

THEORETICAL FOUNDATIONS OF THE COMPETENCY-BASED APPROACH IN THE CONTEXT OF INTERDISCIPLINARY INTEGRATION

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Abstract: In recent years, competency-based education has gained increasing importance as a leading paradigm in modern educational systems. This article analyzes the theoretical foundations of the competency-based approach within the framework of interdisciplinary integration. The main objective is to justify the methodological relationship between interdisciplinary learning and competency development based on recent national and international research. The study employs theoretical analysis, synthesis, and a systemic approach. The findings confirm that interdisciplinary integration enhances the development of key competencies by promoting holistic thinking, transferable skills, and practical application of knowledge.

Keywords: competency-based education, interdisciplinary integration, key competencies, modern education, educational theory.

Introduction

Modern education is undergoing significant transformation due to rapid technological development and changing social demands. Contemporary learners are expected not only to acquire subject knowledge but also to develop competencies that enable them to apply this knowledge effectively in diverse life situations. Therefore, the competency-based approach has become a central element of educational reforms worldwide [3: 18].

Recent studies emphasize that competencies cannot be formed effectively within the boundaries of isolated academic disciplines. Complex real-world problems require interdisciplinary understanding and integrated thinking. For this reason, interdisciplinary integration is considered a crucial pedagogical principle that supports the successful implementation of competency-based education [10: 518].

In the context of Uzbekistan's education system, competency-based education is defined as a strategic priority aimed at improving learning outcomes through the development of key and subject-specific competencies [5: 7]. This article seeks to explore the theoretical foundations of competency-based education through interdisciplinary integration.

Methods

The research is theoretical in nature and relies on contemporary pedagogical concepts and policy documents published within the last five years. The following methods were applied:

- **Theoretical analysis** of recent national and international studies on competency-based and interdisciplinary education;
- **Synthesis** of interdisciplinary and competency-oriented pedagogical theories;
- **Comparative analysis** of traditional subject-based and interdisciplinary competency-based models;
- **Systemic approach**, which considers education as a holistic system of interconnected components.

These methods allowed for a comprehensive understanding of interdisciplinary integration as a methodological basis for competency formation [1: 42].

Results

The theoretical analysis revealed that interdisciplinary integration plays a decisive role in the development of competencies.

Firstly, interdisciplinary learning fosters the formation of **integrated knowledge systems**, enabling learners to establish meaningful connections between concepts from different

disciplines. This process enhances analytical and critical thinking skills, which are essential components of key competencies [6: 29].

Secondly, interdisciplinary integration significantly contributes to the development of **key competencies**, such as problem-solving, collaboration, communication, and information literacy. Research indicates that competency-based learning environments grounded in interdisciplinary tasks improve learners' ability to transfer knowledge across contexts [8: 6].

Thirdly, the results show that interdisciplinary integration increases the **practical relevance of learning**, as educational tasks are closely aligned with real-life situations. This practical orientation strengthens learners' motivation and engagement [4: 63].

Discussion

The findings align with contemporary pedagogical research emphasizing that interdisciplinary integration is not merely a methodological tool but a foundational principle of competency-based education. Unlike traditional subject-centered instruction, interdisciplinary learning creates conditions for holistic competence development by combining knowledge, skills, attitudes, and values [2: 48].

International frameworks for lifelong learning competencies also highlight the importance of interdisciplinary and cross-curricular approaches. According to the European Commission, key competencies are inherently interdisciplinary and require integrated learning experiences for effective development [7: 11].

However, research also indicates that the successful implementation of interdisciplinary competency-based education requires well-aligned curricula, teacher readiness, and appropriate assessment mechanisms. Without these conditions, interdisciplinary integration may remain superficial and fail to achieve its intended outcomes [10: 523].

Conclusion

This study confirms that interdisciplinary integration constitutes a fundamental theoretical foundation of the competency-based approach. By transcending disciplinary boundaries, interdisciplinary education promotes holistic learning, supports the development of key competencies, and enhances the practical applicability of knowledge.

The integration of interdisciplinary approaches into competency-based education should therefore be considered a strategic priority in modern educational reform. Future research should focus on empirical studies examining the effectiveness of interdisciplinary competency-based models in different educational contexts.

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