



DESIGN APPROACH IN THE EDUCATIONAL PROCESS OF TRAINING FUTURE PRESCHOOL EDUCATORS

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Abstract

This article examines the pedagogical potential of implementing a design approach in the educational process of training future preschool educators. The study investigates the development of students' design competence through interdisciplinary integration, interactive teaching methods, innovative technologies, and project-based learning activities. The findings indicate that an educational process organized based on a design approach significantly contributes to the development of creative thinking, practical skills, and professional competence among future preschool educators. The study also highlights the importance of integrating pedagogical, psychological, and methodological knowledge in fostering a comprehensive professional outlook and improving educational outcomes.

Keywords: design competence, instructional design, interactive methods, innovative technologies, interdisciplinary integration, future preschool educator, project-based learning.

Introduction

In the modern system of pedagogical education, the use of innovative approaches in preparing future preschool educators for professional activity has become increasingly important. In particular, an educational process organized on the basis of a design approach contributes not only to the acquisition of theoretical knowledge but also to the development of creative thinking, aesthetic awareness, and practical competencies [1].

Today, the necessity of organizing pedagogical activities effectively through interdisciplinary integration, digital technologies, and interactive teaching methods is growing rapidly. Therefore, the development of design competence among future preschool educators is regarded as an actual pedagogical issue.

The integrated teaching of specialized disciplines plays an important didactic role in the preparation of future preschool educators. Interdisciplinary integration combines pedagogy, psychology, methodology, practical training, and innovative technologies into a unified system, thereby facilitating the formation of comprehensive professional competencies.

Through this approach, students not only acquire knowledge from individual disciplines but also learn how to apply this knowledge in real pedagogical situations. For example, theoretical concepts studied in pedagogy are enriched by psychological knowledge concerning child development, while methodology provides mechanisms for implementing this knowledge in educational practice [2]. As a result, students develop systems thinking, the ability to analyze problematic situations, and competence in generating creative solutions.

Interdisciplinary integration also plays a significant role in the development of design competence. The process of designing an educational environment requires the harmonious

application of knowledge and skills from multiple disciplines, including aesthetic principles, pedagogical objectives, and psychological approaches.

Research methodology

The study employed pedagogical observation, comparative analysis, SWOT analysis, an interdisciplinary integration approach, and theoretical generalization methods. Factors influencing the development of design competence in future preschool educators were examined through interactive teaching methods, innovative technologies, and project-based learning activities.

The research analyzed the possibilities of designing the educational process through the integration of pedagogy, psychology, and methodology [3]. Within the educational process, the design approach involves careful planning, systematic organization of each stage of instruction, and accurate forecasting of expected outcomes. In this context, education is viewed not merely as a process of knowledge transmission but as a creative activity.

The design approach encourages collaboration between teachers and students in creating an effective educational environment. Educational objectives, teaching methods, instructional tools, and assessment criteria are planned in advance [4]. This approach is particularly important for future preschool educators, as it enables them to learn how to organize a developmentally appropriate and aesthetically rich environment for children.

Furthermore, the design approach requires the use of interactive methods, project-based learning, problem-solving activities, and information and communication technologies (ICT). These elements contribute to the development of students' independent thinking, creativity, and innovative potential. Consequently, the future educator is formed not only as a provider of knowledge but also as a designer and creator of the educational process.

Swot Analysis Of The Role Of Specialized Disciplines In Training Future Preschool Educators

Strengths

- Specialized disciplines contribute to the development of professional knowledge and skills required for preschool educators.
- The integration of pedagogy, psychology, and teaching methodology facilitates the formation of comprehensive professional competence.
- Theoretical knowledge is effectively connected with practical activities.
- Students develop pedagogical thinking and professional responsibility.
- Opportunities exist for implementing innovative approaches within the educational process.

Weaknesses

- Gaps may occur between theoretical knowledge and practical application.
- Practical training sessions are not always organized at a sufficient level.
- Students may demonstrate low motivation during the initial stages of study.
- Some instructors make limited use of innovative teaching methods.
- Educational materials do not always fully correspond to contemporary design requirements.

Opportunities

- Extensive use of modern interactive and digital technologies.
- Development of practical skills through project-based learning.

- Creation of a creative educational environment for fostering design competence.
- Strengthening interdisciplinary integration.
- Adoption of advanced international educational experiences.

Threats

- Excessive theoretical orientation of educational programs.
- Shortage of competitive and highly qualified pedagogical personnel.
- Insufficient technical and methodological resources.
- Risk of inadequate development of students' individual abilities.
- Slow implementation of innovative technologies.

Results

The findings of the study demonstrate that an educational process organized on the basis of a design approach effectively contributes to the development of the professional competence of future preschool educators. The use of interactive teaching methods transforms students from passive recipients of information into active participants in the learning process, thereby enhancing their independent thinking and creative potential.

In particular, methods such as brainstorming, clustering, case-study, and FSMU proved to be effective tools for developing design competence. These methods encouraged students to express ideas freely, analyze educational situations, and generate innovative solutions.

Innovative technologies, including multimedia tools, graphic design software, and virtual learning environments, played a significant role in enhancing students' aesthetic thinking and technological literacy. Such technologies expanded opportunities for designing educational activities in accordance with contemporary educational requirements.

Practical training and project-based activities contributed to the development of students' abilities to:

- create didactic materials;
- design developmental learning environments;
- develop creative solutions to pedagogical problems;
- work effectively in teams.

As a result, the following components of design competence were significantly strengthened:

- theoretical knowledge;
- practical skills;
- motivational readiness;
- creative thinking;
- innovative orientation.

Practical training occupies a central position in the development of design competence because theoretical knowledge is reinforced through practical application. During practical sessions, students perform tasks related to the aesthetic organization of educational environments, the creation of didactic materials, the design of visual teaching aids, and the development of educational play environments for children.

Project-based activities further enhance students' abilities for independent inquiry, creative problem-solving, and collaborative work. Through project implementation, students gain experience in addressing real pedagogical challenges, generating innovative ideas for

educational environment design, and testing these ideas in practice. This process promotes responsibility, initiative, and professional competence among future educators.

The combination of interactive teaching methods, innovative technologies, and project-based learning therefore provides comprehensive support for the development of design competence in future preschool educators.

Discussion

The analysis indicates that the design approach represents an important factor in improving the quality of pedagogical education. This approach enables educators to plan educational activities systematically, define objectives and expected outcomes clearly, and organize learning environments that are both aesthetically appealing and functionally effective.

Interdisciplinary integration serves as an effective means of connecting theoretical knowledge with practical application. Through the interaction of pedagogy, psychology, and teaching methodology, students learn to analyze authentic pedagogical situations and develop creative solutions to educational challenges.

Furthermore, the combined use of interactive teaching methods and innovative technologies enhances educational effectiveness and supports the formation of future educators as modern pedagogical professionals. The findings suggest that interdisciplinary integration significantly contributes to students' ability to connect theory with practice, analyze pedagogical situations, and generate innovative solutions.

The enrichment of specialized disciplines through the design approach also promotes competencies related to educational environment design, the development of didactic materials, and the creation of aesthetically and pedagogically effective learning spaces for children.

The analysis further demonstrates that the development of design competence through specialized disciplines should be considered one of the strategic priorities of contemporary pedagogical education. Design competence should not be viewed merely as an aesthetic skill; rather, it represents an integrative, creative, and innovative professional competence that enables educators to organize and improve educational activities effectively.

Conclusion

In conclusion, the implementation of a design approach in the educational process of training future preschool educators represents one of the key directions of modern pedagogical education. The development of design competence prepares students to organize pedagogical activities on an innovative, aesthetic, and creative basis.

The findings confirm that the integration of interdisciplinary learning, interactive teaching methods, innovative technologies, and project-based activities constitutes an important pedagogical factor in the development of professional competence among future preschool educators.

The study also demonstrates that the combined application of interactive methods, innovative technologies, and project-based learning activates the educational process, strengthens students' independent thinking, and enhances their creative initiative. As a result, future educators are prepared not only to transmit knowledge but also to design, organize, and continuously improve educational processes.

Future research should focus on further improving methodological systems for the development of design competence and expanding the implementation of innovative technologies within digital educational environments.

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