instructional innovation and learner engagement. In broader theoretical frameworks, media competence through multiple layers: a narrow perspective that includes specific knowledge of media structures and multicultural content; a general dimension involving adaptive behavior within media environments; and the concept of “media immunity” - the capacity to preserve personal identity amidst rapid media evolution (Sharikov, 1990) this notion to include cross-cultural awareness and resilience in digital spaces (Nurgalieva, 2019) extends.

Media competence as a synthesis of critical thinking, comprehension of mass communication processes, and the responsible production and interpretation of media texts (Silverblatt, 2002). In this framework, the ability to make informed and autonomous judgments is central to effective media engagement. This perspective is supported by empirical validation studies conducted by Lin, Li, Deng, and Lee (2020), who link media literacy with broader cognitive and reflective capabilities. Media competence has also been introduced as a subdomain of communicative competence, structured around four functional areas: media knowledge, usage, design, and reflection (Baacke, 2001). This model highlights the operational and creative dimensions of media interaction within both educational and professional contexts.

Fedorov (2007) offers a comprehensive pedagogical model that defines media competence through interconnected indicators: motivational readiness, informational awareness, interpretive judgment, and creative action. His framework emphasizes the developmental aspect of media literacy as a socially situated competence that facilitates critical consumption, production, and contextual analysis of media messages. This position aligns with Fateeva’s (2007) argument that media competence evolves through informal learning and experiential interaction with mass media. Such a view is supported by recent studies (Kadirbayeva & Amirbekuly, 2020; Kuatbekov & Tapalova, 2021), which frame media literacy as a communicative skill set acquired through ongoing engagement in digital and informational environments. Research by Goncharova (2013), Isaeva (2003), and Kuatbekov and Tapalova (2021) positions media competence as an applied professional attribute. These scholars emphasize that media

competence includes not only the ability to retrieve and process media content, but also the capacity to generate and disseminate original media materials-skills that are essential for educators operating within a digitally mediated academic environment.

In the framework of this research, the authors propose an original model that conceptualizes the structural and functional dimensions of media competence specific to future education managers. This model identifies four interrelated core competencies essential for effective professional activity in a digital learning environment:

1. Digital Literacy. This refers to the mastery of technological tools and the ability to operate confidently within a digital space. It includes competencies necessary for information retrieval, navigation of digital platforms, and effective use of media resources in pedagogical contexts.

2. Content Interpretation. This component involves the critical analysis and deconstruction of media content. It includes the capacity to evaluate the political, economic, and social dimensions of media messages, compare and synthesize information from diverse sources, and distinguish between subjective emotional responses and objective analytical judgment.

3. Content Generation. This competence focuses on the ability to construct and disseminate media messages thoughtfully and purposefully. It includes written and visual communication skills, the ability to participate meaningfully in digital discourse, and the creation of content that demonstrates critical reflection and responsible engagement with public opinion.

4. Digital Awareness. This dimension reflects the ethical, reflective, and socially responsible use of media. It encompasses the awareness of one's digital footprint, respect for diversity and privacy, and understanding of legal norms governing media interactions. It also implies the ability to anticipate and evaluate the broader social impact of media outputs.

To further clarify the proposed framework, it is important to elaborate on the key components that comprise the internal structure of media competence for future education managers. Media technology serves as the instrumental basis enabling the creation, dissemination, and reception of media content. It encompasses digital tools, platforms, and systems that have transformed how individuals interact with information. The proliferation of streaming services such as Netflix, Amazon Prime Video, Spotify, and YouTube has redefined traditional patterns of media consumption by offering on-demand access to vast repositories of audiovisual content tailored to individual preferences (Bulger & Davison, 2018). In parallel, emerging technologies such as virtual reality (VR) and augmented reality (AR) are reshaping user experience by facilitating immersive interaction in educational, training, and entertainment contexts. These tools enhance cognitive and affective engagement, expanding the pedagogical possibilities in digital learning environments (Simons, Ketelhut, & Nelson, 2017; Smyrnova-Trybulska, 2019; Simonov, 1999).

Additionally, social media platforms have become indispensable components of modern media ecosystems. Their interactive nature enables users not only to consume content but also to produce, share, and discuss it in real time. These platforms function as dynamic spaces for collaborative learning, professional networking, and public discourse, making digital fluency and ethical participation essential for education professionals (Tomczyk, 2020). In this context, understanding media technology is not limited to technical operation but includes a reflective awareness of its influence on pedagogical practices, information dissemination, and the social construction of knowledge.

Media resources represent the diverse forms and modalities of content designed for communication, learning, and engagement in digital and hybrid environments. These resources include a broad spectrum of information carriers:

- media texts, such as academic articles, books, newspapers, and magazines, which form the core of written communication;

- visual media, including photographs, infographics, illustrations, and schematic diagrams

that enhance information accessibility through visualization;

- audio formats, such as music, podcasts, radio broadcasts, and sound effects, which provide auditory modes of information perception and emotional resonance (Drevitskaya, 2018);

- video materials, encompassing films, documentaries, television programs, and digital video content integrating motion, sound, and visual effects to create immersive narratives (Miliutina, 2020).

Social networks, including platforms like Facebook, Twitter, Instagram, YouTube, and TikTok, which serve as dynamic spaces for the co-creation, sharing, and circulation of multimedia content (Kuatbekov & Ananishnev, 2021; Kunacova & Primbetova, 2020).

Collectively, these media resources constitute a digital ecosystem that supports the exchange of ideas, storytelling, education, and social interaction. In this context, media information refers to the data and content disseminated through various mass communication channels. This includes everything from news reports and visual imagery to video footage and social media posts. According to Nikou and Aavakare (2021), media information plays a vital role in fostering transparency, contextual understanding, and authenticity. It empowers users to critically assess the credibility of sources and make informed, evidence-based decisions. In the era of digital transformation, the ability to navigate this media landscape has become imperative for future education managers. Mastery of digital tools is no longer optional; it is essential for performing core professional functions in teaching, administration, and research. As educational systems adopt increasingly sophisticated technologies, the demand for digital and media competence grows accordingly.

Integrating technology into the learning process not only enhances student engagement but also fosters the development of transferable skills in digital communication, problem-solving, and collaborative interaction. Through structured exposure to online platforms and guided media practices, learners are better equipped to manage digital risks and strengthen their digital resilience. From a pedagogical perspective, media competence is not merely a set of operational abilities - it is a dynamic process underpinned by critical thinking, enabling individuals to reflectively interpret, analyze, and respond to media messages. This conceptualization aligns with the broader educational imperative to cultivate discerning, ethically grounded, and digitally literate professionals capable of navigating complex information environments. Among the foundational soft skills that underpin media competence, critical thinking occupies a central place. It refers to the cognitive ability to systematically evaluate information based on logic, relevance, and empirical validity, rather than emotional impression or cognitive bias. In the context of media consumption, critical thinking involves assessing the credibility of sources, distinguishing between evidence-based claims and speculation, and recognizing manipulative or ideologically charged content. For future education managers, this competence is vital for navigating the complexities of the digital information landscape, where misinformation and fragmented narratives are pervasive.

As digital technologies increasingly shape the educational process, critical thinking enables future professionals to make reasoned decisions, respond to informational ambiguity, and foster a culture of informed inquiry within their institutions. Another equally important soft skill is communicative reflection, which entails a deliberate process of self-examination and dialogic awareness in mediated interactions. It encompasses the ability to express one’s thoughts and emotions with clarity, respond empathetically to others, and adapt communicative strategies based on feedback and audience perception. In digital learning environments, where interaction often occurs asynchronously and across diverse cultural contexts, communicative reflection empowers future education managers to maintain coherence, ethical awareness, and relevance in their messaging. It also enhances their capacity to interpret the communicative intent of others, anticipate misunderstandings, and adjust discourse to improve clarity, engagement, and inclusivity.

A media-competent education manager who possesses strong communicative reflection skills is better equipped to critically evaluate media content, identify implicit bias or distortion, and make informed pedagogical choices about media integration. These choices may include determining the suitability of media materials for different learner groups, designing inclusive digital content, or navigating issues related to online etiquette and interactional ethics. Moreover, ethical awareness represents an integral aspect of these competencies. It involves understanding the legal and moral implications of media use, including concerns around privacy, intellectual property, online security, and responsible digital behavior. Education managers must be prepared to address ethical dilemmas that arise in digital pedagogy, guiding students and staff toward media practices that are respectful, transparent, and socially responsible.

An essential component of the media competence framework is operational readiness, which reflects the practical ability of future education managers to interact fluently with diverse media tools and digital platforms. This competence synthesizes foundational knowledge in digital and media literacy with applied technical skills, enabling professionals to navigate digital ecosystems confidently and productively. It includes familiarity with multimedia technologies, software applications, content management systems, and communication tools that support educational and administrative functions. Operational readiness is not merely technical aptitude; it reflects an adaptive mindset and responsiveness to technological innovation. Education managers with a high level of operational readiness demonstrate the capacity to integrate new media tools into educational processes, troubleshoot digital challenges, and scale up digital initiatives efficiently. Such adaptability is particularly critical in the context of the rapid evolution of educational technology.

Equally important is creative activity, which enriches media competence by fostering innovation and flexible problem-solving. In a dynamic media environment, creativity allows future education managers to design engaging content, experiment with new formats, and develop original pedagogical solutions. It supports divergent thinking and facilitates the transformation of conventional approaches to teaching, leadership, and digital interaction. As noted by Zhu et al. (2018), creative thinking enhances professional resilience and enables individuals to respond effectively to complex challenges and evolving learner needs. The final soft component in the proposed model is motivation, particularly achievement motivation. This psychological readiness fuels sustained engagement with digital innovation and continuous learning. A motivated education manager seeks out new knowledge, embraces technological change, and proactively integrates media tools into practice. Motivation also has a social dimension: it enables managers to inspire their teams, foster collective enthusiasm for innovation, and promote a culture of media competence across the institution. Thus, the combination of critical thinking, communicative reflection, operational readiness, creative activity, and motivation forms a cohesive structure of soft competencies essential to the formation of media competence in future education managers. These competencies are not isolated but functionally interrelated, reinforcing one another in the process of navigating, interpreting, and generating media content within ethical and socially responsible frameworks.

Taken together with core digital skills, these soft competencies shape the media competence profile of the education manager as a digitally literate, critically aware, ethically oriented, and creatively engaged professional. This integrated model served as the foundation for the subsequent empirical study aimed at examining the quantitative and qualitative development of media competence among graduate-level education students. An essential component of the media competence framework is operational readiness, which reflects the practical ability of future education managers to interact fluently with diverse media tools and digital platforms. This competence synthesizes foundational knowledge in digital and media literacy with

applied technical skills, enabling professionals to navigate digital ecosystems confidently and productively. It includes familiarity with multimedia technologies, software applications, content management systems, and communication tools that support educational and administrative functions.

Operational readiness is not merely technical aptitude; it reflects an adaptive mindset and responsiveness to technological innovation. Education managers with a high level of operational readiness demonstrate the capacity to integrate new media tools into educational processes, troubleshoot digital challenges, and scale up digital initiatives efficiently. Such adaptability is particularly critical in the context of the rapid evolution of educational technology. Equally important is creative activity, which enriches media competence by fostering innovation and flexible problem-solving. In a dynamic media environment, creativity allows future education managers to design engaging content, experiment with new formats, and develop original pedagogical solutions. It supports divergent thinking and facilitates the transformation of conventional approaches to teaching, leadership, and digital interaction. As noted by Zhu, Wang, Zhang, and Li (2018), creative thinking enhances professional resilience and enables individuals to respond effectively to complex challenges and evolving learner needs.

The final soft component in the proposed model is motivation, particularly achievement motivation. This psychological readiness fuels sustained engagement with digital innovation and continuous learning. A motivated education manager seeks out new knowledge, embraces technological change, and proactively integrates media tools into practice. Motivation also has a social dimension: it enables managers to inspire their teams, foster collective enthusiasm for innovation, and promote a culture of media competence across the institution. Thus, the combination of critical thinking, communicative reflection, operational readiness, creative activity, and motivation forms a cohesive structure of soft competencies essential to the formation of media competence in future education managers. These competencies are not isolated but functionally interrelated, reinforcing one another in the process of navigating, interpreting, and generating media content within ethical and socially responsible frameworks. Taken together with core digital skills, these soft competencies shape the media competence profile of the education manager as a digitally literate, critically aware, ethically oriented, and creatively engaged professional. This integrated model served as the foundation for the subsequent empirical study aimed at examining the quantitative and qualitative development of media competence among graduate-level education students.

Materials and Methods. The study involved 150 Master's degree students from three higher education institutions in Shymkent, Kazakhstan: Kuatbekov People's Friendship University, Auezov South Kazakhstan University, and Miras University. The participants were enrolled in educational programs such as *Pedagogics and Psychology*, *Management in Education*, *Information Technology*, and *Psychology*. The sample included 52 males, and 98 females aged between 21 and 30 years. Participants were randomly assigned to control (n=75) and experimental (n=75) groups based on a baseline assessment of their media competence.

The study utilized a quasi-experimental design with pre-test and post-test assessments. The primary objective was to evaluate the effectiveness of a targeted educational intervention-an online course titled Digital Etiquette-on enhancing the media competence of future education managers. Data were collected using a mixed-method approach, including: An author-developed self-assessment questionnaire designed to measure perceived levels of media competence and media literacy; The standardized "Preparedness for Media Communication" test, which evaluated participants' ability to interpret and engage with media content; Observation protocols focused on behavioral indicators of digital communication skills; Polling instruments assessing participants' subjective experience during the intervention. This triangulated method increased the reliability and validity

of the results by incorporating both subjective self-assessments and objective measurements. The assessment framework was based on four core dimensions of media competence: Digital Literacy; Content Interpretation; Content Generation; Digital Awareness. Each domain was operationalized into measurable indicators used for initial diagnostics and outcome evaluation. These indicators reflected the competencies needed to function effectively in digital educational environments. At the initial stage, all participants completed the diagnostic tools to determine their baseline levels of media competence. Based on the results, the groups were formed to ensure initial comparability. The experimental group then participated in the Digital Etiquette online course, while the control group continued with standard instruction. After the intervention, both groups were reassessed using the same set of instruments.

Results and Discussion. Quantitative data from the questionnaire and standardized test were analyzed using descriptive statistics (means, standard deviations) and inferential methods (e.g., t-tests) to determine the significance of changes between pre- and post-intervention results. Qualitative data from observations and polls were coded thematically to identify trends and patterns in participants' digital behavior and reflective responses. Table 1 presents the average baseline scores for media competence and preparedness for media communication prior to the implementation of the online course "Digital Etiquette." These values provide a reference point for evaluating the impact of the educational intervention on media competence development.

Table 1. *Average values of initial level of media competence and preparedness to media communication*

Pedagogical universities and colleges	Groups	Levels of media competences		
		Low	Medium	High
MC-1. Digital literacy				
A. Kuatbekov PFU	CG-1 (N - 20)	5	12	3
	EG-1 (N - 30)	11	18	1
Miras University	CG-2 (N - 21)	4	14	3
	EG-2 (N - 29)	10	18	1
M. Auezov SKU	CG-3 (N - 19)	3	13	3
	EG-3 (N – 31)	11	19	1
Average values (%)	28%	64%	8%	
MC-2. Content interpretation				
A. Kuatbekov PFU	CG-1 (N - 20)	6	11	3
	EG-1 (N - 30)	15	13	2
Miras University	CG-2 (N - 21)	7	11	3
	EG-2 (N - 29)	15	13	1
M. Auezov SKU	CG-3 (N - 19)	7	9	3
	EG-3 (N – 31)	16	13	2
Average values (%)		50%	40%	10%
MC-3. Content generation				
A. Kuatbekov PFU	CG-1 (N - 20)	9	9	2
	EG-1 (N - 30)	19	10	1
Miras University	CG-2 (N - 21)	8	10	3
	EG-2 (N - 29)	15	14	0
M. Auezov SKU	CG-3 (N - 19)	8	9	2
	EG-3 (N – 31)	19	11	1
Average values (%)		58%	36%	6%
MC-4. Digital awareness				
A. Kuatbekov PFU (N-50)	CG-1 (N - 20)	9	10	1
	EG-1 (N - 30)	19	11	0

Miras University (N-50)	CG-2 (N - 21)	12	9	1
	EG-2 (N - 29)	18	11	0
M. Auezov SKU (N-50)	CG-3 (N - 19)	10	8	1
	EG-3 (N – 31)	19	12	0
Average values (%)		70%	28%	2%

Analysis of the baseline assessment results revealed notable variation in the distribution of media competence levels across the four core indicators. The findings are summarized as follows:

1) MC-1: Digital Literacy – The majority of participants (64%) demonstrated a medium level of competence, with 28% falling into the low category and only 8% achieving high-level performance. This suggests a relatively stable foundation of technical and operational skills among the cohort.

2) MC-2: Content Interpretation – Here, competence was markedly weaker: 50% of respondents scored at a low level, 40% at medium, and only 10% at high. This imbalance indicates substantial difficulty in analyzing and critically assessing media messages across political, economic, and social dimensions.

3) MC-3: Content Generation – An even more pronounced deficit was observed in this domain: 58% of participants reported low competence, while 36% fell into the medium range, and only 6% demonstrated a high level. These results reflect limited capacity to produce meaningful, critically informed media content.

4) MC-4: Digital Awareness – This was the weakest area across the board. A striking 70% of participants reported low awareness, 28% achieved medium results, and only 2% demonstrated a high level of competence. Such findings point to a pervasive lack of ethical and reflective awareness concerning digital behavior, personal digital identity, and the societal implications of media engagement.

Overall, the data indicate that while participants possess a moderate level of technical fluency (MC-1), their skills in interpretation, content creation, and digital self-regulation are underdeveloped. Particularly concerning is the low level of digital awareness, which underscores the urgent need to integrate ethical, legal, and critical reflection practices into professional training. To enhance interpretability and facilitate comparative analysis, graphical representations were constructed for each of the four components. These visualizations (Figure 1) depict the initial levels of MC-1 – Digital Literacy, emphasizing participants' readiness to operate in digital environments prior to the educational intervention.

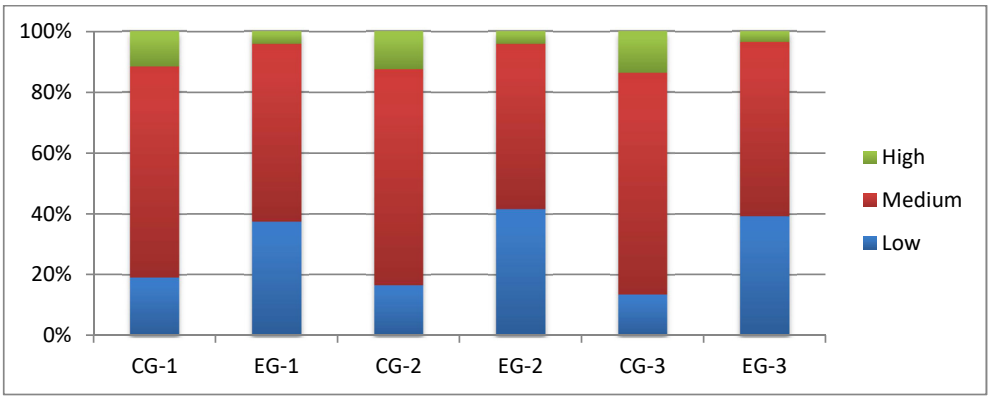

Figure 1: Initial level of MC-1 – Digital literacy and preparedness to media communication

Figure 2 illustrates the initial distribution of participants' media competence in relation to the second key component, MC-2 – Content Interpretation. This indicator reflects the students' ability to critically process and evaluate media content by identifying relevant

meanings, verifying source credibility, and discerning implicit biases within political, social, and economic messages. The results reveal a disproportionately high concentration of low-level responses (50%), suggesting limited analytical engagement with media texts. Only 10% of the participants demonstrated high-level competence in content interpretation, while 40% scored at a medium level. These findings emphasize a clear need for targeted development of analytical and interpretive skills within pedagogical training. Given the increasing complexity and saturation of the media landscape, the ability to evaluate and contextualize information is a foundational skill for future education managers responsible for shaping informed and media-literate learners.

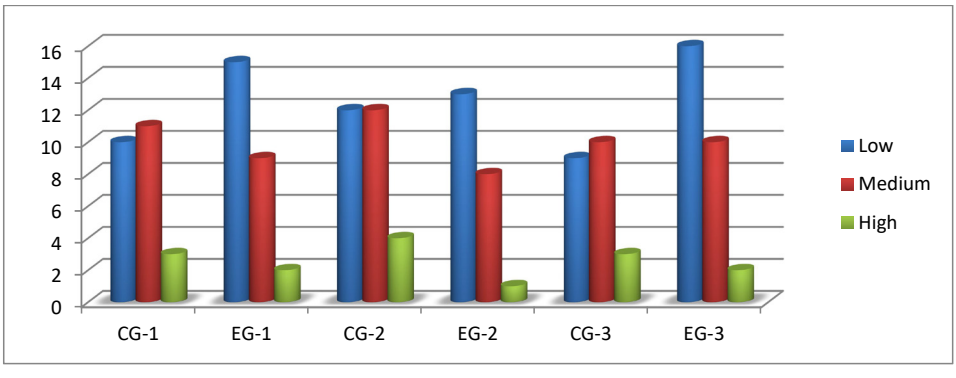

Figure 2: Initial level of MC-2 – Content interpretation

Figure 3 presents the distribution of baseline results for the third key dimension, MC-3 – Content Generation. This component assesses the students' ability to articulate ideas, engage in meaningful communication, and deliberately construct media content-both visual and textual-within digital platforms. The results indicate a predominance of low-level proficiency in this domain: 58% of respondents demonstrated limited ability to formulate coherent, critically informed media messages; 36% were categorized at a medium level; only 6% reached high-level competence. These findings suggest that while students may engage with media content passively or receptively, their capacity for active, intentional, and reflective content production remains significantly underdeveloped. This is particularly problematic in the context of educational leadership, where the ability to generate impactful media narratives and foster constructive discourse is essential. Enhancing this dimension of media competence is therefore crucial, especially considering the increasing role that education managers play in shaping institutional communication strategies, digital learning environments, and public engagement through media channels.

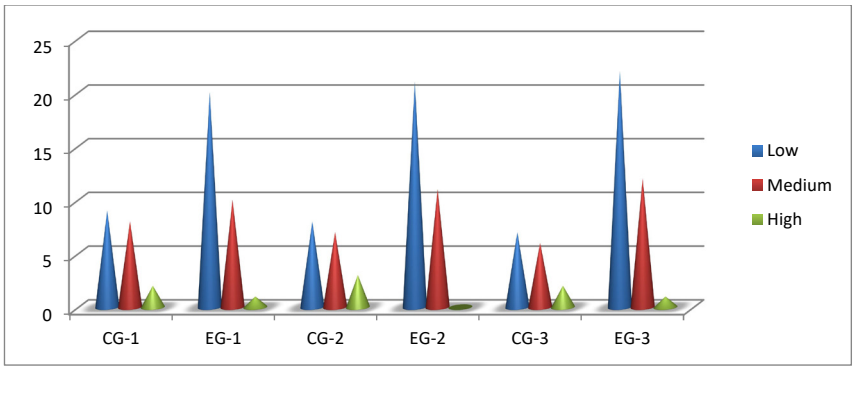

Figure 3: Initial level of MC-3 – Content generation

Figure 4 summarizes the results of both assessment and self-assessment for the fourth component of media competence - MC-4: Digital Awareness. This dimension captures the extent to which students are conscious of their actions, presence, and impact within digital media environments, as well as their understanding of the ethical and legal norms that regulate digital interaction. The data point to a pronounced deficit in this area: A striking 70% of participants scored at a low level; 28% demonstrated a medium level of awareness; and only 2% reached a high level of competence. These findings are particularly concerning, as digital awareness forms the ethical and reflective core of responsible media behavior. A lack of awareness about digital footprints, online privacy, authorship, and the broader societal implications of one's digital actions undermines not only individual competence but also institutional trust and professional integrity. In the context of education management, where decisions about media use, content dissemination, and digital safety directly affect learners and staff, such underdeveloped awareness signals a critical area for pedagogical intervention. Strengthening this component is essential for preparing future managers to operate within complex digital ecosystems while upholding ethical standards and promoting digital citizenship among students.

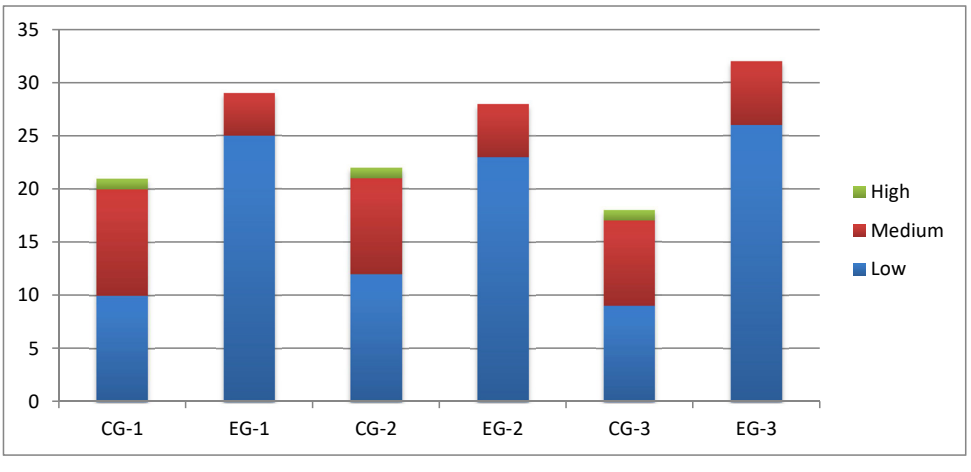

Figure 4: Initial level of MC -4. – Digital awareness

The analysis of baseline data revealed that many master's degree students exhibited low to medium levels of media competence, particularly in areas requiring critical analysis, content creation, and digital self-awareness. These initial diagnostic results, derived from both subjective self-evaluations and objective testing procedures, provided a basis for dividing the participants into control and experimental groups for the intervention phase of the study. This grouping marked the starting point for a pedagogically structured experiment aimed at enhancing media competence through targeted training. To this end, the authors developed and implemented the online course "Digital Etiquette", which served as a core educational intervention. The course integrated a range of media formats and pedagogical tools, including video-guided tutorials; concise instructional texts and audio materials; individual and group practical assignments; reflective tasks requiring annotation and publication of results in digital media environments.

Following completion of the course, participants in the experimental groups were reassessed using the same instruments as in the initial phase: the author-designed diagnostic questionnaire; the "Preparedness for Media Communication" test; and additional polling instruments designed to measure self-perception of progress. To further validate the findings, a supplementary survey was conducted to assess participants' understanding of communicative processes in media contexts. The collected data

allowed for a comprehensive assessment of the post-intervention level of media competence, focusing again on the four core dimensions: Digital Literacy; Content Interpretation; Content Generation; Digital Awareness.

Table 2 presents a comparative summary of pre- and post-intervention results in the experimental groups. The findings clearly demonstrate a positive shift in media competence maturity, thereby confirming the effectiveness of the "Digital Etiquette" course as a pedagogical tool for fostering critical, creative, and ethically responsible engagement with digital media.

Table 2. *Comparison study of the indicators of maturity of media competence in the experimental groups* (*before and after exploring the online course 'Digital etiquette'*)

Universities and colleges	Groups	Levels of media competencies		
		Low	Medium	High
MC-1. Digital literacy				
A. Kuatbekov PFU	EG-1 (in the beginning of EE)	11	18	1
	EG-1 (in the end of EE)	0	14	16
Miras University	EG-2 (in the beginning of EE)	10	18	1
	EG-2 (in the end of EE)	0	13	17
M. Auezov SKU	EG-3 (in the beginning of EE)	11	19	1
	EG-3 (in the end of EE)	0	14	17
Average values (%)		0%	47%	53%
MC-2. Content interpretation				
A. Kuatbekov PFU	EG-1 (in the beginning of EE)	15	13	2
	EG-1 (in the end of EE)	2	13	15
Miras University	EG-2 (in the beginning of EE)	15	13	1
	EG-2 (in the end of EE)	2	12	15
M. Auezov SKU	EG-3 (in the beginning of EE)	16	13	2
	EG-3 (in the end of EE)	2	14	15
Average values (%)		7%	45%	48%
MC-3. Content generation				
A. Kuatbekov PFU	EG-1 (in the beginning of EE)	19	10	1
	EG-1 (in the end of EE)	1	13	16
Miras University	EG-2 (in the beginning of EE)	15	14	0
	EG-2 (in the end of EE)	1	13	15
M. Auezov SKU	EG-3 (in the beginning of EE)	19	11	1
	EG-3 (in the end of EE)	1	14	16
Average values (%)		3%	45%	52%
MC-4. Digital awareness				
A. Kuatbekov PFU	EG-1 (in the beginning of EE)	19	11	0
	EG-1 (in the end of EE)	3	12	15
Miras University	EG-2 (in the beginning of EE)	18	11	0
	EG-2 (in the end of EE)	3	12	14
M. Auezov SKU	EG-3 (in the beginning of EE)	19	12	0
	EG-3 (in the end of EE)	3	13	15
Average values (%)		10%	41%	49%

Post-Intervention Results: Comparative Analysis of Media Competence Levels. A comparative analysis of pre- and post-intervention data in the experimental groups demonstrates a marked improvement across all four key indicators of media competence. The findings are as follows:

1. MC-1: Digital Literacy. At the initial stage, most participants exhibited low-level

proficiency in technical media skills. However, following the educational intervention, this distribution shifted significantly: 0% remained at the low level; 47% achieved a medium level; and 52% reached a high level of digital literacy. These results confirm the effectiveness of the course in enhancing participants' operational fluency with digital tools and platforms.

2. MC-2: Content Interpretation. Substantial progress was also observed in the ability to critically evaluate and contextualize media content: Low-level responses dropped to 7%; medium-level responses accounted for 45%; while 48% of students demonstrated high-level interpretive skills. This shift reflects strengthened critical thinking and increased capacity to distinguish valid information from biased or misleading content.

3. MC-3: Content Generation& The ability to create meaningful and purposeful media messages improved notably: Only 3% of participants remained at the low level; 45% attained medium proficiency; and 52% demonstrated high-level content production skills. Participants showed greater confidence in composing media texts, expressing personal views, and engaging in constructive digital discourse.

4. MC-4: Digital Awareness. Perhaps the most significant qualitative shift was observed in this domain, which is foundational for ethical and reflective media engagement: The proportion of low-level responses decreased to 10%; 41% of participants reached a medium level; and 49% demonstrated high digital awareness.

These results indicate a growing understanding of personal responsibility in digital environments, including issues of online conduct, privacy, and media ethics. To enhance the interpretability of the post-intervention outcomes, visual data representations were created for each component. Figure 5, for instance, displays the final distribution of competence levels for MC-1 – Digital Literacy, reflecting the participants' improved technical readiness following the online course.

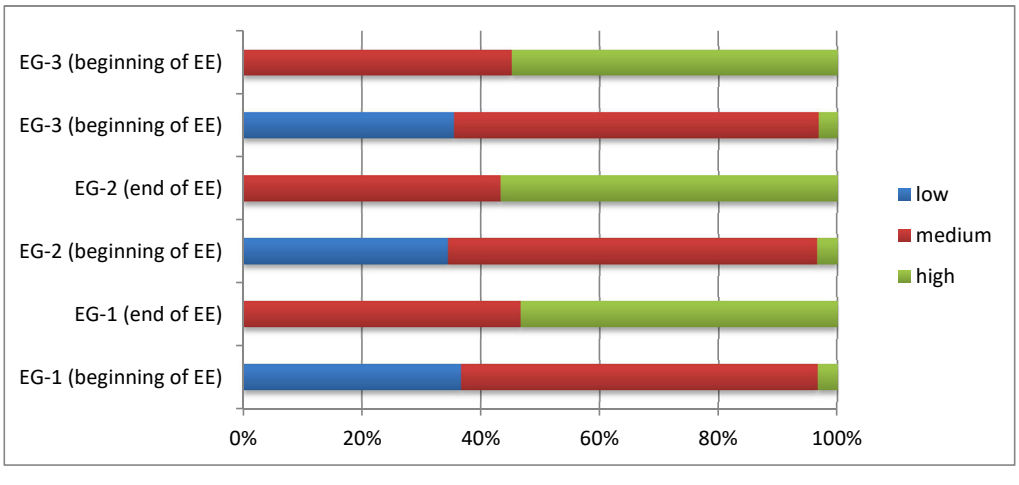

Figure 5: Final level of MC-1. – Digital literacy and preparedness to media communication

Figure 6 illustrates the results achieved by the experimental group on the second key component - MC-2: Content Interpretation - following the completion of the psychological-and-pedagogical training programme aimed at enhancing media competence. This component reflects the students' ability to critically filter, interpret, and evaluate media content from various sources, considering its socio-political, economic, and cultural contexts. The post-intervention data reveal a substantial positive shift in competence levels: The proportion of participants at the low level dropped to 7%; 45% reached a medium level, and 48% demonstrated a high degree of interpretive skill. These results indicate that the implemented educational programme successfully fostered the development of critical literacy and

evaluative judgment - essential for informed media engagement in professional educational contexts. Participants became significantly more adept at distinguishing fact from opinion, identifying bias, and extracting reliable meanings from complex digital narratives.

The outcomes reflected in Figure 6 further support the conclusion that structured, practice-oriented training can serve as an effective mechanism for enhancing interpretive dimensions of media competence in future education managers.

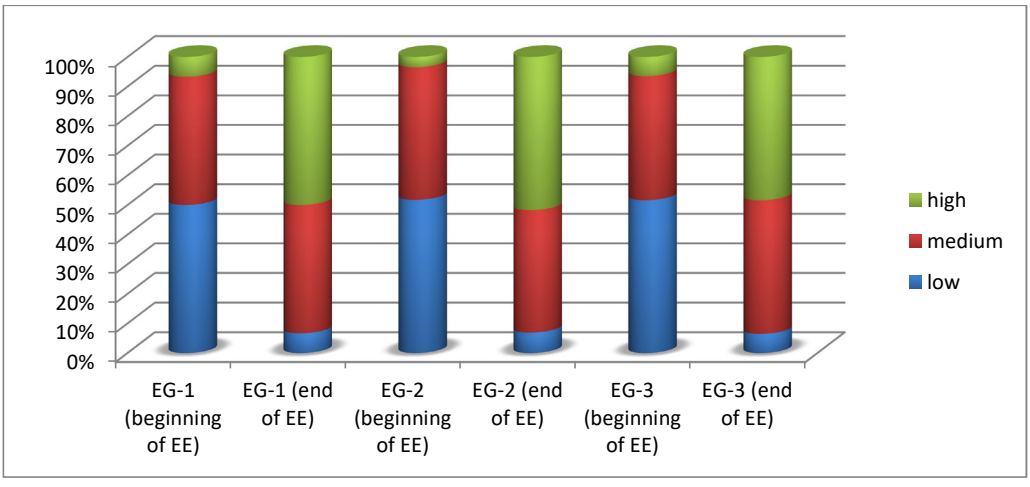

Figure 6: Final level of MC-2 Content interpretation

Figure 7 presents the final assessment results for the third component of media competence - MC-3: Content Generation, which pertains to the ability of future education managers to formulate and express their views, engage in meaningful digital communication, and construct media content with intentionality and critical reflection. Following the implementation of the psychological-and-pedagogical training programme, participants in the experimental group demonstrated substantial progress: Only 3% of students remained at the low level of competence; 45% attained a medium level, and 52% reached a high level of performance in this domain.

These results highlight an enhanced capacity for active participation in digital discourse, including the creation of well-reasoned media posts, constructive commentary, and purposeful engagement in online platforms. Students showed improved skills not only in expressing individual beliefs but also in adapting their communication for specific audiences and contexts. The development of content generation skills is particularly important in educational management, where professionals are increasingly required to curate, produce, and moderate digital content as part of teaching, leadership, and community engagement activities. The outcomes depicted in Figure 7 confirm that the intervention fostered both technical ability and critical intentionality in media production among future education managers.

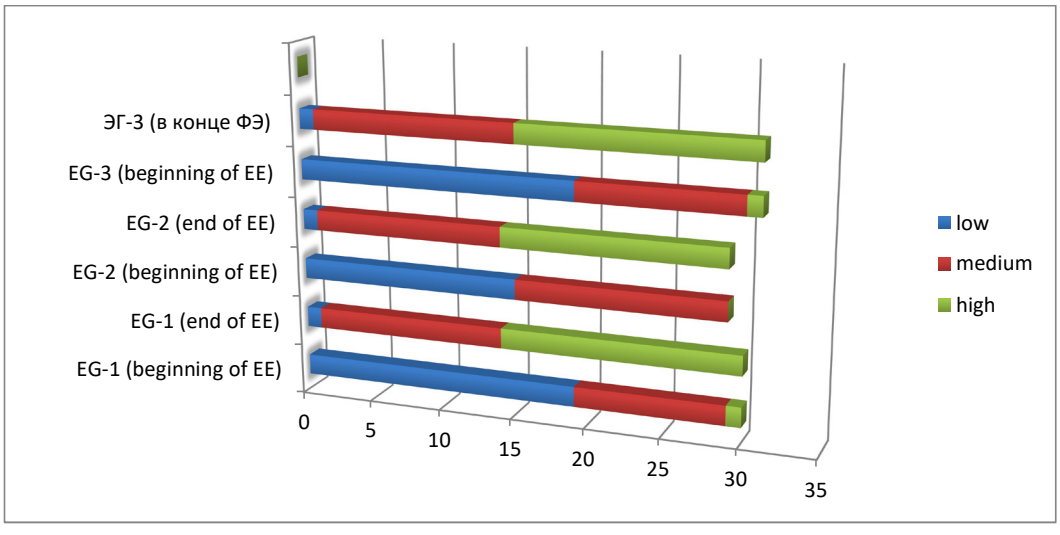

Figure 7: Final level of MC-3. – Content generation

The obtained findings on assessment and self-assessment of the final level of media competence of the master's degree students on the fourth component MC-4 – Digital awareness – ability to realize one's own actions and influence in digital media space are given in Figure 8.

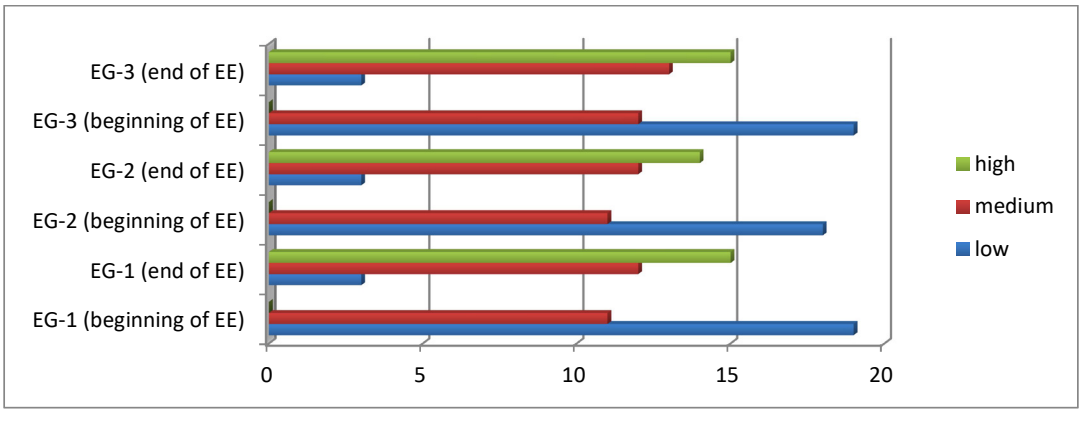

Figure 8: Final level of MC-4. – Digital awareness

Figure 8 reflects the final distribution of media competence levels among the experimental group in relation to the fourth and most complex component - MC-4: Digital Awareness. This dimension evaluates participants' ability to reflect on their digital presence, recognize the social and ethical implications of media behavior, and adhere to legal norms within digital environments. Post-intervention results show a substantial qualitative improvement: The proportion of students at the low level dropped to 10%; 41% demonstrated a medium level, while 49% achieved a high level of digital awareness. These outcomes indicate that students not only expanded their understanding of responsible media behavior but also developed critical awareness of how digital actions affect professional reputation, institutional culture, and learner well-being. Participants exhibited greater sensitivity to privacy, intellectual property, and ethical standards in media use - competencies essential for leading digital transformation in educational contexts.

Conclusion. The results obtained at the control stage of the study clearly demonstrate that the experimental group achieved significantly

higher levels of media competence in comparison both to their own initial performance and to the final outcomes of the control group. Given that all other external conditions remained stable, this positive dynamic can be directly attributed to the implementation of the "Digital Etiquette" *o*nline course, which functioned as a key pedagogical intervention during the formative phase of the study. The applied model of intrinsic and component structure of media competence, developed and tested in this research, has allowed us to conceptualize a pedagogical profile of the media-competent education manager of the future. This professional is characterized by the ability to: engage in purposeful and effective media activity to enhance the educational process; manage digital communication and content in alignment with pedagogical goals; apply media, digital, and informational literacy in both instructional and administrative settings; critically interpret and produce media content; demonstrate operational readiness and creativity in media use; reflect communicatively and ethically in media environments, and maintain motivation and value-based orientation toward responsible and innovative digital engagement.

At the core of this professional profile lies a synergistic integration of soft and media-specific competencies. Soft competencies - including critical thinking, creative activity, motivation, operational readiness, and communicative reflection - intersect with core media competencies - such as digital literacy, content interpretation and generation, and digital awareness. Together, they form a cohesive foundation for professional identity and effectiveness within the digital learning environment. This integrated model offers both theoretical and practical implications. It can serve as a framework for designing targeted training programs, evaluating professional readiness in digital education, and guiding institutional policies on media pedagogy and leadership development in the context of global digital transformation.

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Discourse of a social educational teacher working with families

Abstract

Introduction. The study discusses the importance and specificity of social educators' discourse in working with parents, addressing the growing need for effective cooperation between family and school to ensure harmonious development of children and create suitable emotional atmosphere that directly affects children's psychological well-being. The research examines social educators' key role as mediators between educational institutions and families in the context of modern social reality. *Methodology and Methods*. The research employed comprehensive approach including review of scientific sources and publications on social educator-parent interaction, theoretical and empirical studies, interviews with social workers and parents to obtain in-depth qualitative data on their experience and perception. The study analyzed specific cases of successful interaction to identify effective practices and methods, examined official documents, meeting minutes, and correspondence to understand formal discourse structure and content, and conducted direct observation of real interaction processes to obtain objective data on communication and work methods. *Results*. Using these methods, discursive characteristics and genres of social educator discourse in working with parents were identified, revealing the most effective communication methods that contribute to strengthening mutual understanding and cooperation. The study demonstrated how effective interaction with parents helps create suitable emotional atmosphere for children and established the importance of social educators as mediators in building trusting relationships between educational institutions and families. Proposals for discourse improvement were developed based on identified effective practices. *Scientific novelty*. The research provides comprehensive analysis of social educator discourse characteristics and genres in parent interaction, establishing theoretical foundation for understanding communication dynamics between educational institutions and families and contributing to discourse analysis in educational contexts. *Practical significance*. The findings help improve the quality of education and family support by providing evidence-based communication strategies and effective practices for social educators, offering practical tools for strengthening cooperation between educational institutions and parents in contemporary social contexts.

Keywords: parents, social educator, discourse, communication, dialogue, family, work with parents, activities of a social teacher.

Introduction. Any society strives to educate complete, well-rounded individuals. The main goal is to improve the worldview, moral development, and cultural and educational level of young people. One of the tools that contributes to solving the problems of socialization of students, their personal and intellectual development is the system of aesthetic, cultural and moral education in educational and extracurricular activities of educational institutions. In this system, the competence of the teacher who educates the individual is one of the main issues. Since the social educator establishes a dialogue not only with students, but also with the school staff, government officials, and parents, the communicative competence of the social educator must be at a high level (Shubovich M. et al., 2021). Parents play a vital role in children's lives and development, and their involvement is essential for a child's success in school and society. Social workers can play a vital role in developing effective relationships between parents and children, acting as mediators and confidants. In this

regard, we set out to identify the discourse of a social educator in the process of working with parents. The aim of the article is to identify the discourse by analyzing the work and dialogues of social educators with parents, and by reviewing the literature. If we identify the discourse of a social educator during work with grandparents, it is clear that this will provide a basis for future work to improve the discursive competencies of social educators.

The study of discourse is a useful and complex task. It is one of the most popular and analytical concepts among researchers in the social sciences and humanities. The findings in research on discourse have formed several directions. Discourse is a very complex concept, and has different meanings in different scientific fields. Currently, there are several types of discourse that have acquired a scientific character (Aiolfi, 2025). One of them, which is close to the topic of our study, is pedagogical discourse. Pedagogical discourse is designed to ensure the coordination of the interests of all participants in the educational environment (Sapiński & Ciupka, 2021) There are a number of studies on pedagogical discourse in general, but the issue of our study, namely the discourse of a social educator, has not been addressed.

The discourse is aimed at establishing an open and constructive dialogue with parents, and jointly solving the difficulties that arise during the education and upbringing of children. A social educator must provide individual and effective assistance to parents, taking into account the family's situation and its cultural and social characteristics. In addition, the social educator must support the child's psychological and social development by strengthening cooperation between the family and the school. It allows us to identify the role and basic principles of the social educator's discourse in working with parents, as well as effective strategies. Therefore, the study of the methods and discourse of the social educator's interaction with parents is the basis of our research.

Materials and Methods. To determine the discourse of a social educator, it is necessary to take into account several key aspects. Analysis of goals and objectives: What are the main goals of the work of a social educator? This may be personal support, social adaptation, or work with specific groups**.** Language and Rhetoric: Review of terms and phrases used in the professional communication of a teacher. For example, "empathy", "social adaptation", "psychological and pedagogical assistance". Context of work: Studying the social environment in which the educator works and how this environment shapes his or her methods. For example, schools, rehabilitation centers, or public organizations. The table below shows the steps taken in defining the discourse of a social pedagogue.

Table. 1 *Discourse identification measures*

Steps	Tasks to be performed
Issues and context	Description of the social environment in which the teacher works. Identification of the current problems and needs of students/community
Discourse Studies	Data collection (interviews, observations, document analysis) Identify key themes and issues related to the teacher's work
Data analysis	Data classification
Formulating conclusions	Describe the main conclusions on the issues, describe the discourse of a social educator.
Recommendations and actions	Drawing conclusions on the discourse problem. Developing recommendations

In conducting the research, we tried to find answers to several questions: What are the types of work, forms of influence, and tools that social educators conduct with parents? What are the

main issues that are considered at meetings with parents? By analyzing the interview responses, which consisted of a series of such questions, we were able to identify the discourse of social educators. To carry out our research, we chose the following research methods: theoretical and empirical (observation, interview). A review of scientific and source materials on the topic of interaction between social educators and parents was conducted. Interviews were conducted with social educators, official documents, and meeting minutes were studied. These methods provided a deep and comprehensive understanding of the social educator's discourse and his or her role in working with parents, which in turn contributed to the formation of recommendations and research conclusions.

Results. According to the table above, we conducted a number of research activities to achieve the objectives of our research work. Interviews were conducted among social educators in Almaty city and region. Methods and documents of social educators working with parents at the municipal state institution «Comprehensive Education School No. 10» of the Almaty City Department of Education were analyzed, interviews were conducted. As a result of these measures, a number of issues were identified.

In our study, first of all, interviews and observations were conducted to identify the issues of social educators working with parents. In general, various questions were asked during the interview. It was conducted in the form of a free conversation. However, the questions asked to all in order to determine the discourse were as follows.

1. What tools do you most often use when working with parents?

2. What is the most effective form of working with parents for you?

3. What issues do you most often work with parents on?

4. What professional terms and words do you most often use when talking to parents?

Professional terms are an important part of discourse, as they are necessary for effective and accurate communication between professionals. Professional discourse is the specifics of language and communication used within a particular profession or field. This discourse contains specific terminology that is understood and used by professionals in a particular field. Interviews were conducted with a total of 8 social educators.

Table 2. *Interview analysis*

Questions	Answers	Analysis
What tools do you most often use when working with parents?	Phone calls, WhatsApp, Telegram, trainings, counseling methods, online platforms, diagnostic questionnaires, video calls	6 out of 8 teachers (75%) choose phone calls, WhatsApp, and telegrams. They consider these to be the fastest means of communication due to time constraints. The remaining 2 teachers (15%) consider these means to be a way to go to a private area. For them, the most effective way to communicate with their families is through the class teacher. Nowadays, the most effective means of communication are phones and text messages. With the passage of time, parents often use these messengers.
What is the most effective form of working with parents for you?	Individual counseling, group training, informational meetings or webinars. An effective format is agreed upon based on the needs of the parents.	A full 100% of respondents answered this question in favor of face-to-face meetings, as they believe that face-to-face conversations with parents are more effective in resolving issues. Because it is clear that talking to parents face to face is effective in resolving issues.
What issues do you most often work with parents on?	Socialization issues. Issues of child upbringing and development, family issues. Crime prevention.	Social educators said that they cannot specify this question specifically. They work with parents on many issues. The most important work is on obtaining social assistance. It was reported that while our research was being conducted, intensive work was being carried out with parents on the «Social Wallet» project.

What professional terms and words do you most often use when talking to parents?	Social assistance, social support, child, trust, training, partnership, individual, child, discipline, law, adaptation, survey, document, cyberbullying, bullying, parents, upbringing, family, social environment, support, event, social environment, document, survey, training, care advice, application, supervision, child with special educational needs, inclusive environment, speech therapist, defectologist, lesson, bruk, gratitude, requirements, charity, psychological-medical-pedagogical consultation, psychological-medical-pedagogical examination (PMPE), preventive measures, recommendations, information, characteristics, protocol.	Social educators noted the most frequently used professional words. We analyzed them and calculated the percentage of words found in their answers. 1. «Child», «social assistance» «Parents», (100%, /8 educators) 2. «family» «certificate» «trust» (62%/6) 3. «Support», «application» «document» (62% /5) 4. «upbringing», «social environment», «guardianship council», «supervision», «inclusive environment» «PMPK» (50%/4) 5. «Discipline», «cyberbullying « «survey», «counseling», «adaptation», «action» «child requiring special care» «clubs» (37.5%/3) 6. «Violence», «bullying», «protocol», « law», «training» (25% /2)

We analyzed the interview results above. Through this analysis, we identified the issues that social educators are most often working with parents on. We tried to identify their discourses through the dialogues they create while finding solutions to those issues. Next, in order to further define the discourse, we analyzed several official documents that allow us to monitor the work of the social worker with parents at school. All documents related to the social educator (registration logs of applications received from parents, work plans with parents for 2024-2025, school social passport, meeting minutes, minutes of the brokerage commission meeting, home inspection report, minutes of the board of trustees meeting, social educator's plan for the academic year) were studied.

We monitored the daily work of social educators. The work done at the beginning of the school year was very extensive.

1. Data on the study of the social living conditions of students and information about the students of the class (social passport of the class) were obtained from the class teachers.

2. Students with social status (orphans, left without parental care, incomplete, partial orphans, large families, low-income, receiving social assistance, from unsuccessful families, students in difficult situations) were provided with textbooks.

3. Work was carried out to form a social passport of the school, determine the category of students by family type.

4. The school's social passport, a list of students from families with social status, was sent to local authorized bodies

5. A journal was kept to regulate the personal files of orphans and children left without parental care, to monitor and record the personal interests of students with social status.

6. The stands on the protection of children's rights in the «Child Protection Corner» were updated.

7. The Social Educator Week was held.

8. A set of measures was implemented to implement the state service of providing students (grades 1-4, certain categories of students in grades 5-11) with one-time meals

and to provide students with high-quality meals (brokerage commission, prohibited items, menu, report card, etc.).

9. Socio-pedagogical support for students living with stepparents: planning, monitoring, inspection, diagnostic work was carried out.

This was only a series of works that we observed and identified during the study. There are also enough small daily tasks. The social educator was in daily contact with parents, school administrators, students, and authorized bodies. We were convinced that communicating with each individual and finding solutions to problems requires social educators to have high communicative competence and emotional intelligence. Based on the results of the study, we identified the forms and tools of social educators' work with parents. We observed their dialogues and identified their discourses during their work with parents. We did not ignore their dialogues not only in face-to-face meetings, but also in the exchanges of opinions on WhatsApp.

As we have found in our practice, the social educator uses various forms of working with parents, including:

1. General and class parent meetings: Holding meetings where important issues of raising and educating children are discussed.

2. Individual consultations: A social educator helps parents understand issues of family law, interpersonal relationships in the family, and parenting methods.

3. Lectures and talks: Conducting educational lectures and talks for parents on issues of child upbringing, health, and safety.

4. Family Visits: A social worker can visit students' families to better understand their situation and provide support.

5. Designing stands and displays: Creating informational materials for parents at stands or displays at the school.

Discourse is a speech act that takes place between communicants in a specific time and place. It describes the process of transferring the events of the life of the participants in a speech relationship into language, and as a result of this speech, the discourse becomes a text and is preserved in the language. The main features of discourse are:

1. Thematic connection, that is, the accumulation of content around one topic - discourse;

2. Situationality, according to the sphere of communicative interaction, the discourse is built around a specific issue;

3. Speed, in some cases the topic can change;

4. Social orientation;

5. Specific structure.

The content of discourse is provided by the communicative situation and thematic connection, and its completion, interruptions, or transitions to other topics are determined by nonverbal signals. For this reason, discourse cannot be analyzed outside the framework of communicative interaction. In this context, in our study, we analyzed the dialogue between a social worker and parents, and attempted to identify and analyze the discourse at that time. To define the discourse of a social educator, it is necessary to highlight the main aspects that shape his professional practice. The discourse of a social educator covers different levels of interaction: with children, parents, colleagues, as well as with various social institutions. Below, we have presented in the table the main characteristics of the discourses of social educators based on the results of our research.

Table 3. *Description of the discourse of a social educator*

Parameters	Description	Related words
Relationship goal	Establishing connections, helping to solve social problems, preventing deviations.	Support, assistance, adaptation, prevention, problem solving, cooperation
Contact type	Individual consultation with the teenager, group work with parents, interdepartmental interaction.	Advice, conversation, training, teamwork, dialogue, discussion
Methods of influence	Methods and technologies used by a social educator to achieve communication goals.	Methodology, training, psychological counseling, art therapy, design, training

Emotional tone	The nature of the emotional state and mood that the teacher establishes in the relationship.	Empathy, support, understanding, kindness, compassion, trust
Conflicts and problems	Interaction in conflict situations, identification and resolution of problems. Reducing the level of aggression in adolescents, resolving conflicts in the family, providing assistance in crisis situations.	Conflict, crisis, resolution, aggression, problems, difficulties, misunderstanding
Expected results	What results are expected when interacting with subjects: children, parents, colleagues?	Result, success, progress, adaptation, psycho-emotional state, improvement
Tools and resources	Resources that a teacher uses to organize his/her activities: methods, programs, literature, partners.	Resources, tools, methods, programs, partners, diagnostics, publications
Composition of participants	Who participates in the discourse and to what extent: children, parents, teachers, social workers, authorities .	Children, parents, class teachers, social workers, subject teachers, law enforcement agencies, government agencies

Next, we identified the genres of social educator discourse. These discourses reflect how social educators interact with students, parents, colleagues, and society.

Table 4. *Discourse genres of social educators*

Discourse genre name	Events
Consultative discourse	Provide advice to students to help them solve their personal problems. Provide advice, information and guidance to parents on issues related to child development, discipline and other aspects of parenting. Manage conflicts and ensure that the needs of all parties are met.
Information discourse	Disseminates information on social, psychological, and educational issues, provides information about school policies, programs, and services, and the rights and responsibilities of parents.
Motivational speech	Encouraging students to develop themselves and achieve life goals, Providing concern, understanding and support to parents and their children.
Law enforcement discourse	Protecting children's rights and ensuring their safety. Representing the interests of parents and children in school administration or other organizations.
Pedagogical discourse	Discussing lesson delivery and teaching methods. Discussing student progress with parents.

Discussion. The concept of "discourse" has been used in linguistics since the 1970s and 1980s. Currently, this term is used alongside such concepts as "text", "speech" and "functional style". There are many foreign and domestic studies on the topic of discourse. For example, D. Alkebayeva associates discourse with the meaning of "actually spoken words" (Älkebaeva, 2014). Professor N. Wali describes discourse as a communicative "event" that includes an "author", a "speech act", an "addressee", and a speech situation (the context in which the speech is uttered). In turn, G.G. Burkitbayeva considers discourse to be a combination of text, participants, and communicative situation (Bürkıtbaeva, 2005).

When comparing the definitions of these researchers, it can be seen that their common views emphasize the dialogic nature of discourse and the fact that speech acts are performed in accordance with the speech situation. In European linguistics, discourse was initially understood as a speech act based on linguistic material and interpreted as "text + situation",

while text as a narrower concept was interpreted as "discourse - situation"(Ruess & Hildebrandt, 2017). Although researchers have interpreted the concept of "discourse" differently, they all share a common idea: the main characteristic of discourse is its result-oriented procedural nature (speech act) and intersubjectivity (speech act). According to the Dutch scholar Theun van Dijk, who founded text linguistics, the term "discourse" refers to the study of a text from a static to a dynamic state (Van Dijk, 2015). Discourse develops and unfolds through dialogue. Dialogue is a consistent and coherent verbal activity involving at least two communicants. In the process, the roles of communicants are exchanged, and dialogue becomes the basis for the creation of a single discourse (or text). Dialogue is evolving from a specific form of communication into a dialogical form of culture that is constantly developing and enriching. Therefore, dialogic discourse is of interest to our research, and we consider it as a type of discourse.

Pedagogical discourse is classified as a type of institutional discourse, as indicated by V.I. Karasik (Karasik, 2009). Any type of institutional discourse is determined by two system-forming features: the goal and the participants in the communication. For example, the goal of pedagogical discourse is the socialization of a new member of society, and the participants are parents, students, school principals, teachers, government officials, etc. In pedagogical practice, discourse is considered as a written text, which requires discursive thinking that creates certain meanings in the process of communication. The source of meaning is not just a single word, but also the intention of the speaker, why he is speaking, his attitude and needs. Differences in teacher discourse lie in the extent to which speech is related to solving professional problems and in the degree of participation of the subjects of communication in the problem (Lașcu, 2023). Pedagogical discourse is designed to ensure the coordination of the interests of all participants in the educational environment (Kochetkov & Kovalevich, 2020). Pedagogical discourse is relevant as a methodological basis for educational practice in the existential, cultural and ideological aspects of human development (Ryve, 2011). Thus, the existential and axiological dimensions of education are formed. The education of the future should be directed towards innovation and development in the progress of civilization, without neglecting the principles of traditional values for the socio-cultural space. Discourse analysis is the study of human communication, the most unique of which is language in use (Kress & Van Leeuwen, 2001). Discourse analysis goes beyond the simple analysis of grammatical structures to cover a wide range of human communication, paying special attention to how language is used and interpreted in real-life situations. It deals with the analysis of how people communicate and how they use language.

The participants of the communicative situation are communicative individuals. A communicative individual is an individual who has fully mastered the norms inherent in the functional features of the language and the norms inherent in the pragmatics of communication, and has developed a habit of using it in accordance with the communicative situation (Sadirova, 2008). K. Sadirova The speech of communicative individuals depends on their level of education, environment, activity and profession, that is, social status. The behavior and speech culture of a communicative individual correspond to the norms established in that environment. They conduct language communication in accordance with those norms. In our study, the discourse of a social educator as a communicative individual is considered.

One of the duties of a social educator is to act as an intermediary between students, educators, and specialists from the organization, family, environment, various social services, departments, and administrative bodies. It is clear that this task requires a high level of communicative competence from the social educator. It is very important for the social educator, who finds himself in a linguistic situation with a diverse environment, to communicate correctly, especially with parents. The existence of cooperation between students, parents, and social workers depends, first of all,

on how the relationships between adults in this process develop. Only when the teacher and parents who are raising a child work together will the results of education be successful. In order to achieve the intended goal, it is very important to be able to build the right relationships.

M. Madsen, as a result of her research on the issue of parent-teacher communication, came to the following conclusion. From the teachers' point of view, much could be achieved by increasing knowledge and experience if we chose communication tools that were well-received by parents and that ensured effective two-way communication. It is important for parents to be aware of the workload of teachers and their opportunities to talk privately about their children with special needs. It is important to raise awareness among parents about the challenges and additional stress experienced by special education teachers (Madsen & Madsen, 2022). It all depends on the culture of the parents and the social educator's ability to build relationships and choose the right tools. In a study that confirms the link between student achievement and parent-teacher conferences, Masood Ahmad found that meetings provide an opportunity for students and teachers to discuss their skills and progress at school. It has been found that parents can help teachers improve their teaching methods according to their child's individual needs (Zubair, Ahmad & Tariq, 2023) Of course, the more active parents are, the more cooperative and responsible they are with teachers, the better the child's performance.

Nowadays, the work of a social educator with a family is multifaceted. The work of a social educator with a family is aimed at positively influencing the development and upbringing of children, establishing close relationships with parents, and solving social problems (Sadvakasova, 2016). Indeed, dialogue is necessary for students to achieve common requirements. As experience shows, this dialogue does not always occur, and the harmony of the educational influence of parents and teachers remains a necessary ideal condition for the development of children. There are often situations when there is a lack of understanding between teachers and parents, because they have different approaches to upbringing. Parents either suppress the child's conflicting behavior or, on the contrary, encourage it, sincerely believing that they are taking care of their well-being. Relationships between children are a reflection of the attitude of adults towards themselves and their children.

Discourse refers to the ways of communicating and interacting with other people. The social worker's conversation with parents should be based on the principles of respect, empathy, and cooperation. Effective discourse is necessary for social workers in the following areas:

- establishing a trusting relationship: by creating an atmosphere of trust, social educators can build a strong bond with parents that facilitates open and honest communication.
- identifying needs and problems: through discourse, social educators can identify the specific needs and problems of parents and their children and create appropriate support plans.
- facilitate understanding: social educators should use clear language and avoid jargon so that parents can understand the topics discussed and feel part of the decision-making process.
- engaging parents: effective discourse allows social educators to engage parents in their learning process and help them become partners in their children's learning and development. Social educators use a variety of discourse types in their work with parents.

Conclusion. The discourses of social educators in working with parents play a key role in promoting authentic and productive communication. By using effective discursive strategies, social educators can build trust, identify needs, facilitate understanding, engage parents in collaboration, and help resolve issues that arise between parents and children. By talking to a social educator, parents can receive valuable suggestions and advice aimed at understanding and solving the difficulties in raising their children. This helps to improve the family climate and the development of the child. Interaction with parents allows the social worker to quickly identify potential problems and difficulties in children's behavior and learning, which contributes to timely intervention and preventive measures.

The discourse of a social educator supports the emotional and psychological state of children, contributing to their successful social adaptation. A properly structured discourse of a social educator in working with parents is an important tool for strengthening the relationship between family and school, improving the quality of education, and supporting the comprehensive development of children. This shows the importance of the teacher's professional skills and ability to use words effectively. We have some suggestions for this research topic. In the future, we will conduct a comprehensive analysis to identify the views of parents on the issue of communication with social educators. In the future, identify and conduct a comprehensive analysis of parents' thoughts on the issue of communication with social educators. Special training for social educators to communicate effectively when working with parents; adapting vocabulary and speech style to different cultural and social groups; using joint online platforms to discuss student development; creating psychological support groups for parents; preventing conflict situations and developing mediation services. We believe that future research is needed based on these recommendations.

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