FORMATION OF DEFECTOLOGIST PROFESSIONAL COMPETENCE THROUGH INNOVATIVE METHODS IN INCLUSIVE EDUCATION

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Abstract*. The increasing number of children with special educational needs has intensified the demand for qualified defectologists in modern education systems. This study examines the formation of professional competence of defectologists and the role of innovative methods in this process. The research highlights the effectiveness of game-based learning, problem-based learning, and digital educational technologies in enhancing corrective and developmental outcomes. The findings indicate that the integration of innovative approaches significantly improves cognitive, communicative, and social skills of children with special needs, while also strengthening the professional competence of specialists.*

Keywords*: defectology, professional competence, innovative methods, inclusive education, digital learning.*

1. Introduction

The global increase in the number of children with special educational needs presents new challenges for educational systems. According to international statistics, a significant proportion of the population lives with disabilities, many of whom are children requiring specialized pedagogical support. This situation has accelerated the development of inclusive education worldwide.

In Uzbekistan, inclusive education has been identified as a priority area of educational reform. National legislation guarantees equal access to education for all citizens, including individuals with disabilities. Recent reforms focus on integrating children with special needs into general education environments, improving teacher qualifications, and implementing modern teaching methodologies.

As a result, the demand for highly competent defectologists is rapidly increasing. Therefore, the formation of professional competence based on innovative pedagogical methods has become an actual research issue.

Literature Review

The concept of professional competence has been widely studied in pedagogical and psychological research. According to Vygotsky (1978), learning and development are deeply interconnected processes influenced by social interaction. Leontyev (1978) emphasized activity-based approaches in understanding human development.

Modern researchers highlight that competence includes not only knowledge and skills but also the ability to apply them effectively in real-life situations. In the context of defectology, professional competence involves diagnostic, corrective, communicative, and innovative abilities.

Recent studies emphasize the importance of innovative teaching methods in improving educational outcomes for children with special needs. Game-based learning enhances motivation and engagement, while problem-based learning develops critical thinking skills. Digital

technologies provide interactive and individualized learning opportunities, making education more accessible and effective.

Methodology

This study is based on qualitative analysis of pedagogical practices and modern educational approaches used in defectological work. Comparative and analytical methods were applied to evaluate the effectiveness of innovative teaching strategies.

✓ The research focuses on:
✓ analysis of professional competence components;
✓ evaluation of innovative teaching methods;
✓ observation of their impact on children's development.

Results and Discussion

The findings show that professional competence of defectologists is a multidimensional construct consisting of several interconnected components:

Table 1. Structure of Defectologist Professional Competence

Competence Type	Description	Practical Implementation	Impact on Child Development
Diagnostic	Identifies developmental level and difficulties	Observation, testing, interviews	Early detection of problems
Correctional-developmental	Corrects and develops deficiencies	Special exercises, training sessions	Improvement in speech, attention, memory
Communicative	Establishes effective interaction with the child	Individual approach, motivation strategies	Increased confidence and engagement
Innovative	Applies modern teaching methods	Use of games, digital tools, interactive tasks	Increased interest and activity
Social-adaptive	Supports social integration	Group activities, real-life simulations	Development of social skills
Reflective	Evaluates own professional activity	Self-analysis, feedback, adjustments	Improvement of teaching quality

⁂ diagnostic competence;
⁂ correctional and developmental competence;
⁂ communicative competence;
⁂ innovative competence;
⁂ social-adaptive competence;
⁂ reflective competence.

Each component contributes to the overall effectiveness of pedagogical activity and positively impacts child development.

The study also confirms that innovative methods significantly enhance the effectiveness of corrective education:

Table 2. Effectiveness of Innovative Methods in Defectological Practice

Method	Purpose	Tools Used	Outcomes
Game-based learning	Develop cognitive and speech skills	Didactic games, visual materials	Improved attention, speech, motivation
Problem-based learning	Develop thinking and problem-solving skills	Situational tasks, guided questions	Enhanced independence and logical thinking
Digital learning technologies	Improve engagement and individualization	Tablets, interactive apps, multimedia	Increased motivation, memory, digital skills

The analysis shows that innovative methods significantly increase the effectiveness of educational and corrective processes.

Game-based learning

Game-based activities create a motivating environment that supports cognitive and speech development. Children actively participate in the learning process, which improves attention, memory, and communication skills.

Table 3. Example of Game-Based Correctional Exercise

Component	Description
Method	Game-based learning
Activity Name	“Find and Name the Color”
Objective	Develop attention, speech, and color recognition
Materials	Colored cards, toys
Procedure	Show colors → name them → child finds → child names → connects with objects
Approach	Encouragement, repetition, individualization
Result	Improved speech, attention, memory

Problem-based learning

This method encourages independent thinking and problem-solving abilities. It helps children become active participants in their own learning process.

Digital educational technologies

The use of interactive applications and multimedia tools enhances engagement and allows individualized instruction. Digital tools also support the development of attention, memory, and logical thinking.

Table 4. Example of Digital-Based Correctional Exercise

Component	Description
Method	Digital learning technology
Activity Name	“Find and Match”
Objective	Develop memory, attention, logical thinking

Component	Description
Materials	Tablet/computer, interactive software
Procedure	Open task → show shapes → match → feedback → increase difficulty
Approach	Interactivity, visual/audio feedback
Result	Improved independence, motivation, cognitive skills

However, the study reveals that not all specialists possess sufficient skills to effectively implement innovative methods. This highlights the need for continuous professional development and training.

Conclusion

The formation of professional competence of defectologists is a continuous and dynamic process that requires the integration of modern pedagogical approaches. Innovative methods play a crucial role in improving both educational outcomes and specialist performance.

The study concludes that:

√ innovative methods significantly enhance child development;

√ professional competence depends on continuous learning and adaptation;

√ the implementation of modern technologies should be expanded.

Future research should focus on developing effective training programs for defectologists and adapting innovative methods to national educational contexts.

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