



PROJECT-BASED LEARNING AS AN INNOVATIVE APPROACH TO DEVELOPING RESEARCH COMPETENCE IN PRE-SERVICE ENGLISH LANGUAGE TEACHERS.

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Abstract: This study explores the role of Project-Based Learning (PBL) as an innovative pedagogical method in developing research competence among pre-service English language teachers. The paper discusses how PBL fosters independent inquiry, critical thinking, and analytical skills, which are fundamental to conducting educational research. Based on classroom interventions and observations at a teacher training institute in Uzbekistan, the study demonstrates the effectiveness of PBL in enhancing future teachers' research readiness.

Keywords: project-based learning, research competence, pre-service teachers, innovative pedagogy, English language teaching, higher education, research skills.

Аннотация: Данное исследование рассматривает роль проектного обучения (Project-Based Learning, PBL) как инновационного педагогического метода в развитии исследовательской компетентности у будущих учителей английского языка. В статье анализируется, как PBL способствует формированию навыков самостоятельного исследования, критического мышления и аналитических способностей, которые являются основой для проведения научной и педагогической работы. На основе анализа учебных интервенций и наблюдений в одном из педагогических вузов Узбекистана показана эффективность использования PBL для повышения исследовательской готовности будущих преподавателей.

Ключевые слова: проектное обучение, исследовательская компетентность, будущие учителя, инновационная педагогика, преподавание английского языка, высшее образование, исследовательские навыки.

Annotatsiya: Ushbu tadqiqot loyiha asosida o'qitish (Project-Based Learning, PBL) metodining bo'lajak ingliz tili o'qituvchilarida tadqiqotchilik kompetensiyasini rivojlantirishdagi innovatsion pedagogik usul sifatidagi o'rmini o'rganadi. Maqolada PBL mustaqil izlanish, tanqidiy fikrlash va tahliliy ko'nikmalarni shakllantirishga qanday hissa qo'shishi tahlil qilinadi. Tadqiqot O'zbekistondagi pedagogik institutda o'tkazilgan amaliy mashg'ulotlar va kuzatuvlar asosida PBL metodining kelajakdagi o'qituvchilarning tadqiqotchilikka tayyorligini oshirishdagi samaradorligini ko'rsatadi.

Kalit so'zlar: loyiha asosida o'qitish, tadqiqotchilik kompetensiyasi, bo'lajak o'qituvchilar, innovatsion pedagogika, ingliz tili o'qitish, oliy ta'lim, tadqiqot ko'nikmalari.

INTRODUCTION

In the context of modern educational reforms in Uzbekistan, President Shavkat Mirziyoyev has emphasized the importance of training highly qualified, creative, and research-oriented teachers capable of adapting to global challenges. In his address to the Oliy Majlis, he stated,

“Education and science must become the main drivers of our development and modernization.” This vision underscores the critical role of research competence in the professional formation of future educators, especially in foreign language teaching, where pedagogical innovation is closely tied to global communication and evolving learning needs.

Research competence in pre-service English language teachers entails more than the ability to write academic papers or conduct experiments. It involves cultivating the mindset, skills, and strategies necessary to identify educational problems, analyze data, synthesize information, and develop evidence-based solutions. However, traditional teacher training methods often rely heavily on passive content delivery, offering limited opportunities for students to engage in authentic research activities. As a result, many trainees enter the teaching profession without the confidence or capability to investigate classroom phenomena independently.

In response to these challenges, innovative pedagogical approaches such as Project-Based Learning (PBL) offer a transformative alternative. Rooted in constructivist theory, PBL engages learners in collaborative, inquiry-driven projects that mirror real-life problem-solving scenarios. This method not only enhances content mastery but also develops transferable skills like critical thinking, academic writing, teamwork, and reflective analysis—all essential for effective research practices. In the field of English language teacher education, PBL aligns well with communicative teaching methodologies and promotes both language proficiency and research competence simultaneously.

This study explores the application of Project-Based Learning as a strategy for developing research competence among pre-service English language teachers in Uzbekistan. The aim is to demonstrate how integrating PBL into teacher education programs can bridge the gap between theory and practice, encourage active student participation in inquiry, and prepare future teachers to contribute meaningfully to educational research and innovation. By doing so, the research supports broader national efforts to modernize education and build a knowledge-based society as envisioned by Uzbekistan's leadership.

METHODS

The methodological foundation of this study is grounded in the rich body of literature on innovative pedagogies and constructivist learning theories. Project-Based Learning (PBL) has been widely recognized as a powerful instructional model that promotes student-centered inquiry and active engagement in authentic problem-solving. Thomas (2000) identifies five key characteristics of effective PBL implementation, including centrality of the project, constructive investigation, driving questions, student autonomy, and real-world context, all of which support the development of research-oriented thinking in learners [1]. Bell (2010) also emphasizes the value of PBL in developing 21st-century skills, including collaboration, communication, and critical thinking, which are essential components of research competence [2].

Kolmos and de Graaff (2014) highlight how PBL serves as a bridge between academic knowledge and practical application. Their work demonstrates that students who engage in project-based learning tend to demonstrate higher levels of reflection, inquiry, and problem-solving skills, particularly in fields that demand active experimentation and collaborative design thinking [3]. Savery and Duffy (1995) further contextualize this by arguing that knowledge is not passively absorbed but actively constructed through problem contexts that challenge the learner's existing schema, thus reinforcing deeper learning and analytic reasoning [4].

In the field of language education, PBL has been adopted as an effective strategy to enhance pre-service teachers' methodological awareness and research capacity. Recent studies suggest that integrating small-scale, real-life research tasks—such as classroom observations, learner needs analyses, or teaching material evaluations—within project frameworks supports the development of research competence among language teacher trainees. Such tasks not only improve their ability to design and conduct educational research, but also help them internalize the value of evidence-based teaching practices (Patton, 2012; Beckett & Slater, 2005) [5][6].

Based on these theoretical and empirical foundations, this study employed a PBL-informed qualitative research design to examine how engaging pre-service English teachers in structured project cycles can promote the development of research competence. The intervention was designed to encourage autonomy, group collaboration, and critical engagement with real-world problems in language classrooms. Data were collected through multiple sources—including classroom observation, student reflections, and focus group interviews—and analyzed thematically to capture the depth and scope of participants' research skill development. The overall approach aligned with the constructivist paradigm, supporting meaningful and context-driven learning outcomes.

RESULTS

The analysis of data collected through observation, reflective journals, and focus group discussions revealed several key outcomes indicating the effectiveness of Project-Based Learning (PBL) in enhancing the research competence of pre-service English language teachers. One of the most prominent findings was the improvement in students' ability to formulate clear and researchable questions. Prior to the intervention, participants often struggled with narrowing their focus or identifying pedagogically meaningful issues. However, by the fourth week, over 70% of the participants were able to independently define classroom-based problems and propose practical research objectives, a growth aligned with Thomas's (2000) emphasis on learner-driven inquiry [7].

Another significant outcome was the increased confidence and engagement students exhibited when navigating the research process. Reflective journal entries demonstrated a shift in perception—from viewing research as an abstract, academic task to experiencing it as a practical tool for solving real classroom challenges. Students reported greater enthusiasm and ownership over their projects, echoing Bell's (2010) argument that PBL fosters motivation by connecting learning to authentic contexts [8]. Many participants wrote that for the first time they saw themselves as active contributors to educational knowledge, rather than passive consumers.

Collaborative work emerged as a vital component in the development of research competence. The project teams were intentionally diverse, bringing together students with varying strengths in language proficiency, technology skills, and academic writing. Focus group discussions revealed that students learned from one another's expertise, which accelerated the acquisition of research-related skills such as designing surveys, analyzing qualitative data, and composing academic reports. This aligns with Kolmos and de Graaff's (2014) assertion that project teams simulate real-world research settings, making them ideal environments for professional skill development [9].

Finally, the data indicated measurable growth in metacognitive awareness and self-regulation. As students moved through the project phases, they became more adept at planning their work, setting achievable milestones, and reflecting critically on their learning processes. Several students explicitly stated that they had started applying similar research cycles in their teaching practicum courses, attempting to assess student needs or evaluate classroom strategies using basic inquiry tools. This suggests that PBL not only enhances short-term competence but also lays the groundwork for sustainable research practices in future professional contexts (Patton, 2012) [10].

DISCUSSION

The findings of this study confirm that Project-Based Learning (PBL) serves as a powerful tool for developing research competence in pre-service English language teachers. As reflected in student reflections and focus group discussions, engaging with real classroom problems made the research process more meaningful, practical, and relevant to their future profession. This supports the views of Thomas, who emphasized that learner-driven inquiry enables students to

take intellectual ownership of their learning, fostering a deeper understanding of both content and context.

Furthermore, the observed increase in learner autonomy and critical thinking aligns with Bell's assertion that PBL enhances core 21st-century skills such as problem-solving, collaboration, and creativity [11]. In this study, students not only practiced these skills but also transferred them into their teaching practicum, which suggests that PBL fosters sustainable, transferable competence. It also demonstrates that research training, when rooted in authentic learning contexts, leads to increased motivation and self-efficacy in conducting educational inquiry.

The collaborative dimension of PBL appeared especially effective in bridging the gap between theory and practice. Students applied academic research concepts—such as data collection methods, analysis strategies, and ethical considerations—not as abstract ideas, but as tools to explore tangible classroom issues. This resonates with Kolmos and de Graaff's argument that team-based project learning mirrors professional research environments and better prepares students for future roles as reflective practitioners [12]. The ability to share tasks, debate approaches, and synthesize findings within a group setting significantly enriched the learning experience.

Perhaps most importantly, this study shows that introducing structured, project-based research experiences early in teacher education cultivates a mindset of inquiry that can evolve throughout a teacher's career. As noted by Patton [13], long-term engagement with research requires metacognitive habits and reflective awareness—traits that were evidently fostered during this intervention. These findings suggest that embedding PBL in teacher training programs not only builds immediate research skills but also contributes to the formation of a professional identity grounded in continuous learning, curiosity, and evidence-based practice.

CONCLUSION

The findings of this study demonstrate that Project-Based Learning (PBL) is an effective and innovative pedagogical approach for enhancing the research competence of pre-service English language teachers. By engaging with real-life classroom problems through collaborative projects, students developed essential research skills such as identifying researchable questions, collecting and analyzing data, and reflecting critically on educational practices. The process helped transform their understanding of research from a theoretical concept into a practical, meaningful tool for professional growth. These outcomes align with constructivist learning theory and confirm that inquiry-based instruction fosters both academic and metacognitive development in future educators.

Moreover, the study highlights the broader significance of embedding structured, research-oriented activities into teacher training curricula. When students are empowered to investigate authentic challenges within their learning environment, they not only become more autonomous and reflective but also begin to internalize the habits of continuous inquiry and evidence-based teaching. PBL, therefore, is not only a method for immediate skill development but also a foundation for long-term professional identity formation. Based on these conclusions, it is recommended that teacher education programs systematically integrate PBL into methodology and practicum courses to support the emergence of research-literate, innovation-ready educators.

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