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SOCIO-PEDAGOGICAL APPROACHES IN TRAINING FUTURE TEACHERS THROUGH PROBLEM-BASED LEARNING: THEORETICAL ANALYSIS AND PRACTICAL PROSPECTS

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Abstract
This article provides a theoretical analysis of socio-pedagogical approaches used in preparing future primary school teachers to apply problem-based learning (PBL) mechanisms in the subject of upbringing. The impact of PBL on students' socialization, development of professional-social competencies, interpersonal communication skills, and civic position is examined. Based on local and international scholarly sources and practical methodologies, a theoretical model and specific methods for enhancing the socio-pedagogical readiness of future teachers are proposed.

Keywords: Socio-pedagogical approaches, problem-based learning, future teachers, professional training, socialization, upbringing subject, PBL, case-study, reflection, collaborative learning.

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Introduction

BO'L AJAK O'QITUVCHILARNI MUAMMOLI TA'LIM VOSITASIDA TAYYORLASHDA IJTIMOIY-PEDAGOGIK YONDASHUVLAR: NAZARIY TAHLIL VA AMALIY ISTIQBOLLAR

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Annotatsiya:
Ushbu maqolada bo'lajak boshlang'ich ta'lim o'qituvchilarini tarbiya fanida muammoli ta'lim mexanizmlaridan foydalanishga tayyorlash jarayonida qo'llaniladigan ijtimoiy-pedagogik yondashuvlar nazariy jihatdan tahlil qilinadi. Muammoli ta'lim (PBL) texnologiyasining talabalarni ijtimoiylashuv jarayoniga, kasbiy-ijtimoiy kompetensiyalarini rivojlantirishga, shaxslararo munosabatlar ko'nikmalarini shakllantirishga va fuqarolik pozitsiyasini tarbiyalashga ta'siri ko'rib chiqiladi. Mahalliy va xalqaro ilmiy manbalar, shuningdek amaliy metodikalar asosida bo'lajak o'qituvchilarning ijtimoiy-pedagogik tayyorgarligini oshirishning nazariy modeli va aniq usullari taklif etiladi.

Kalit so'zlar: ijtimoiy-pedagogik yondashuvlar, muammoli ta'lim, bo'lajak o'qituvchilar, kasbiy tayyorgarlik, ijtimoiylashuv, tarbiya fani, PBL, keys-stadi, refleksiya, guruhli o'qitish.

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INTRODUCTION

One of the priority tasks of the modern education system is to prepare future teachers not only as providers of knowledge but also as mentors who support students' social development and guide them in adapting to society. As emphasized in UNESCO's Education 2030 framework, a contemporary teacher should possess competencies in critical thinking, problem analysis, and the development of social skills.

From the perspective of social pedagogy, the socialization of students is understood as the process through which they acquire social norms, values, and a culture of interpersonal relations within the educational environment. According to A.V. Mudrik (2011), socialization occurs not only under the influence of external social factors but also through the process of active self-development. In this regard, Problem-Based Learning (PBL) has been widely recognized in international educational practice as an effective pedagogical approach that integrates both of these dimensions.

The concept of socio-pedagogical preparedness of future teachers encompasses three interrelated components: cognitive (knowledge), operational (skills), and motivational-value (attitudes). These components are closely interconnected, and comprehensive professional preparation can be achieved only when they complement and reinforce one another. The methodology of problem-based learning provides a unique opportunity for the simultaneous development of all three components.

The purpose of this article is to provide a theoretical analysis of socio-pedagogical approaches used in preparing future primary school teachers to apply problem-based learning mechanisms in the teaching of the subject Education (Tarbiya), as well as to identify relevant methodologies and outline practical prospects for their implementation.

LITERATURE REVIEW

The issue of socio-pedagogical approaches has been interpreted in various ways in both national and international pedagogical research. M.I. Makhmutov (1975) defined problem-based learning as an integrated didactic system that transforms learners from passive recipients of information into active and creative participants in the learning process. According to his concept, a problem situation emerges when a learner experiences a genuine cognitive need and encounters a creative contradiction between existing knowledge and a new task. Makhmutov distinguished four types of problem-based methods: problem presentation, partial-search method, heuristic conversation, and research method.

N.N. Azizkhodjayeva (2006) highlighted the possibilities of integrating problem-based learning with national pedagogical traditions and classified learning motives into two groups: professional-social motives and cognitive-interest motives. O'.Q. Tolipov (2019) investigated the decisive role of teachers' methodological competence in fostering student motivation and developed a system of practical tasks aimed at forming professional identity among future teachers.

H.S. Barrows and R.M. Tamblyn (1980), recognized as the founders of the scientific foundations of Problem-Based Learning (PBL), initially applied this approach in medical education and later extended it to other fields. Barrows identified seven key characteristics of PBL: student-centered learning, the teacher's role as a facilitator, the use of real-life problems, compulsory group work, open discussion, self-assessment, and reflection.

C.E. Hmelo-Silver (2004) identified five major outcomes of PBL: a flexible knowledge base, problem-solving skills, self-directed learning abilities, effective collaboration, and intrinsic motivation for learning. All of these outcomes are highly significant for future teachers from both professional and social perspectives.

According to Ryan and Deci's (2000) Self-Determination Theory (SDT), intrinsic motivation develops when the needs for autonomy, competence, and relatedness are satisfied. The PBL methodology effectively addresses these three needs simultaneously. Furthermore, L.S. Vygotsky's (1978) concept of the "Zone of Proximal Development" provides a strong theoretical foundation for PBL, as engaging learners in challenging yet solvable problems enables them to progress beyond their current level of development.

From the perspective of social pedagogy, A.V. Mudrik (2011) emphasized additional benefits of problem-based learning, arguing that group-based PBL contributes to the formation of students both as knowledgeable individuals and as social actors. Therefore, PBL should be viewed not only as a didactic technology but also as an important tool of socio-pedagogical development and education.

In a comprehensive review encompassing more than 300 studies, B. Condliffe and colleagues (2016) found that well-designed PBL directly contributes to the development of interpersonal and intrapersonal competencies. Similarly, the meta-analysis conducted by J. Strobel and A. van Barneveld (2009) demonstrated that PBL is particularly effective in professional and vocational education settings.

RESEARCH METHODOLOGY

This article is theoretical and analytical in nature and focuses on examining the intersections between socio-pedagogical approaches and problem-based learning. The methodological foundation of the study is based on a systems approach, comparative analysis, content analysis of scientific literature, and the theoretical methods of pedagogical modeling.

The following methodological principles are considered essential for the implementation of problem-based learning in the preparation of future teachers:

The Principle of Contextualization. Problem situations should be derived from authentic school environments in Uzbekistan and should be closely related to the subject of Education (Tarbiya). For example, a problem such as "A seventh-grade student has become excessively dependent on a mobile phone. As a teacher, how would you address this situation?" is relevant, realistic, and understandable for students.

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The Principle of Social Interaction. Every problem-based task should be solved collaboratively within a group. It is recommended that group membership be changed regularly, for instance on a weekly basis, to enable students to develop the ability to work effectively with peers who possess different personalities, perspectives, and problem-solving styles.

The Principle of Reflection. A reflection stage should be conducted after each PBL session. Students are encouraged not only to evaluate how the problem was solved but also to reflect on their own behavior and contribution to the group process by considering questions such as "How did I perform during the activity?" and "What contribution did I make to the group?"

The Principle of Progressive Complexity. Problem situations should be structured according to a gradual increase in complexity, moving from simple to more challenging tasks. The learning process should begin with individual activities, followed by pair work, then small-group collaboration (three to four students), and finally larger group work involving five to six students.

Quyidagi jadvalda muammoli ta'limning ijtimoiy-pedagogik funksiyalari va ularning bo'lajak o'qituvchilar tayyorlashdagi ahamiyati ko'rsatilgan:

Table 1. Socio-pedagogical functions of problem-based learning

Socio-pedagogical function	**Implementation in PBL**	**Importance for a future teacher**
Socialization	Solving group problems together, with changing group composition each time	Experience in working with students of different characters and thinking styles
Communicative development	Discussion, debate, exchange of ideas, and reaching consensus	Skills for effective communication with students, parents, and colleagues
Professional identification	Modeling real pedagogical situations as case studies	Conscious acceptance of the teacher's role and responsibilities
Critical thinking	Analyzing open-ended problems from multiple perspectives	Creative approach to complex educational situations
Social responsibility	Personal accountability for group results	Responsibility for student development and civic stance
Empathy and tolerance	Listening to different opinions, accepting them, and finding compromises	Understanding and accepting each individual student
Self-management	Planning time and delegating tasks	Ability to manage and organize the classroom community

ANALYSIS AND RESULTS: KEY METHODOLOGICAL APPROACHES

The theoretical analysis indicates that several specific methodologies can be employed to develop the socio-pedagogical preparedness of future teachers through problem-based learning. Each of these methodologies possesses distinct pedagogical potential and contributes to the formation of both professional and social competencies.

1. Case Study Methodology.

The socio-pedagogical value of the case study approach lies in its ability to engage students in the analysis of complex educational situations drawn from real school environments. For example, cases involving disruptive classroom behavior or conflicts among students require learners to: (a) analyze the situation, (b) identify the root causes of the problem, (c) propose alternative solutions, and (d) justify the most appropriate course of action. Such activities foster not only professional knowledge and problem-solving abilities but also empathy, communication skills, and the capacity for constructive compromise.

2. Role-Play Methodology.

In role-play activities, students assume different roles within a problematic pedagogicalsituation, such as teacher, student, parent, or class supervisor. During a semester, each student is encouraged to experience several different roles. This methodology is particularly effective for professional socialization, as it enables students to think, communicate, and make decisions from the perspective of a practicing teacher even before entering the profession. The difference between experienced educators and novice teachers often lies in the extent to which they have internalized and mastered such professional roles.

3. Problem-Based Project Methodology.

Students work collaboratively to design educational projects addressing authentic school-related issues. Examples include developing a program on internet safety for fifth-grade students or preparing a teacher's guide for preventing bullying in schools. Through this methodology, students function simultaneously as specialists who identify social problems and as educators who design pedagogical solutions. Public presentation and defense of projects further enhance public speaking skills, confidence, and the ability to justify professional decisions.

4. Socratic Seminar Methodology.

Within this approach, the teacher facilitates open discussions with students as intellectual partners rather than as traditional instructor and learner. Topics such as "What constitutes good education?" or "Is student punishment pedagogically justified?" encourage participants to exchange viewpoints without labeling responses as strictly right or wrong. This methodology develops the ability to defend personal opinions, listen to alternative perspectives, engage in critical evaluation, and participate in respectful dialogue—competencies that are essential for contemporary teachers.

5. Cooperative Learning Methodology.

Among cooperative learning strategies, the Jigsaw technique is particularly effective for promoting socialization. Each group member independently studies a specific aspect of a topic and subsequently teaches it to peers. This process allows students to experience the roles of both learner and instructor simultaneously. The ability to explain acquired knowledge to others

strengthens professional identity, enhances self-confidence, and improves communication skills.

6. Reflective Journal Methodology.

Following each PBL session, students are encouraged to write brief reflective journal entries addressing questions such as: "What new knowledge did I acquire today?", "How did I feel while working in the group?", and "How would I respond if I encountered a similar professional situation in practice?" Although often overlooked, this methodology plays a crucial role in professional development. According to Schön's (1983) concept of the reflective practitioner, professional growth is fundamentally linked to an individual's capacity for reflection. For future teachers, reflective journaling helps cultivate the habit of self-observation, critical self-analysis, and continuous professional improvement from an early stage of their careers.

The second table below presents the stages of implementing these methodologies within the educational process, along with the recommended time allocations for each stage.

Table 2. Stages of application of socio-pedagogical methods

Method	Educational stage (Year of study)	Time norm	Socio-pedagogical outcome
Case study	1st–2nd year	1 case per week (45–60 minutes)	Skills of empathy and reaching a compromise
Role-playing	1st–3rd year	1–2 times per month (90 minutes)	Professional identification, understanding of roles
Problem-based project	2nd–3rd year	1 per semester (3–4 weeks)	Social responsibility, cooperation
Socratic dialogue	2nd–4th year	Once every 2 weeks	Critical thinking, defending one's own opinion
Cooperative learning	1st–4th year	15–20 minutes each lesson	Teamwork, peer teaching
Reflective journal	1st–4th year	10 minutes after each lesson	Self-awareness, reflection skills

It can be argued that the following conditions are essential for the effective implementation of problem-based learning methodologies:

- **Problem situations should be adapted to the subject of Education (Tarbiya) and the socio-cultural context of Uzbekistan.** Examples drawn from local school environments are more relevant and meaningful for students, enabling them to relate theoretical knowledge to real-life situations.
- **Group tasks should encourage students to experience different social roles.** Rotating roles such as leader, executor, critic, moderator, and observer allows students to develop diverse interpersonal and professional competencies while gaining experience in collaborative decision-making.
- **The teacher should act as a facilitator of learning and social interaction.** Rather than providing direct solutions, the teacher guides students through questioning, encourages critical thinking, and supports productive interaction among group members.

• **Reflection should be a compulsory component of every lesson.** In many cases, the reflective stage generates pedagogical outcomes that are as valuable as, or even more valuable than, the acquisition of subject knowledge itself, as it promotes self-awareness and professional growth.

• **Assessment criteria should extend beyond the correctness of solutions.** Evaluation should also consider the quality of collaboration, active listening skills, the ability to express ideas clearly, and the overall effectiveness of group participation.

Longitudinal studies conducted by Dolmans and Schmidt (1994; 2006) at Maastricht University demonstrated that students who completed Problem-Based Learning (PBL) programs exhibited significant advantages over students in traditional educational settings with regard to problem-solving abilities and self-directed learning skills. In particular, PBL participants achieved results that were approximately 25–30% higher in their ability to transfer acquired knowledge to new and unfamiliar situations. These findings suggest promising prospects for the preparation of future teachers through the implementation of problem-based learning methodologies.

CONCLUSION

The theoretical analysis conducted in this study demonstrates that Problem-Based Learning (PBL) possesses significant socio-pedagogical potential in the preparation of future teachers. PBL functions not only as a didactic tool for developing knowledge and skills but also as an important mechanism for fostering students' socialization, professional identity formation, and sense of social responsibility.

Methodologies such as case studies, role-play activities, problem-based projects, Socratic seminars, cooperative learning, and reflective journals contribute to the comprehensive development of future teachers' socio-pedagogical preparedness when implemented as an integrated and complementary system. These methodologies represent the practical application of the theoretical foundations proposed by Makhmutov (1975), Barrows and Tamblyn (1980), Hmelo-Silver (2004), Ryan and Deci (2000), and Vygotsky (1978).

Based on the synthesis of national pedagogical traditions represented by Makhmutov, Azizkhodjayeva, and Tolipov, together with internationally recognized theoretical and empirical approaches, it is necessary to develop a socio-pedagogical model for preparing future primary school teachers to utilize problem-based learning mechanisms in the teaching of the subject Education (Tarbiya). Furthermore, this model should be validated through empirical research and practical implementation.

Practical Recommendations

– A comprehensive bank of problem situations based on the six methodologies described above should be developed for the Education (Tarbiya) curriculum and regularly updated to reflect contemporary educational challenges.

– Assessment of group-based tasks should include social competencies such as collaboration, active listening, and effective communication as separate evaluation criteria, accounting for at least 30 percent of the overall grade.

– Teachers should participate in specialized preparatory training at the beginning of each semester to develop the skills necessary to perform the role of facilitator effectively within problem-based learning environments.

– The practice of reflective journal writing should be introduced from the first year of teacher education programs and recognized as a component of student assessment and certification procedures.

– Future empirical studies should employ standardized diagnostic instruments, including social competence scales and structured observation protocols, to measure the level of students' socialization and socio-pedagogical development more accurately.

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