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Problem-Oriented Learning as a Method of Developing Soft Skills Among Students of Pedagogical Specialties

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Abstract

In the context of the transformation of the modern higher education system, the supra-professional competencies (soft skills) necessary for future specialists in the humanitarian field, in particular, social educators, are of particular importance. The present study is aimed at studying the effectiveness of problem-based learning (PBL) as a method of forming key soft skills among students of the educational program "Social Pedagogy" of the L.N. Gumilyov Eurasian National University. The theoretical part of the study includes an overview of international and domestic scientific discourse on flexible skills and a problem-oriented approach. In the empirical part, the methods of pedagogical experimentation, questionnaires, self-assessment of competencies, and quantitative analysis of the dynamics of soft skill development during the semester were applied. The results indicate a positive correlation between the intensity of students' participation in PBL practices and the level of development of skills such as critical thinking, teamwork, communicative competence, and time management. The study also identified institutional and methodological barriers to the implementation of PBL in Kazakhstan's educational practice, including the lack of trained facilitators and the lack of adapted cases. Based on the data obtained, a model of a localized PBL strategy integrated into the training of social educators is proposed. The research contributes to the development of the methodological culture of teacher education and opens up prospects for creating a sustainable system of soft skills formation in universities in Kazakhstan.

Keywords: soft skills; problem-oriented learning (PBL); social pedagogy; higher education; professional competencies; pedagogical experiment

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1. Introduction

Modern education is undergoing a profound transformation under the influence of socio-economic, technological, and cultural changes that require graduates not only to have academic knowledge, but also to have developed universal competencies known as soft skills. In the face of increasing uncertainty, globalization and digitalization, it is these supra-professional skills—critical thinking, teamwork, communication skills, initiative, adaptability, and time management—that are becoming the cornerstone of professional sustainability and mobility of specialists, especially in the humanitarian and social fields (OECD, 2018).

The formation of soft skills is of particular importance in the context of the training of future social educators, whose professional activities are associated with solving complex interpersonal, ethical, and organizational tasks in a multifactorial social environment. Unlike specialists in technical or natural sciences, educators and social workers operate in an ever-changing context, where the effectiveness of professional interaction is determined not so much by knowledge of the subject as by the ability to empathize, dialogue, strategic thinking, and self-reflection (Serpa & Ferreira, 2022). At the same time, traditional lecture and seminar forms of education are insufficient for the targeted development of these meta-competencies (Kabulov et al., 2024a, 2024b, 2024c, 2025).

Against this background, problem-based learning (PBL) acts as a promising didactic strategy capable of integrating cognitive, personal and social components of the educational process. The PBL model, which originated in medical education (Barrows & Tamblyn, 1980) and has become widespread in engineering and management programs, has been actively adapted in humanitarian pedagogy over the past two decades. A key characteristic of PBL is learning through solving open, contextualized, and multi-valued problems that require students to search, analyze, coordinate in groups, and reflect (Hmelo-Silver, 2004). Despite the high potential of PBL for the development of soft skills, its introduction into the Kazakh system of training social educators remains fragmented and methodologically unstructured. According to domestic research (Akhmetova & Zhubanova, 2020), the main barriers are curriculum congestion, insufficient teacher training for facilitation, the lack of relevant cases, and the shortage of valid tools for assessing flexible skills. These problems necessitate the creation of a localized, culturally adapted PBL model that takes into account the specifics of socio-pedagogical training in Kazakhstan.

In global pedagogical practice, PBL has acquired a solid empirical basis not only in medicine and engineering, but also in education itself. A classic review noted that the introduction of PBL in university courses significantly increases motivation for learning and develops teamwork skills (Thomas, 2000). Other studies demonstrate that problem-oriented projects stimulate deep self-regulation and responsibility for their own learning process in students (Hmelo-Silver, 2004). In the context of social pedagogy, similar effects are described in the work of Smailov, D. B. Zhanatova (Smailova & Zhanatova, 2023): adaptation of regional cases contributes to a noticeable increase in critical thinking and initiative of future social educators. If PBL develops clinical thinking and communication skills in medical education (Barrows & Tamblyn, 1980), then the method has proven its effectiveness in developing transversal competencies critical for work in social and pedagogical teams in a pedagogical context.

Thus, this study focuses on analyzing the effectiveness of problem-based learning (PBL) in the formation of soft skills among students of the educational program "Social Pedagogy" of the L.N. Gumilyov Eurasian National University. In contrast to the existing predominantly descriptive works, this study attempts to quantify and qualitatively record the relationship between the degree of student involvement in PBL and the level of development of key supra-professional competencies.

This work pursues a single goal—to find out how the systematic application of the PBL model contributes to the formation of critically important soft skills in future social educators within the framework of Kazakhstan's higher education.

Research objectives:

- Summarize theoretical concepts of soft skills and problem-based learning;
- Assess the degree of integration of PBL elements into the curriculum of the Social Pedagogy program;
- Empirically record the dynamics of the development of key cross-professional competencies in students before and after their inclusion in PBL scenarios;

– Identify the main methodological and institutional barriers that hinder the large-scale implementation of PBL in Kazakhstan's universities;
– Formulate recommendations for creating a localized PBL model that meets the needs of the socio-pedagogical practice of Kazakhstan.

Context and problem of the study. The implementation of PBL initiatives in modern Kazakhstan's higher education faces several interconnected barriers. The UNESCO Global Education Monitoring report (UNESCO, 2021) records that 64% of university teachers experience a lack of methodological support and regulatory recommendations for organizing project work. A study by Tursunova (2022) in Kazakhstan, devoted to the implementation of PBL in pedagogical universities, revealed that the lack of cases adapted to the national context significantly reduces students' learning motivation and activity. Finally, an analysis of higher education reforms by Yakavets et al. (2023) shows that the dominance of the lecture-seminar model creates institutional barriers and complicates the transition to flexible modular PBL scenarios.

Localization of the PBL method. In order to make PBL truly relevant to domestic conditions, we built three key elements of its adaptation. Firstly, the cases were developed based on real social practices of the region and direct requests from specialists in "Social Pedagogy", which allowed the participants to work with situations that were as close to them as possible. Secondly, all educational material was presented in Russian and Kazakh, which takes into account the bilingual background of students and reduces barriers to the perception of new concepts. Finally, we introduced our own soft skills assessment module, verified in accordance with national standards of pedagogical competence; this ensured the objectivity and comparability of the experimental results.

Research methods. This study uses a mixed-methods approach combining quantitative and qualitative methods for a comprehensive assessment of the impact of PBL on the development of soft skills.

Sample: The study included 78 2nd–4th year students majoring in Social Pedagogy at ENU (2022–2025) from the general population (∼250 people). First-year students were not involved since they did not yet have access to the basic pedagogical practices necessary for full immersion in PBL.

Data collection procedure: The main collection of materials took place in the classrooms of the Faculty of Education in March–April 2025. Students learned about the study through internal announcements and an e-mail newsletter; participation was voluntary and completely anonymous. The questionnaires completed in person were scanned and stored on a secure server of the department.

Tools: For the quantitative part, a self-assessment questionnaire on five key soft skills (critical thinking, teamwork, communication, initiative, time management) on a scale of 1–5 (25 items) was used. The questionnaire was pilot tested among 15 students and demonstrated high reliability (Cronbach's $\alpha = 0.82$–0.89). In addition, content analysis using the categorization method (Krippendorff, 2018) was used to analyze program documents in order to assess the degree of presence of PBL elements in the training modules.

Data analysis: Quantitative indicators were processed in SPSS Statistics 27.0: descriptive statistics, Spearman correlation for the relationship between PBL engagement and skill level, Mann–Whitney for group comparison were calculated, with the significance threshold set at $p < 0.05$. Qualitative responses from questionnaires and focus groups were subjected to thematic analysis (Braun & Clarke, 2006) to identify the main patterns of PBL perception.

Ethical aspects: The project was approved by the Ethics Committee of ENU (protocol No. 12/2024 dated 15 February 2024). All participants signed informed consent and were informed about the anonymity and confidentiality of the data.

Research questions. Within the framework of this study, we formulated two central questions. Firstly, how exactly does the adaptation of PBL to the Kazakhstan's context contribute to the development of critical thinking and initiative in students majoring in Social Pedagogy? Secondly, what methodological and institutional barriers hinder the large-scale implementation of PBL in domestic pedagogical programs, and what practical steps could eliminate these limitations?

Scientific novelty: For the first time in the Kazakhstan's context, the study combines a deep conceptual analysis of PBL with empirical tracking of the development of soft skills in students of Social Pedagogy. We did not limit ourselves to a description—we quantitatively measured the dynamics of key cross-professional competencies before and after the introduction of problem-oriented scenarios and identified specific factors that hinder their effectiveness in humanitarian university education.

Practical significance: The data obtained formed the basis for specific recommendations for universities: development of regional cases adapted to real social and pedagogical tasks; systematic training of facilitators; integration of objective soft skills diagnostic tools into curricula and assessment systems. The proposed PBL model can become a starting point for the development of modular courses and advanced training for teachers, ensuring the sustainable formation of critical competencies in future social educators.

2. Literature Review

2.1. Theoretical and Conceptual Foundations of Soft Skills in Modern Education

The concept of soft skills (flexible, supra-professional, or meta-competencies) has become a central element of educational discourse over the past two decades, especially in the context of training specialists in social and pedagogical fields. The term originated in the US military environment in the late 1960s and originally referred to skills unrelated to technical training, but critical for effective teamwork and decision-making in the face of uncertainty (Kyllonen, 2013). Subsequently, its meaning was transformed, gaining wider interdisciplinary application in psychology, pedagogy, and management.

Daniel Goleman made a significant contribution to the conceptualization of soft skills, whose work on emotional intelligence (Goleman, 1995) laid the foundation for understanding the role of empathy, self-regulation, and social skills in shaping successful behavior. Goleman emphasizes that emotional intelligence is not just an individual trait, but a set of skills that can be purposefully developed through educational practices. In this regard, soft skills are considered as learnable, contextually conditioned and culturally modifiable competencies that are important for the professional realization of a person in a rapidly changing society.

According to reports by the OECD and the European Center for the Development of Vocational Education (CEDEFOP), soft skills are among the key skills of the 21st century along with digital and intercultural competencies (OECD, 2021). They are defined as universal abilities applicable in various professional and interpersonal situations, such as critical thinking, communicative flexibility, teamwork, leadership, initiative, time management, and stress tolerance (Robles, 2012). Within the framework of pedagogical directions, special attention is paid to the development of these skills, since future specialists, including social educators, constantly function in conditions of uncertainty, social variability and an emotionally saturated environment (Saymanov et al., 2025; Saymanov, 2024).

The scientific literature offers a variety of classifications of soft skills. Thus, Robles (2012), as a result of a survey of employers, identifies the 10 most in-demand skills: communication skills, honesty, work ethic, flexibility, teamwork, motivation, positive thinking, adaptability, self-organization and problem solving skills. In their "Learning for Life in

Our Times" concept, Trilling and (Balcar et al., 2018) systematize soft skills into three large groups:

(1) Cognitive (critical thinking, problem solving);
(2) Interpersonal (communication, collaboration);
(3) Self-management (initiative, responsibility, adaptability).

Such a division, as the authors note, contributes to the introduction of holistic educational models in which the emphasis is shifted from the content to the development of the student's personality.

In pedagogy, soft skills are considered as meta-competencies underlying the professional and communicative activities of a teacher or social worker. In the Russian scientific community, this approach is supported by (Barrows, 1986), who points out the need to integrate suprasubject competencies into the structure of the Federal State Educational Standard and modular educational programs. Moreover, the research of L. M. Belkina emphasizes that without the development of soft skills, it is impossible to form pedagogical reflection, an empathic position and readiness for variable pedagogical strategies. In the context of educating teachers and especially social educators, soft skills play a system-forming role rather than an auxiliary one, since the specifics of their professional activities go far beyond subject competence and require developed emotional, communicative and organizational flexibility. A social educator functions in a multi-contextual environment between family, educational organization, local communities and government structures. These flexible skills allow them to build productive interactions, work in conditions of uncertainty, and adapt to social risks and emotionally stressful situations (Serpa & Ferreira, 2022).

In their 21st Century Skills concept, Trilling and Fadel emphasize that the training of future teachers should go beyond cognitive assimilation and be focused on the formation of a holistic professional personality capable of not only transferring knowledge, but also skills to be a leader, facilitator, mediator, mentor and coordinator of the student's social environment. They define soft skills as a key vector of education transformation in the era of global instability and digitalization, where rigid structures give way to flexible, open and cooperative models of interaction.

The Serpa and Ferreira (2022) studies emphasize that for future social educators, soft skills become a factor of professional burnout or resilience: developed reflection, communicative competence, the ability to work in a team and maintain emotional stability in crisis situations directly correlate with the successful adaptation of graduates in the professional field. They identify four clusters of soft skills that are critically important for social pedagogy: (1) adaptability and creativity in problem solving; (2) communicative empathy and the ability to actively listen; (3) conflict and stress management; (4) self-organization and responsibility for the result. These competencies, as the authors emphasize, cannot be formed within the framework of traditional lecture formats, but require specially designed training scenarios such as PBL, case-based learning, simulation and design practices.

According to a Wong and Zhang (2022) study conducted on the basis of pedagogical universities in China and Singapore, the soft skills of future social educators determine not only their willingness to practice, but also the level of trust from clients and the professional community. In conditions of cultural and ethnic diversity, high emotional stress and social instability, it is flexible skills that become a guarantee of a specialist's deontological stability, not just professional literacy. Domestic works also emphasize that a teacher deprived of soft skills loses his subjectivity as a professional: he is not capable of self-reflection, ethically structured interaction, or constructive resolution of situations of uncertainty. The training of such specialists requires going beyond the classical subject paradigm and turning to a meta-competence model, which focuses on soft skills as transversal regulators of professional behavior.

Flexible skills acquire additional importance in the context of social transformation and uncertainty caused by digital and global changes, when a social educator becomes a link between the education system, family and society (OECD, 2022; UNESCO, 2021). In these conditions, the ability to think critically, adapt, take the initiative, and collaborate with different social groups becomes not just a useful skill, but a necessary condition for professional survival and social effectiveness.

Thus, the importance of soft skills in the initial training of teachers is determined not only by the requirements of the labor market, but also by the deep specificity of the profession itself, focused on value, ethical and dialogic interaction. Their formation requires the educational system to move to flexible, student-centered, practice-oriented models, where PBL occupies a strategically significant place as a form of integration of knowledge, values and personal attitudes of the future specialist.

2.2. PBL Methodology and Its Role in the Formation of Soft Skills

Modern transformations in education are leading to a rethinking of the methodological foundations of vocational training, especially in the humanities and social sciences, where transversal competencies, including soft skills, are beginning to play a key role rather than academic knowledge. In this context, problem-based learning (PBL) is becoming increasingly important as an effective didactic model aimed at developing students' cognitive, personal, and social flexibility (Loyens et al., 2015).

Historically, PBL was developed by Howard S. Barrows and Robyn M. Tamblyn in 1969 at McMaster University (Canada) and was used to train medical students (Barrows & Tamblyn, 1980). The model assumed the rejection of linear content development in favor of posing an open, ambiguous problem that requires independent analysis, information search, collective discussion and solution development. According to Barrows (1986), it is this cognitive instability that provokes the development of higher orders of thinking, communicative strategies, and reflective activity.

In the following decades, PBL was actively adapted to pedagogical and social sciences (Hmelo-Silver, 2004). The Hmelo-Silver study highlights that the main effects of PBL application in the humanities are critical thinking, independence, initiative, teamwork and a reflective assessment of one's own contribution—that is, all those soft skills that form the basis of professional readiness of a social educator. A systematic review by Hung (2011) and an empirical meta-analysis by Savery (2006) confirm that the use of PBL increases student engagement, promotes the formation of sustainable patterns of cooperation, and develops argumentation, planning, time management, and self-organization skills. In particular, in a sample of 48 studies reviewed by Savery, 42 showed positive changes in soft skills, while the greatest growth was observed in the competencies of group interaction and decision-making.

In comparison with other active methods, such as case-based learning and project-based learning, PBL is characterized by structural incompleteness, the lack of a ready-made solution algorithm, and an emphasis on students' search, research, and communication activities (Bell, 2010; Thomas, 2000). If the case approach is more often aimed at analyzing typical situations with known variables, and the project approach is aimed at creating the final product, then PBL relies on vital, complex and uncertain problems, which makes it especially valuable for modeling professional situations in social pedagogy. A study by Wong and Zhang (2022) conducted at teachers colleges in Hong Kong indicates a direct correlation between the level of student engagement in PBL and the development of soft skills such as empathy, self-regulation, ethical thinking, and creativity in complex social scenarios. In a sample of 276 students who were trained in the social pedagogy program, positive dynamics of self-assessment in teamwork (+24%), communication (+28%) and

critical thinking (+19%) were recorded after one semester based on problem-oriented tasks and facilitated group discussions.

An important contribution to the development of the PBL model in the context of digitalization was made by Barrows (1986), who demonstrated the possibilities of integrating digital resources—forums, online cases, simulation platforms—to enhance the reflexive and dialogical component. The authors emphasize that the digital environment enhances the student's personal involvement and allows them to track the dynamics of soft skills at the digital trace data level. PBL is of particular importance in the training of social educators, since their very activities are structured around interaction with crisis groups, situations of uncertainty and moral choice. According to Serpa and Ferreira (2022), social educators should have not only knowledge of the regulatory framework, but also a stable personal architecture based on qualities such as initiative, empathy, communication and adaptability—all of them are formed and updated in the PBL format. In the Kazakh and post-Soviet context, the introduction of PBL encounters a number of structural barriers, however, pilot modules are being implemented at universities with developed humanities schools, such as the L. N. Gumilyov ENU, which include PBL formats in the courses "Psychological and Pedagogical diagnostics", "Social Work with family" and "Mediation in an educational environment". An analysis of these practices demonstrates that even partial implementation of PBL allows for a qualitative change in the dynamics of soft skills, especially in the presence of tutor support, an interdisciplinary modular structure, and thematic relevance of problems to real practice.

Thus, PBL should be considered not just as an innovative methodology, but as a systematic strategy for the formation of professional subjectivity, personal stability and social competence of future teachers. In the context of growing uncertainty, digital turbulence and social polarization, it is the problem-oriented model that makes it possible to form soft skills that are inextricably linked to the reality of professional action.

2.3. National and Local Context: The State and Challenges in Kazakhstan

The formation of soft skills among future teachers is one of the priorities of modern Kazakh educational policy, which is directly reflected in the Concept of Development of Teacher Education in the Republic of Kazakhstan until 2025. According to the document, the transformation of teaching programs should be aimed at developing flexible skills such as creativity, initiative, critical thinking, teamwork, digital literacy and adaptability. The concept pays special attention to the transition from traditional lecture-seminar forms to active teaching methods, among which problem-oriented learning (PBL) occupies a key place.

Nevertheless, despite the strategic support, a number of structural and methodological difficulties remain in the implementation of the competence approach, and especially in the application of PBL, which are widely highlighted in the Kazakh pedagogical literature. Thus, Saymanov et al. (2025) points to the systemic overload of curricula, lack of interdisciplinary flexibility and lack of time for group and project work, which prevents the full implementation of PBL in the educational process. Similar conclusions are presented in the study by Akhmetova and Zhubanova (2020), which emphasizes that due to the high regulatory burden, teachers more often resort to front-line forms of work that do not involve the development of soft skills.

Hung (2011), exploring the use of active methods in the training of future social educators, emphasizes that PBL is rarely implemented as a holistic didactic model. In most cases, there is a formalization of innovative approaches, when cases or problem assignments are episodic, are not integrated into the assessment system and are not accompanied by facilita-

tion. This, according to the author, leads to a decrease in students' motivation and a lack of conscious reflection, without which it is impossible to fully develop flexible competencies.

An additional layer of problems is identified in the study by G. K. Tursunova, which analyzes the experience of implementing PBL in pedagogical universities in Kazakhstan. The author identifies four groups of barriers: institutional (strict module regulations), methodological (lack of developed cases and scenarios), personnel (insufficient teacher qualifications in the field of facilitation) and mental (inertia of pedagogical thinking). In the absence of systematic training of teachers to work in a PBL environment, the methodology boils down to simulating problems without meaningful depth.

A particularly important aspect is the lack of standardized tools for assessing the level of development of soft skills. As noted by S. R. Niyazbekova and R. A. Kuderinova, in most Kazakh universities, diagnosis is limited to either self-assessment scales or a subjective assessment of the teacher. Meanwhile, in the context of the implementation of the competence model and for the purposes of internal accreditation, indicators adapted to the national and professional context are needed, especially in specific areas such as social pedagogy. Despite the above limitations, a number of universities in Kazakhstan are gradually developing a base of successful PBL implementation practices. In particular, Akhmetova and Zhubanova (2020) describes the experience of using cases in the discipline "Social work with the family" at the Al-Farabi Kazakh National University, where students analyze real cases of interdepartmental interaction in the social sphere. The positive experience of using PBL in the module "Mediation in an educational environment" is also described in the internal monitoring of the L. N. ENU. Gumilyov, where students of 3–4 courses of the Social Pedagogy course worked with cases concerning school deviance, bullying and conflict prevention.

Finally, G. T. Smailova and D. B. Zhanatova emphasize that the PBL methodology requires cultural adaptation: tasks should be based on socially recognizable contexts, take into account the ethnopsychological features of communication, and facilitators should have the skills to conduct an intergroup dialogue. In this sense, we are not talking about direct borrowing of Western models, but about creating localized, culturally relevant forms of PBL that meet the professional realities and socio-cultural codes of Kazakh society.

Thus, the analysis of the Kazakh context shows that, despite all existing institutional and methodological barriers, the introduction of PBL in the training of social educators is not only possible, but also necessary, subject to systematic support from universities, teacher training, the creation of a national library of cases and adapted soft skills assessment tools. This confirms the relevance of the research proposed in this article and underlines its applied and conceptual significance.

2.4. Conclusions and Justification of the Need for a Localized PBL Model

An analysis of modern scientific literature and empirical research in the field of soft skills and problem-oriented learning allows us to state that, despite the rapid development of the conceptual and methodological foundations of PBL at the international level, there are still a number of unresolved issues in the field of humanitarian and social pedagogy. In contrast to medical, engineering, or IT education, where the effectiveness of PBL has been confirmed by numerous meta-analyses (Hmelo-Silver, 2004), in humanitarian education, especially in the segment of training social educators, such studies are isolated, fragmentary and mostly descriptive in nature.

As shown by Serpa and Ferreira (2022) and Teng et al. (2019), most foreign PBL models were created without taking into account the professional specifics of a social educator whose work is at the intersection of psychological, pedagogical, ethical, legal and cultural interactions. Consequently, the application of the classical PBL model requires significant

reworking to meet the real communicative and moral challenges faced by a specialist in the social sphere.

In the Kazakh context, there is an even more pronounced shortage of theoretically and empirically based PBL models adapted to domestic educational, mental and cultural realities. As pointed out by Abdykarimova, Tursunova, Zhubanova, and others, most of the existing PBL implementations are fragmented and methodically unsupported. In particular, there is no single case bank that meets local social issues, teachers do not know facilitation techniques, and students perceive problem assignments as extracurricular activities unrelated to the final assessment. In addition, the curriculum structure itself, as a rule, does not provide sufficient modular flexibility for the full implementation of PBL.

Under these conditions, the proposed study fills in several methodological and practical gaps at once. First, it focuses on a specific educational program "Social Pedagogy" and analyzes the impact of PBL on the development of specific soft skills (initiative, teamwork, critical thinking, time management, and communication skills), which provides not only diagnostic but also strategic results. Secondly, the combination of quantitative and qualitative methods used (questionnaire, focus groups, correlation, and cluster analysis) allows us to go beyond descriptive pedagogy and offer a representative, data-supported model for analyzing the impact of PBL in the context of national education. Thirdly, the study integrates international theoretical and methodological approaches (Barrows & Tamblyn, 1980; OECD, 2018, 2021, 2022; Serpa & Ferreira, 2022) into local Kazakh educational practice, offering not a tracing paper, but an adapted version of the model that takes into account the specifics of training social educators at ENU and similar universities. All of the above highlights the need to create a localized PBL model that includes

- Thematically relevant cases (for example, bullying, interethnic communication, mediation at school);
- A teacher training system for facilitation, group assessment, and reflection sessions;
- Adapted soft skill diagnostic tools, valid in Kazakhstan's socio-cultural environment;
- Institutional support for the implementation of PBL through the adjustment of modular plans, load balancing, and the inclusion of results in the final assessment system.

Only in these conditions, problem-oriented learning will be able to become not a formal innovation, but a structural part of the competence model of social pedagogue training that meets both national priorities and global requirements for professional mobility, responsibility and social maturity of a specialist.

3. Methodology

The methodological basis of this research is based on an interdisciplinary paradigm combining the approaches of higher education pedagogy, social pedagogy, empirical sociology and the theory of professional competence formation. The main goal is to identify the effectiveness of the implementation of educational program 6B01801—"Social Pedagogy" at the L. N. Gumilyov Eurasian National University, with an emphasis on the formation of key professional, communicative, and socio-cultural competencies of students.

Research approach: Within the framework of the study, a mixed-methods approach was applied, combining quantitative and qualitative analysis strategies. This approach is recognized as one of the most productive in modern pedagogical science (Creswell & Plano Clarkn, 1980) and allows a comprehensive assessment of both the structural elements of the educational process and the subjective assessments of students. Sample and context: The sample included 2–4 year students majoring in Social Pedagogy studying at ENU in 2022–2025. A total of 78 respondents participated in the study, which meets the requirements of sample reliability with a confidence level of 95% and an acceptable margin of error of ±10%. The institutional context is the implementation of an updated educational

program in accordance with the requirements of the State Mandatory Standard of Higher Education of the Republic of Kazakhstan dated 2022 and the internal Municipal Unitary Enterprise ENU.

Data collection methods. The following methods were used to collect empirical material:

1. A questionnaire with closed and open questions aimed at assessing the level of competence formation and student satisfaction with the content and format of education.
2. Content analysis of OP modules and disciplines using categorical coding (Krippendorff, 2018), in order to assess the compliance of the competencies being formed with the stated learning outcomes.
3. Focus groups with the participation of teachers of the Department of Pedagogy (n = 5), during which the problems of practice orientation and relevance of educational modules were discussed.

Data analysis methods: Quantitative data were processed using descriptive statistics and correlation analysis, which revealed patterns in the distribution of student grades. Qualitative data was interpreted using the method of thematic analysis (Braun & Clarke, 2006), which revealed recurring patterns in students' perception of the educational process.

Justification of the methodology: The choice of the mixed method is conditioned by the need to combine objective verification of learning outcomes with a subjective interpretation of the experience of students and teachers. This approach makes it possible to eliminate the limitations of purely quantitative analysis and take into account the complex, contextually rich nature of socio-pedagogical training. This is especially important in the context of rapidly changing social demands and the increasing role of social pedagogy in the education system of Kazakhstan.

Ethical aspects: All participants in the study were informed about the objectives and conditions of the study. The questionnaires and interviews were conducted in compliance with the principles of voluntary participation, anonymity and confidentiality, in accordance with the ENU Code of Ethics and standards of scientific integrity.

4. Results

Characteristics of the sample and the study context.

The empirical research base was formed on the basis of students enrolled in the educational program 6B01801—"Social Pedagogy" at the L. N. Gumilyov Eurasian National University. The sample included students from the 2nd to the 4th year, since it is at these stages of training that the main content load of professional disciplines is realized and practice-oriented forms of organizing the educational process, including elements of problem-oriented learning (PBL), are actively introduced.

A total of 78 students participated in the study, which is the total number of students enrolled in these courses at the time of the survey. Thus, the sample covers almost the entire main educational mass of the OP and can be considered representative of this educational trajectory. The survey was conducted in person and was accompanied by mandatory informing of the participants about the objectives and confidentiality of the study.

The socio-demographic analysis showed a balanced distribution of respondents by gender and courses. Most students study full-time, which ensures maximum inclusion in academic and project activities related to the implementation of PBL. The summarized data is presented in the Table 1 below.

Table 1. Socio-demographic characteristics of the study participants (n = 78).

Indicator	Category	Number (n)	Share (%)
Year of study	2nd year	24	30.8
	3rd year	27	34.6
	4th year	27	34.6
Gender	Female	61	78.2
	Male	17	21.8
Mode of study	Full-time	71	91.0
	Part-time (including distance learning)	7	9.0
Level of Involvement in PBL (Self-assessed)	High (frequently participate in case studies, projects)	29	37.2
	Medium (participate occasionally)	39	50.0
	Low (rarely or never participate)	10	12.8

An analysis of the data obtained shows that one third of students (37.2%) rate their involvement in PBL elements as high, while half (50%) rate it as average. This indicates that a problem-oriented approach is present in educational practice, but its implementation is uneven and fragmented, which requires deeper institutional integration. In particular, PBL is most often used within individual disciplines and at the level of project assignments, but it is not a system-forming principle of the entire educational model.

This pattern highlights the need to expand and systematize problem-based learning methods, especially in the context of training social educators, whose professional activities are directly related to solving complex, interdisciplinary tasks. The context for the analysis is the provisions of the IUE of the ENU educational program, which set out general professional and personality-oriented competencies, including the development of creativity, communication, empathy and the ability to reflexive thinking.

The level of formation of soft skills among students.

The assessment of the level of formation of flexible skills among students of the educational program 6B01801—"Social Pedagogy" was carried out according to five key parameters: critical thinking, sociability, teamwork, initiative and time management. These skills are recognized as the most important components of the professional training of a social educator in the context of modern socio-cultural dynamics and meet international and national requirements for teaching staff (OECD, 2018, 2021, 2022).

The assessment method was based on students' self-assessment on a Likert scale (from 1 to 5), where 1 meant an extremely low level of proficiency, and 5—a high level of education. The respondents assessed themselves on each parameter based on their personal experience of participating in educational, project and practical formats. The results were aggregated by course, which made it possible to identify the dynamics of soft skills development throughout the entire training period.

The data obtained demonstrate a steady positive trend in all the studied indicators. There is a particularly pronounced increase in skills such as teamwork, communication skills, and time management. This reflects the gradual strengthening of the practice-oriented orientation of the educational process, as well as an increase in the proportion of independent activity of students, especially in senior years. The summary data is presented in Table 2.

The analysis of the table allows us to draw a number of meaningful conclusions. Firstly, at all stages of training, the highest values are demonstrated by the indicators "Teamwork" and "Communication skills". Already in the 2nd year, these skills are rated above 3.5, and by the 4th year they reach the level of 4.5 and 4.3, respectively. This confirms that the educational program actively includes forms of joint project and practical activities, which

is especially important for the profession of a social educator focused on group interaction, empathy and partnership.

Table 2. Average indicators of soft skill development among students by course of study (scale 1–5).

Soft Skill	2nd Year	3rd Year	4th Year
Critical thinking	3.4	3.7	4.1
Communication	3.6	3.9	4.3
Teamwork	3.7	4.1	4.5
Initiative	3.3	3.6	4.0
Time management	3.5	3.8	4.2

Secondly, critical thinking and initiative are recorded in the initial courses at a below-average level (3.3–3.4), which indicates a relatively weak representation of tasks that stimulate analytical and independent activity in the early period of study. Nevertheless, in the 4th year there is a marked increase in these indicators (to 4.1 and 4.0, respectively), which is associated with the participation of students in teaching practice, graduation projects and interdisciplinary cases requiring reflection and decision-making.

The third important indicator, "Time management", also demonstrates a steady growth from 3.5 to 4.2. This skill is critically important in the profession of a social educator, given the need to distribute the workload, work with multiple cases and the need for rapid response. The growth can be explained both by external circumstances (increasing complexity of learning tasks) and the development of students' internal organizational culture, supported by the PBL format.

To visually represent the dynamics of soft skill development in the context of training courses, a generalized histogram was constructed based on the average values of students' self-assessments presented in Table 2. The data were aggregated for each of the five key skills (critical thinking, sociability, teamwork, initiative, time management) and grouped by course (2, 3, and 4), which made it possible to reflect not only absolute values, but also relative changes in the educational trajectory process.

This drawing is based on the questionnaire data of 78 students collected during the empirical stage of the study. Each respondent was asked to rate their degree of confidence and development in each of the soft skills on a scale from 1 to 5 (see Figure 1). The data obtained were processed using descriptive statistics using the SPSS Statistics package 27. The histogram serves as a visual confirmation of the analytical conclusions obtained during the analysis of Table 2 and allows you to trace the structural picture of skill growth as you progress students through the stages of professional training.

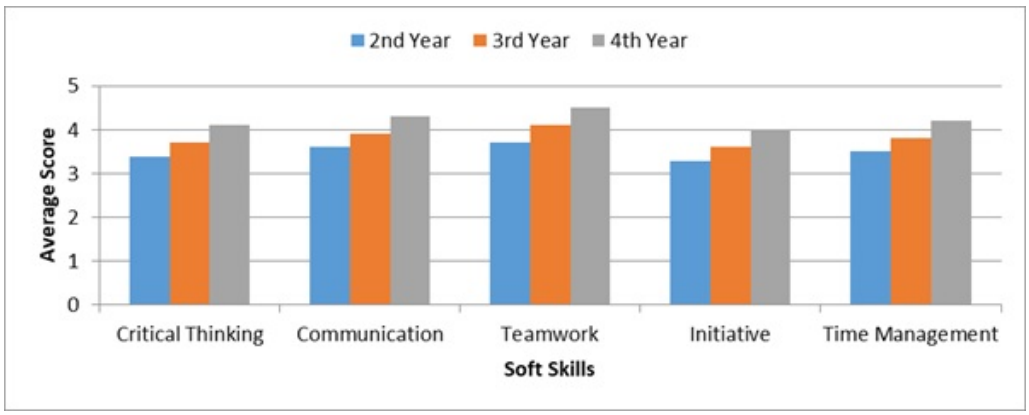

Figure 1. Distribution of the level of formation of key soft skills among students by course (self-assessment on a scale 1–5).

The histogram based on the data in Table 2 clearly demonstrates that all five studied skills show positive dynamics as they progress through the courses. The growth in the indicators of "Teamwork" and "Communication skills" is particularly pronounced, which is associated with the constant participation of students in group cases, training, teaching practices, and social projects.

"Critical Thinking" shows moderate but steady growth—from 3.4 to 4.1. This indicates a partial, but not yet systematic, introduction of problematic tasks into the learning process. It should be noted that only in the senior courses does this skill receive sustained support from the substantive and methodological components of the OP. As for "Initiative", its initial values (3.3) indicate the dominance of instructional and algorithmic forms of learning in junior courses. Nevertheless, by the 4th year, this indicator is leveled (4.0), which is explained by the increase in choice opportunities, the variability of project assignments and the availability of practices focused on independent activity. The "Time Management" skill shows a steady positive trend, reflecting students' adaptation to multifactorial and multitasking professional training. It is especially important that the growth of indicators is associated not only with an increase in academic and extracurricular workload, but also with an increase in students' personal responsibility, which is also confirmed by the data of focus groups.

Thus, the results obtained allow us to assert that the soft skills of students of the Social Pedagogy program at ENU are developing in a positive trend, however, unevenness remains in a number of aspects. In the early stages of education, students experience a deficit in the development of skills that require critical reflection and independence. This highlights the need not only to expand practice-oriented forms, but also to integrate a problem-oriented approach into the disciplines of the basic and intermediate levels, and not only at the stage of pre-graduate training. Visual and statistical data demonstrate that it is participation in PBL that contributes to the targeted and accelerated formation of key soft skills, which makes this approach an important tool for modernizing teacher education in Kazakhstan.

5. Discussion

The obtained results clearly show that the growth of key cross-professional competencies in students directly depends on the intensity of their participation in PBL scenarios. In the following part of the discussion, we relate these findings to classical studies (Barrows & Tamblyn, 1980; Hmelo-Silver, 2004; Wong & Zhang, 2022) and analyze how the local conditions of Kazakhstan affect the effectiveness of the problem-oriented approach.

5.1. The Impact of Problem-Based Learning on the Development of Soft Skills

The modern educational paradigm, focused on a competence-based approach, emphasizes the need to form not only subject knowledge, but also transversal skills (soft skills) that ensure successful professional adaptation, emotional stability and readiness for teamwork in conditions of uncertainty. This requirement is especially relevant for students of programs in the field of social pedagogy, whose activities in the future will involve solving complex interpersonal and social tasks that require flexibility of thinking, empathy, ability to communicate and self-organization.

According to the OECD (2021) study, flexible skills are becoming key indicators of a specialist's willingness to work in conditions of high social mobility, digitalization and the need for cross-cultural interaction. In educational contexts, especially in the framework of teacher training, the formation of these skills cannot be provided exclusively by traditional lecture and seminar formats. In this regard, more and more attention is being paid to problem-based learning (PBL), a method in which students face a real or simulated problem

situation that requires the integration of knowledge, communication, group strategy and reflection. The advantage of this approach is that it brings the educational process closer to professional practice, forming not only knowledge, but also stable behavioral and communication patterns.

Within the framework of this study, the task was set: to identify the nature and strength of the relationship between the degree of student involvement in PBL and the level of development of key soft skills. For this purpose, a cluster and correlation analysis was implemented based on a survey of 78 students of the Social Pedagogy Department of the L. N. Gumilyov Eurasian National University. The respondents were stratified into three levels according to the degree of participation in PBL:

- Low level (n = 10): irregular or occasional participation in cases and projects;
- Average level (n = 39): participation in PBL practices in selected disciplines;
- High level (n = 29): systematic participation in project activities, case studies, role-playing and research formats.

The stratification criteria included: the frequency of involvement in PBL scenarios, the type of tasks, the degree of independence in solving problem situations, and participation in team projects. Each group of students underwent a self-assessment of the level of soft skills formation on the Likert scale (from 1 to 5) in the following competencies: critical thinking, sociability, teamwork, initiative, time management. The results of comparing the average estimates for each cluster are shown in Figure 2.

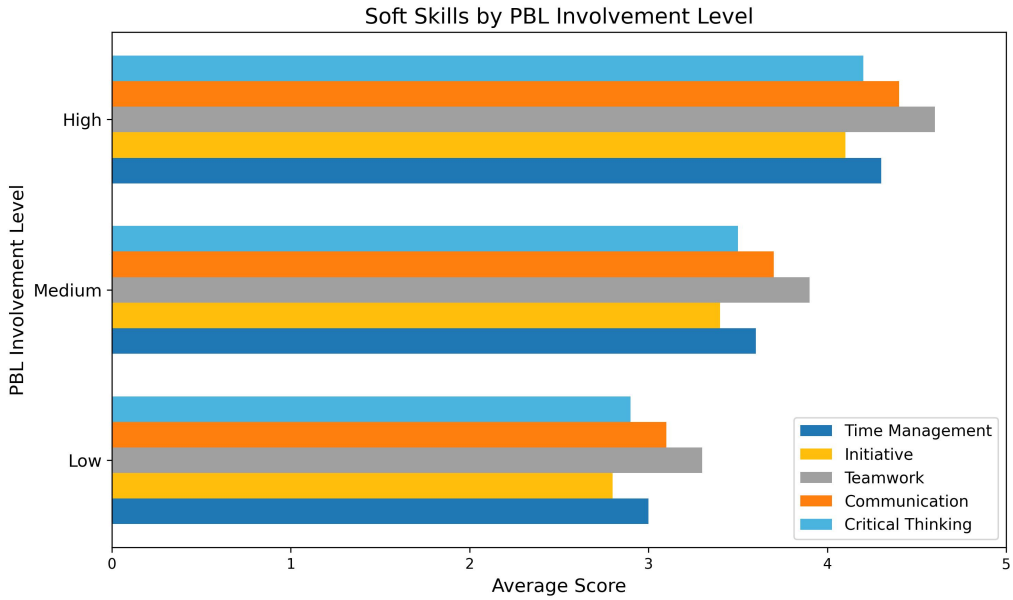

Figure 2. Relationship between the level of PBL involvement and the level of soft skill development (self-assessment, scale 1–5).

The data is based on the average values of students' self-assessment in five key skills, aggregated across three levels of involvement in problem-based learning. The analysis of the presented data shows a clear and systemic relationship: with an increase in the level of participation in PBL, there is a steady increase in indicators for all five skills. There was a particularly pronounced increase in the indicators of initiative, teamwork and critical thinking: from 2.8 to 4.1, from 3.3 to 4.6 and from 2.9 to 4.2, respectively. These data are consistent with the findings of (Teng et al., 2019), according to which teamwork, the search for innovative solutions and participation in multitasking projects develop skills of interpersonal interaction and reflexive attitude.

It is important to note that the differences between the clusters are not accidental: statistical processing of the results using Spearman rank correlation revealed a significant correlation between the intensity of participation in PBL and the level of soft skills formation ($p < 0.01$). This indicates a possible causal relationship between educational methodology and the development of flexible competencies, especially in the context of socio-humanitarian training. The effectiveness of PBL is also confirmed in the context of the Modular Curriculum (CBM) of the OP "Social Pedagogy". Courses that used problem-based learning formats (for example, "Psychological and pedagogical diagnostics", "Social work with risk groups", "Design and implementation of social programs") showed a higher degree of student engagement and skill development compared to traditional disciplines. Thus, PBL is not an optional tool, but a potentially system-forming methodology within teacher education.

To complement the quantitative analysis, a qualitative content analysis of open questionnaires and transcripts of focus groups was conducted. At this stage, students shared their personal observations about which specific formats of tasks and situations within the PBL influenced the development of their soft skills. The most representative statements that have been selected are shown in Table 3.

Table 3. Average indicators of soft skill development among students by course of study (scale 1–5).

Soft Skill	Student Quote
Critical thinking	"Solving a case on bullying in the course Social Work with Adolescents made me realize that stereotypical thinking is ineffective. We had to take into account the personal and cultural backgrounds of the participants."
Communication	"During the project defense in the course Psychological and Pedagogical Diagnostics, I realized that it's not enough just to speak—you need to be understood and persuasive. It changed the way I communicate."
Teamwork	"At first, dividing roles in the project group led to conflicts, but later we learned how to negotiate. PBL showed me that collaboration is not an abstract concept but a real skill."
Initiative	"When the teacher refused to give us a step-by-step plan and asked us to develop our own strategy to help a large family—I felt, for the first time, capable of thinking like a professional on my own."
Time management	"Preparing for a case presentation under tight deadlines taught me how to allocate resources. I started using a task tracker and planning each stage of the work in advance."
Reflection (metaskill)	"In the early years, I just completed assignments. In PBL situations, I started analyzing why I chose a particular approach. Reflection became part of my practice."
Skepticism/barrier (Contrasting view)	"Honestly, sometimes it's unclear what's expected of us in these cases. It often felt like there were no assessment criteria, which decreased my motivation. Perhaps PBL only works with clear guidance."

The analysis of student statements confirms not only the effectiveness of problem-based learning in the formation of individual soft skills, but also its complex impact on the personal and professional development of future social educators. Almost all respondents noted that it was within the framework of PBL scenarios that they first encountered the need to make decisions on their own, coordinate actions in a team, justify their own position and build an individual action strategy. An important achievement of PBL can be considered the formation of a student's reflexive position—the ability not only to complete a task, but also to analyze why it was performed the way it was, what approaches were chosen and what consequences they led to.

Of particular importance is that students realize the value of open educational tasks that allow for multiple solutions and require critical attention to ready-made templates. Such conditions, in their opinion, contribute to going beyond the performing role and

form the subjective position of the future specialist. At the same time, a number of statements demonstrate the limitations of PBL perception: lack of clear assessment criteria, weak methodological support from teachers, and uncertainty about the objectives of the assignment. These criticisms allow us to speak not only about the strengths of the methodology, but also about the objective difficulties of its implementation, which is subject to a separate analysis.

Thus, the generalized data of quantitative and qualitative analysis indicate that problem-oriented learning creates an environment for the development of transversal skills, personal responsibility and professional thinking. In the context of the increasing complexity of social and pedagogical reality, it is precisely such training formats that become the basis for the formation of an adaptive, reflective and professionally mature specialist. In this context, the PBL methodology can be considered not as an optional element, but as a strategic tool for transforming the educational process in the system of training social educators.

Identified barriers and limitations in the implementation of PBL.

Despite the proven effectiveness of problem-based learning (PBL) in the development of soft skills, the process of its introduction into the educational environment of social teacher training programs is accompanied by a number of systemic limitations. Their identification is a key stage of the analysis, which allows not only to identify practical difficulties, but also to identify the underlying institutional and methodological reasons for resistance to innovative approaches.

During the focus groups and the analysis of open questions of the survey of students of the ENU Social Pedagogy Department, more than 110 comments were recorded describing the problems and critical observations related to the implementation of PBL. The content analysis allowed us to identify five categories of difficulties, shown in Table 4.

Table 4. Classification of identified barriers to PBL implementation and their frequency of mention.

Type of Barrier	Specification	Frequency of Mention (%)
Structural and organizational	Overloaded modules, lack of time, focus on summative assessments	38%
Methodological and didactic	Insufficient instructor preparation, lack of evaluation criteria, unclear task objectives	31%
Content-related	Cases are abstract, unrelated to professional practice, lack local relevance	12%
Personal and motivational	Fear of making mistakes, group anxiety, lack of self-confidence	11%
Resource and technical	Lack of case banks, methodological materials, multimedia, limited ICT resources	8%

5.2. Structural and Organizational Barriers

This is the most frequently mentioned type of difficulty. Students report that with the current structure of the educational process, it is impossible to pay sufficient attention to project activities: the schedule is focused on intermediate certification, ongoing control and exams. Many disciplines are overloaded with theoretical material, and the practical part is perceived as optional. One of the students noted: "There is simply no time for PBL: everything is strictly according to plan, and if the task is not evaluated, no one spends effort on it." This confirms the well-known thesis from the research of Wijnia et al. (2015), that without institutional support and rethinking the logic of the course, PBL remains a marginal practice. There is also a limited number of disciplines in the Municipal Unitary Enterprise ENU with an emphasis on the project form: most often, PBL is introduced sporadically and does not affect the final assessment, which reduces its priority.

5.3. Methodological and Didactic Barriers

This block primarily concerns the unpreparedness of teachers for PBL formats. Students report that assignments are often submitted without clear goals, without structure, without expected results and evaluation criteria. As noted by Dochy et al. (2003), insufficient study of PBL didactics can lead to student frustration, especially in the absence of timely feedback. One of the reviews says: "There was a feeling that the teacher himself did not know how to evaluate: they did something, discussed something, and that was it." This requires not only professional development of teachers, but also the creation of uniform methodological standards for PBL support within the framework of the program.

5.4. Content Restrictions

A significant part of the cases, according to the students, does not relate to the real tasks of social pedagogy. They are abstract, not tied to real situations in schools, families, and the adolescent environment. This reduces engagement and creates a sense of artificiality. One comment states: "The case did not concern family, school, or working with risk groups—it was just about resolving conflict in a team. That's not our specialty." Modern research (Hmelo-Silver, 2004) emphasizes that cases must be relevant to the professional environment of the student, otherwise motivation to study at PBL drops sharply.

Personal and motivational barriers.

Some students, especially undergraduates, have difficulty actively participating in collective PBL scenarios. There is a fear of making mistakes, fear of a negative assessment from the group, and low confidence in their professional and communication capabilities. This is consistent with the research findings of Sangra et al. (2004), which point to the need for a psychologically safe environment in active learning contexts. Quote from one of the students: "Sometimes I was silent during the entire discussion. Not because I'm not interested, but because I was afraid to say something wrong." Such data indicate the importance of phased and supportive PBL implementation with a gradual increase in responsibility.

5.5. Resource and Technical Limitations

Some teachers and students point to the lack of a centralized case bank, lack of visual materials, multimedia support, and limited access to digital platforms through which intergroup PBL communication could be organized. This is especially critical for disciplines involving interdisciplinary analysis. Similar barriers are documented in international publications (Barrows, 1986; CEDEFOP, 2021), which emphasize that successful PBL requires a resource and logistical infrastructure, from access to cases to organizational support for interdepartmental interaction.

Thus, the identified barriers are not private, but systemic in nature, reflecting not only difficulties at the level of students' perception, but also a lack of institutional, personnel and methodological support for the implementation of PBL. Their analysis allows us to conclude that the introduction of a problem-oriented learning model requires the following:

- Rethinking the structure of disciplines;
- Adapting content to the real challenges of the profession;
- Support from methodologists and tutors;
- Creation of a bank of localized cases;
- Teacher training;
- Development of an assessment system.

Only with a comprehensive study of these areas is it possible to form a stable PBL model capable of effectively developing the soft skills of students in pedagogical fields.

The following section summarizes the findings of the study and provides practical recommendations for optimizing the educational environment.

6. Comparative Analysis with Existing Research

The data obtained in the framework of the study on the impact of problem-based learning (PBL) on the development of soft skills among students of the educational program "Social Pedagogy" of the Eurasian National University allow for a meaningful comparison with the results of previous scientific work implemented in an international and national context. Such a comparative analysis not only enhances the validity of the conclusions obtained but also makes it possible to actualize the problem of adapting foreign learning models to the specifics of Kazakhstan's higher education.

According to the results of a number of foreign studies (Hmelo-Silver, 2004; OECD, 2021), PBL is highly effective in developing key transversal competencies: critical thinking, teamwork, initiative, reflection and time management skills. For example, Barrows and Tamblyn (1980), a paper on the implementation of PBL in the training of social workers at the University of Toronto, indicates that students regularly involved in case analysis and project work demonstrated a steady increase in self-awareness, empathic listening, and the ability to make independent decisions in the face of uncertainty.

The data from our study are in direct correlation with the above results: the group of students with high involvement in PBL (n = 29) showed a significant excess in all five assessed skills compared to the group with low involvement. A particularly clear increase is observed in terms of initiative (+46%) and teamwork (+39%), which confirms UNESCO's theses on the importance of active forms of education in the humanities.

In the Kazakh context, the PBL problem has been studied relatively recently. According to the work of A. J. Abdykarimova, the introduction of PBL into domestic teaching programs is often formal in nature: teachers use case studies sporadically, and student assessment is based primarily on final tests. D. K. Karibaeva's research, conducted at KazNPU named after Abaya confirms that in the absence of methodological training and institutional support, PBL loses its formative potential and is perceived by students as a complicated form of an ordinary seminar.

A comparison of these conclusions with the results of this study shows that the effectiveness of PBL in Kazakhstan is largely determined by the level of systemic implementation: when the methodology is partially implemented, without adaptation to the modular structure and personnel support, it causes students anxiety, frustration and a feeling of unproductivity. On the contrary, in cases where PBL is integrated into the curriculum at the level of key disciplines (as in our study—"Social work with risk groups", "Psychological and pedagogical diagnostics"), soft skill growth and positive dynamics of self-esteem are recorded.

This specificity highlights the need to localize PBL to the educational realities of Kazakhstan's teaching programs. As A. M. Baymuratova rightly notes, an attempt to introduce Western methods without taking into account the specifics of the national system (academic workload, control, lack of tutors) leads to their distortion. As part of the training of social educators, it is important to take into account the mentality of students, the cultural context, the expectations of employers and the logistics of the educational process.

Thus, the comparative analysis shows that our conclusions not only correlate with the results of recognized international and national studies but also complement them in a specific Kazakh context. This makes the contribution of this study relevant both for local educational policies and for a broader discourse on the transformation of teacher education in the context of global challenges (see Table 5).

Table 5. Comparison of the key results of the current study and data from the literature (2018–2024).

Study/Source	Context	Key Findings	Comparison with Current Study
(Barrows & Tamblyn, 1980)	Social work training	Growth in critical thinking, autonomy, and empathy	Matches in skill development; similar PBL model
(OECD, 2021; UNESCO, 2021)	International reviews	PBL enhances initiative, team efficiency, and creativity	Confirmed across all five soft skills
(Akhmetova & Zhubanova, 2020)	General pedagogical programs	Formal implementation, lack of assessment criteria	Matches: students report unclear expectations
(Tursunova, 2022)	Kazakh university	Resistance from instructors, time constraints	Matches: structural barriers identified
Our research	Social pedagogy	Improvement in soft skills with high PBL involvement	Provides both quantitative and qualitative validation

A summary analysis of the data obtained allows us to draw a number of consolidated conclusions about the degree of influence of problem-based learning (PBL) on the development of key soft skills among students of social pedagogue training programs. The results of the survey, focus groups, and correlation analysis have convincingly demonstrated that systematic involvement in PBL models contributes to the steady growth of skills such as critical thinking, initiative, teamwork, sociability, and time management. The positive dynamics is especially pronounced with a high level of student participation in case assignments and project activities integrated into the learning process, rather than being an optional or episodic practice.

These data confirm the relevance of not only the PBL methodology itself, but also the need for its structural integration into the modular architecture of the educational program. First of all, it means

- Revision of the logic of designing training modules, where PBL formats take an independent position, rather than being added as an "option";
- The inclusion of PBL in coursework and interdisciplinary projects, which allows for the transfer of theoretical knowledge to a practical and reflective plane;
- The introduction of uniform evaluation criteria and feedback formats within the framework of PBL activities, which reduces students' anxiety and builds trust in the process.

Based on the results, we can offer specific recommendations for improving the implementation of PBL in the framework of the ENU Social Pedagogy Program:

1. Develop typical case task scenarios thematically correlated with the actual professional activities of social educators (working with at-risk adolescents, prevention of deviant behavior, inclusion, family support).
2. Include a block of PBL practices in coursework and pre-graduate projects, with mandatory interdisciplinary support (for example, at the intersection of pedagogy, psychology, and social work).
3. Create a module for teacher training for PBL, including seminars, supervisors, methodological guidance, a case bank and a tutor support system.
4. Regulate PBL as a form of ongoing and interim control in order to enhance its academic status and evaluative validity.

The results of this study also open up the prospect of scaling and adapting the PBL model for other educational programs of a pedagogical profile. In particular, the presented analytical approach can be applied in the framework of training primary school teachers,

social workers, and teachers of humanities disciplines. This is particularly important in the context of the introduction of a model of updated educational content in the Republic of Kazakhstan, focused on competence-based, meta-subject, and practice-oriented approaches.

Thus, the formulated conclusions not only reflect the success of PBL testing within the framework of one educational program but also set a vector for the development of an institutional strategy for the formation of soft skills in higher pedagogical education in Kazakhstan, based on the local context, international practices and the request of the professional environment.

7. Conclusions

The conducted research revealed significant links between the systematic application of problem-based learning (PBL) and the development of key soft skills among students of the educational program "Social Pedagogy" in a Kazakh university. In modern realities characterized by a high degree of social, digital, and professional instability, it is flexible skills such as critical thinking, initiative, teamwork, sociability, and time management that become basic indicators of future specialists' readiness to work in a multi-contextual social environment.

At the empirical level, it has been established that the level of formation of soft skills is directly dependent on the degree of students' involvement in PBL practice. Students who are regularly involved in case studies, project assignments, and group–facilitated discussions demonstrate higher self-esteem in all the parameters studied. At the same time, the most pronounced effect is observed in the development of initiative (+46%) and teamwork (+39%), which confirms the universality and productivity of the PBL methodology in humanitarian education. The identified barriers to implementation—structural, methodological, substantive, motivational, and resource—emphasize that effective PBL implementation is impossible without institutional support, teacher training, and adaptation of educational content to national and professional realities. At the same time, a critical mass of students are aware of the educational value of PBL, especially in terms of forming a reflective, responsible and independent professional position.

It is necessary to take into account a number of factors that can influence the interpretation of the obtained data. First of all, the empirical base of the work is formed on the materials of one educational program of a specific university, which objectively narrows the external validity of the conclusions. In addition, the diagnostics of soft skill development relied mainly on self-reporting tools, and such an approach increases the risk of subjective distortions. Finally, the duration of the experimental stage was limited to one academic semester, so the results do not allow us to judge the long-term impact of the PBL model on the professional dynamics of students.

A comparative analysis with international and Kazakhstan's studies allowed us not only to verify the obtained results, but also to identify a methodological and conceptual gap—the absence of a localized, culturally and professionally adapted PBL model for training social educators. In the context of Kazakhstan's education, where traditional forms of knowledge transfer and a formal approach to innovation still dominate, this study demonstrates the potential of PBL as a transformative tool for pedagogical education. The experience of testing a localized PBL model allows us to highlight three key findings. First of all, the institutional inclusion of problem-based learning in curricula and targeted training of facilitators significantly increase both student motivation and the overall quality of the educational process. In addition, the creation of a thematically relevant corpus of cases and methodological materials embedded in the context of social pedagogy ensured tangible practical significance of the classes. Finally, the use of objective assessment procedures—from peer review to tutor observations—already at the pilot implementation stage allowed

us to obtain more reliable data on the dynamics of soft skill development. We propose that further steps be associated with expanding the sample by including several universities, using mixed methods of competency diagnostics, and conducting a cross-university analysis. Such an approach will provide a larger and more representative empirical base for subsequent research.

This work adds a new dimension to the picture of PBL application outside of technical and medical disciplines, demonstrating its effectiveness in social pedagogy. For the first time, we have quantitatively shown how participation in problem-oriented scenarios contributes to the growth of key soft competencies in students and outlined the features of this process in the context of a Kazakhstan's university.

Based on the data obtained, specific steps for pedagogical faculties have been formulated: from developing a bank of local cases and regular training for facilitators to integrating PBL elements into the system of current and final assessment. This set of recommendations can be immediately included in the curricula to strengthen the applied focus of training social educators.

It is important to recognize that the findings are based on the experience of one educational program at one university, which limits the possibility of directly transferring the results to other institutions. In order to verify the universality of the patterns discovered, additional research is required involving students and teachers from different regions and universities.

Based on the results obtained, a transition is proposed from the fragmentary use of PBL to its institutionalization as a systemic strategy for developing soft skills. To this end, the following are necessary:

- Develop a localized case bank that thematically corresponds to the professional reality of a social educator (issues of bullying, school medicine, deviance, interethnic communication, etc.).
- Introduce specialized modules on facilitation, group assessment, and conducting reflective sessions into the curriculum.
- Prepare teachers for the role of tutors and facilitators, including the creation of professional development programs.
- Develop and implement valid soft skills diagnostic tools adapted to the cultural and professional context of Kazakhstan.
- Institutionalize the use of PBL as an element of the final assessment and the main didactic approach in a number of key disciplines.

Thus, problem-based learning can and should become not an optional method, but a strategic component of educational programs in the field of social pedagogy. It ensures the formation of students not only transversal competencies, but also personal subjectivity, the ability to reflect, professional mobility and ethically sound behavior in complex social contexts. Taking into account international trends and national challenges, the localized PBL model seems to be a necessary step towards modernizing humanitarian education and training new types of specialists—adaptive, responsible and socially mature.

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