IMPROVING CHILDREN'S METACOGNITIVE SKILLS USING DIDACTIC GAMES

Tolipova Gulfiya Fayzulla qizi
English teacher of Angren University
tolipovagulfiya@gmail.com

Abstract: Metacognitive skills, the ability to think about and regulate one's own thinking processes, are crucial for children's learning and personal development. These skills enhance problem-solving, critical thinking, and independent learning abilities. Didactic games offer an engaging and interactive approach to foster metacognition in children. This article explores the relationship between didactic games and the development of metacognitive skills, discusses strategies for effective implementation, and presents examples of games designed to enhance self-reflection, planning, and problem-solving skills in children. The findings suggest that integrating didactic games into educational settings can significantly improve children's ability to monitor and manage their learning processes.

Key words: Metacognition, thinking about thinking, didactic games, metacognitive knowledge, metacognitive regulation.

Metacognition, often referred to as "thinking about thinking," involves self-awareness and regulation of cognitive processes. For children, developing metacognitive skills is essential for success in school and life, as these skills enable them to understand their learning styles, set goals, and adapt strategies to solve problems effectively. Traditional teaching methods often fail to actively engage children in metacognitive practices. However, didactic games—educational games designed with specific learning objectives—have proven to be an innovative and effective tool for cultivating metacognition in children.

This article examines how didactic games can enhance metacognitive skills in children, offering theoretical insights, practical applications, and examples. By incorporating these games into the educational framework, educators can create a dynamic learning environment that fosters critical thinking, self-regulation, and problem-solving.

Metacognition comprises two key components:

Metacognitive Knowledge: Awareness of one's own cognitive processes, such as recognizing strengths and weaknesses or understanding the demands of a task.

Metacognitive Regulation: The ability to plan, monitor, and evaluate one's learning strategies to achieve desired outcomes.

Children with strong metacognitive skills are better equipped to:

Analyze tasks effectively, select appropriate strategies, monitor their progress, adjust their approaches as needed.

Role of Didactic Games in Developing Metacognition:

Didactic games provide a structured yet flexible framework for learning, combining fun and education. These games offer opportunities for children to:

Reflect on Actions: Games often require players to pause and assess their strategies, encouraging metacognitive reflection.

Plan and Set Goals: Players must develop plans to succeed, which involves identifying objectives and deciding on strategies.

Monitor Progress: As children engage in gameplay, they assess their performance and make adjustments.

Evaluate Outcomes: Post-game discussions or reflections help children evaluate their decisions and learn from their experiences.

Strategies for Using Didactic Games to Enhance Metacognition:

To maximize the impact of didactic games on metacognitive development, educators should:

Select Appropriate Games: Choose games aligned with specific learning objectives, such as problem-solving, strategy, or critical thinking.

Encourage Reflection: Incorporate moments during or after gameplay for children to reflect on their decisions and strategies.

Facilitate Group Activities: Promote collaborative games that require teamwork and discussion, enhancing social and metacognitive skills simultaneously.

Provide Feedback: Offer constructive feedback to help children understand their strengths and areas for improvement.

Examples of Didactic Games for Metacognitive Development:

Puzzle Games: Jigsaw puzzles or logic puzzles encourage planning, problem-solving, and monitoring progress.

Strategy Board Games: Games like chess or checkers help children think several steps ahead and adapt their strategies.

Interactive Digital Games: Educational apps with challenges that require self-regulation, such as solving math problems within a time limit, can be highly engaging.

Role-Playing Games: Acting out scenarios or solving hypothetical problems allows children to explore multiple perspectives and solutions.

Case Study: Implementing Didactic Games in the Classroom:

A recent study conducted in a primary school integrated didactic games into weekly lessons for six months. Teachers used games like "Escape Room Challenges" and "Math Adventure Games" to encourage planning, reflection, and collaboration. Pre- and post-intervention assessments revealed a significant improvement in students' ability to set goals, monitor their learning, and adapt strategies.

Challenges and Solutions:

Challenge: Limited resources or access to appropriate games.

Solution: Utilize free or low-cost resources, such as printable board games or open-access educational apps.

Challenge: Resistance from educators unfamiliar with game-based learning.

Solution: Provide professional development and training to help teachers integrate didactic games effectively.

Conclusion

Didactic games offer a powerful, interactive medium for fostering metacognitive skills in children. By integrating these games into educational practices, educators can create engaging learning experiences that encourage self-reflection, planning, and adaptability. As the world increasingly values critical thinking and lifelong learning, equipping children with strong metacognitive skills through innovative methods like didactic games is more important than ever.

Future research could focus on longitudinal studies to understand the long-term impact of didactic games on metacognition and explore ways to adapt these games for diverse educational contexts.

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