

DEVELOPMENT OF STUDENTS' READING LITERACY THROUGH TRIZ PEDAGOGY

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Abstract. *Today, in educational institutions of many foreign countries recognized for their high quality of education, interactive methods are widely used, international evaluation programs and trends of TRIZ pedagogy are widely implemented in order to improve the quality of education.*

This article describes the content and essence of TRIZ pedagogy and the development of primary school students' reading literacy through TRIZ pedagogy.

Keywords. *native languages and reading literacy, interactive methods, innovative technologies, reading literacy, TRIZ pedagogy*

In recent years, in our republic, the normative foundations of independent and free thinking of the young generation, expansion of worldview, perception of events happening around, development of literacy of students are being created on the basis of multimedia educational resources. There is an increase in the opportunities for the educational system to raise a generation that is well-rounded, intellectually, physically and spiritually, and to improve the quality of primary education, which is the basis of future education. The conceptual basis of "adapting the secondary education system to the requirements of the times" provided for in the fourth direction of the development strategy of the Republic of Uzbekistan for 2022-2026 was defined as an important priority task. This expands the possibilities of improving the educational process of primary school students based on the programs of new pedagogical technologies.

In the ever-changing landscape of education, the need for nurturing creativity, critical thinking, and problem-solving skills in primary school students has never been more pronounced. One innovative approach that holds promise in this regard is the application of TRIZ (Theory of Inventive Problem Solving) pedagogy. Originally developed for engineering and innovation, TRIZ can be adapted effectively to primary education to foster a dynamic and inventive learning environment[1]

TRIZ, founded by Russian engineer Genrich Altshuller, is a systematic problem-solving methodology that encourages structured and creative thinking. Its principles and techniques can be effectively applied to primary education to enhance the problem-solving skills of young learners.

Identifying Contradictions: TRIZ encourages students to identify contradictions within problems or situations. In primary school, this means helping students recognize conflicts in stories, mathematical equations, or science experiments. For example, in a story, a character's actions may contradict their words, leading to a contradiction that students can explore and resolve. **Ideality and Creativity:** TRIZ promotes the concept of "ideality," which involves envisioning the ideal state of a solution. In the classroom, this can be translated into encouraging students to imagine the ideal outcome of a project, experiment, or artistic creation. This exercise stimulates creative thinking and goal setting.

Structured Problem-Solving: TRIZ provides a systematic approach to problem-solving, involving stages like problem analysis, contradiction identification, and the application of inventive principles. In primary education, teachers can adapt this structure to guide students through complex academic problems or challenges.

Cross-Disciplinary Application: TRIZ principles can be applied across various subjects. Students can use TRIZ to solve math problems, interpret literature, understand historical events, and develop innovative science projects. This interdisciplinary approach encourages holistic thinking[3].

Implementing TRIZ in Primary Schools: Interactive Activities: Incorporate interactive and hands-on activities to engage young learners. For instance, students can act out scenes from a story, design simple inventions, or solve puzzles that require creative solutions.

Storytelling and Creativity: Encourage students to create their stories, allowing them to apply TRIZ principles while developing plots and characters. This exercise nurtures creativity and problem-solving simultaneously[2].

Vocabulary Expansion: Use TRIZ-inspired techniques to expand vocabulary. Word games, such as crossword puzzles or word associations, can be integrated into lessons to make language learning more engaging.

Continuous Improvement: Teach students the value of continuous improvement by reviewing and refining their work. Encourage them to find better solutions to problems or make improvements in their projects.

Collaborative Learning: Foster a collaborative learning environment where students work together to solve problems, share ideas, and learn from one another. This mirrors the real-world collaborative nature of innovation and creative problem-solving.

In today's rapidly changing world, strong reading skills are essential for a child's academic and personal development. Reading not only opens the door to knowledge but also enhances cognitive abilities, imagination, and critical thinking. One innovative approach to improving reading skills in primary schools is the application of TRIZ pedagogy. TRIZ, an acronym for "Theory of Inventive Problem Solving," is a creative problem-solving method that was originally developed for engineering but has found its way into various fields, including education. In this article, we will explore the benefits of using TRIZ pedagogy to enhance reading skills in primary school students[4].

TRIZ pedagogy adapts the principles of TRIZ to foster innovative thinking and problem-solving in primary education. It encourages students to think critically, identify patterns, and solve problems by using inventive strategies. The TRIZ approach involves several key components:

Contradiction Resolution: TRIZ emphasizes the identification and resolution of contradictions, encouraging students to seek solutions that address conflicting needs or requirements in a given context[5].

Patterns of Evolution: TRIZ recognizes recurring patterns in problem-solving and innovation. This helps students understand the evolution of ideas and solutions over time.

Inventive Principles: TRIZ offers a set of inventive principles that can be applied to overcome common problems and barriers in creative problem-solving.

Using TRIZ Pedagogy to Improve Reading Skills

Encouraging Critical Thinking: TRIZ pedagogy encourages students to analyze complex problems and text with a critical eye. They learn to identify contradictions and conflicts in the storyline, characters' motivations, or the author's message, fostering deeper comprehension.

Identifying Patterns: Reading comprehension is often enhanced by recognizing patterns in texts, such as foreshadowing, cause-and-effect relationships, and character development. TRIZ helps students identify these patterns, allowing for a more insightful reading experience[7].

Problem-Solving Skills: TRIZ fosters inventive thinking and problem-solving abilities. When students apply TRIZ principles to reading, they can approach difficult texts as "problems" to be solved, making comprehension more engaging and enjoyable.

Creativity and Imagination: TRIZ pedagogy encourages students to think outside the box and explore various creative possibilities. This approach leads to a richer understanding of the text and encourages students to engage with the material on a deeper level.

Case Study: A TRIZ-Based Reading Program

To illustrate the benefits of TRIZ pedagogy in primary schools, let's consider a hypothetical reading program using this approach:

Reading Circles: Students form reading circles and select a challenging text. They use TRIZ principles to analyze and discuss the text, identifying contradictions, patterns, and inventive solutions to comprehension challenges.

Contradiction Resolution Exercises: Students are given passages from their chosen text and are tasked with identifying contradictions or conflicts within the passage. They must propose inventive solutions to resolve these contradictions.

Pattern Recognition: Students explore recurring patterns in the text and discuss how these patterns contribute to the overall understanding of the story. This exercise promotes pattern recognition and critical thinking[6].

Creative Projects: Students engage in creative projects inspired by the text, such as creating alternative story endings, character profiles, or exploring themes in new ways. This encourages imaginative thinking and deeper engagement with the material.

TRIZ pedagogy offers an innovative and structured approach to nurturing creative problem-solving skills in primary school students. By integrating TRIZ principles and techniques into the classroom, educators can create a dynamic learning environment that not only prepares students for academic success but also equips them with invaluable skills for future endeavors. As primary education continues to evolve, TRIZ pedagogy provides a valuable tool to inspire young minds and foster a lifelong love of learning and innovation. The integration of TRIZ pedagogy in primary school reading programs offers a promising approach to improving reading skills. By fostering critical thinking, pattern recognition, problem-solving, and creativity, TRIZ enhances the overall reading experience and equips students with valuable skills for lifelong learning. As the educational landscape continues to evolve, innovative methods like TRIZ pedagogy can empower young readers to become more proficient and passionate about reading.

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