METHODOLOGY FOR DEVELOPING READING LITERACY IN PRIMARY SCHOOL STUDENTS THROUGH TRIZ PEDAGOGY

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Abstract: This article explores the role of TRIZ (Theory of Inventive Problem Solving) pedagogy in developing reading literacy among primary school students and its methodological foundations. The article analyzes the potential of TRIZ approaches to foster creative thinking, stimulate interest in reading, and develop analytical skills among students. It also highlights the interactive methods developed based on TRIZ and their integration into the educational process.

Keywords: TRIZ pedagogy, reading literacy, creative thinking, primary education, problem-solving, methodological approach.

Аннотация. В данной статье рассматривается роль педагогики TRIZ (Теория решения изобретательских задач) в развитии читательской грамотности у учащихся начальных классов и её методологические основы. В статье анализируются возможности применения подходов TRIZ для развития творческого мышления у учащихся, стимулирования интереса к чтению и формирования аналитических навыков. Также рассматриваются интерактивные методы, разработанные на основе TRIZ, и их интеграция в образовательный процесс.

Ключевые слова: педагогика TRIZ, читательская грамотность, творческое мышление, начальное образование, решение проблем, методологический подход.

In today's education system, developing reading literacy requires not only enhancing reading abilities but also fostering critical and creative thinking skills among students. TRIZ pedagogy plays a significant role as an innovative approach in this regard. This methodology helps to revitalize the learning process by solving creative tasks and problems.

TRIZ (The Theory of Inventive Problem Solving), developed by Genrich Altshuller in 1946, was initially applied to solve technical problems. Later, this approach was adapted to education and aimed at developing creative thinking in students. The key principles of TRIZ pedagogy include:

- *Resolving Contradictions*: Students combine opposing ideas to develop creative solutions.

- *Ideal Outcome Principle*: Achieving the highest results with the least resources in the educational process.

- *Systematic Approach*: Applying a comprehensive approach to solving problems.

In the field of education, scholars such as Leonid Chechurin, Elena G. Popov ("Teaching and Learning with TRIZ: New Directions in Education"), Karen Gadd, Denis Cavallucci, James Moultrie ("TRIZ for Engineers: Enabling Inventive Problem Solving"), and Lilly Haines-Gadd ("TRIZ for Dummies") have conducted research on the use of TRIZ pedagogy.

TRIZ and Reading Literacy: TRIZ offers the following opportunities in improving reading literacy: Deeply analyzing the content of texts and identifying their key ideas; Using creative tasks to enhance students' interest in reading; Creating problem-solving questions based on the material read and finding answers.

TRIZ-based Methodology for Developing Reading Literacy:

Interactive Methods: The interactive methods used in TRIZ pedagogy encourage students to actively participate in the reading process. For example:

"Contrary Story" method: Students propose conflicting situations and their solutions based on the text.

"Ideal Book" method: Students imagine how the story would look in an ideal form and create their own versions.

Game Technologies: TRIZ makes extensive use of game elements, such as:

- "Reading Labyrinth": During the reading process, students solve problems at certain stages to achieve a goal.

- "Question Creator" game: Each student develops questions about the text, and discussions are held based on those questions.

Differentiated Approach: TRIZ methods can be adapted to each student's individual needs. For example, more complex tasks can be offered to high-ability students, while simpler problems can be given to beginners.

International Experience with TRIZ: TRIZ pedagogy has been successfully applied in many countries:

- Russia: Creative activities based on TRIZ are organized for students, showing high results in reading literacy.
- Finland: TRIZ methods are actively used to improve teachers' qualifications and have been integrated into the educational process.
- USA: Interactive TRIZ methods are used as an innovative approach in elementary education institutions.

Features of TRIZ pedagogy:

Encouraging Creative Thinking: TRIZ pedagogy stimulates students' creative thinking by introducing them to a structured framework for problem solving. It encourages them to break away from conventional thinking patterns and explore unconventional solutions.

Problem-Solving Competence: TRIZ equips students with a toolkit of problem-solving techniques that can be applied across various domains. This competence is highly transferable and valuable in addressing real-world challenges.

Identifying Contradictions: TRIZ emphasizes the identification and resolution of contradictions within a problem. This skill is particularly relevant in engineering, product design, and process optimization.

Enhancing Critical Thinking: TRIZ pedagogy encourages students to analyze problems from multiple angles, fostering critical thinking skills. It requires them to question assumptions, seek root causes, and explore innovative alternatives.

Innovation and Inventiveness: TRIZ is centered around the concept of innovation. By teaching students the principles of innovation and inventive problem solving, TRIZ pedagogy prepares them to be future innovators and inventors.

Cross-Disciplinary Application: TRIZ is not limited to a specific field; it can be applied across disciplines. This versatility makes it a valuable addition to educational programs in diverse fields, from science and engineering to business and the arts.

Real-World Relevance: The skills acquired through TRIZ pedagogy are directly applicable to real-world challenges. This prepares students for success in their careers and equips them to contribute positively to society.

While the benefits of TRIZ pedagogy are substantial, there are challenges to its implementation. These include the need for specialized training for educators, curriculum integration, and the adaptation of TRIZ principles to the specific needs of different educational levels and contexts. However, the long-term benefits outweigh these initial hurdles.

Practical Recommendations:

1. Incorporating TRIZ methods into teacher training programs: Equipping future educators with skills to conduct lessons based on TRIZ.
2. Using TRIZ technologies in the classroom: Implementing methods that encourage students to think actively and independently.
3. Improving text-based exercises using TRIZ: Providing tasks that develop creative and critical thinking in students as they study texts.

Conclusion: TRIZ pedagogy is an effective method for developing reading literacy in elementary school students. It not only enhances reading abilities but also shapes creative thinking, problem-solving, and analytical skills. By widely applying TRIZ methods in the education system of Uzbekistan, the learning process can be taken to a new level.

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