"DEVELOPING CREATIVE THINKING IN PRIMARY SCHOOL STUDENTS THROUGH CHILDREN'S LITERATURE WITH THE HELP OF ARTIFICIAL INTELLIGENCE"

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Annotation: *This article explores the potential of developing creative thinking skills in primary school students through children's literature using artificial intelligence technologies. The study analyzes the impact of AI tools (such as ChatGPT, DALL E, audio books, and visual platforms) on students' cognitive development and highlights the pedagogical advantages of these innovations in literature-based learning. Methodologically, the article proposes AI-based strategies such as text analysis, creative task generation, dramatization, and visual content creation. The author argues for the integration of artificial intelligence into the learning process as a modern tool to stimulate creativity and learner engagement.*

Keywords: *artificial intelligence, creative thinking, children's literature, primary education, methodology, innovative technologies.*

In today's modern information society, the educational process is in a constant state of change and development, which requires the improvement of teaching methods, strategies, and tools. This is especially relevant at the primary education level, where developing students' thinking, worldview, communication culture, and creative approach has become one of the most pressing issues. For school-age children—particularly those in primary grades—education should not only serve to provide knowledge, but also act as a means to develop life skills and unlock their personal potential.

Creative thinking refers to a student's ability to process learned information from their own perspective, apply it in a new context, and solve problems in non-traditional ways. It is essential to cultivate this skill from an early age, as the primary education stage is the most suitable period for the psychological, emotional, and intellectual development of children. During this time, their capacity to perceive the world, imagination, and visualization are especially strong. Therefore, the teacher's approach, the selected methodology, and didactic tools at this stage play a decisive role in shaping creative thinking.

On the other hand, in recent years, the rapid integration of artificial intelligence technologies into the education system has elevated this process to a whole new

level. Artificial intelligence—systems designed to perform activities associated with human intelligence—is now widely used in analysis, decision-making, text generation, conversation, test creation, and the development of visual content. Teachers can use AI to design personalized tasks, monitor and assess students' thinking processes, and create interactive environments that engage learners.

Children's literature, in contrast to artificial technologies, plays a vital role as a source of human values, artistic imagery, moral upbringing, and emotional development. The figurative, event-rich, and simple-language texts of children's literature serve to unlock a child's thinking and stimulate their imagination. This makes it a natural resource for developing creative thinking.

Therefore, this thesis analyzes the possibilities, methodological approaches, pedagogical tools, and practical recommendations for developing primary school students' creative thinking through children's literature, using artificial intelligence technologies.

The aim of the thesis is to demonstrate how artificial intelligence tools can be effectively used to foster creative thinking based on literary texts, to analyze existing best practices, and to develop practical methodological guidelines for teachers.

Children's literature is one of the most important tools for shaping the artistic and aesthetic worldview in young minds, enriching their moral values, and stimulating their creative thinking. Literature directly influences a child's imagination, emotions, psychology, and worldview. Especially literary works designed for primary school children—fairy tales, stories, poems, and plays—expand their thinking, and develop their skills in analysis, visualization, imagination, and generating new ideas.

Creative thinking is a child's ability to create new things based on what they know, to approach situations in unconventional ways, to express independent opinions, and to use analogy and imagination. Children's literature provides great opportunities for developing such skills due to the following characteristics:

First, literary texts activate children's emotional and intellectual activity. The development of events, conflicts between characters, and unexpected plot twists encourage children to think critically, understand cause-and-effect relationships, and draw their own conclusions. In these processes, the child doesn't just memorize but thinks, analyzes, compares, and makes predictions — which form the foundation of creative thinking.

Second, literature improves a child's oral and written communication. An engaging plot, figurative language, and expressive dialogues help children learn new words, use them in context, and construct their own texts. In this process, the

child describes, imagines, takes on roles, and creates new contexts. For example, exercises like imagining oneself in the role of a story character, continuing the story in a different direction, or rewriting the ending all lead to the development of creative thinking.

Third, literature gives children subconscious moral and psychological lessons. In each work, concepts like good and evil, honesty and deceit, bravery and cowardice are presented in artistic form through characters. By analyzing these characters, the child enriches their inner world and learns to make ethical decisions. Thus, the child forms not only literary thinking but also real-life reasoning and decision-making skills, becoming an independent and thoughtful individual.

Fourth, through children's literature, activities like dramatization, role play, stage performances, storytelling, and poetry writing enhance students' engagement. These action-based processes stimulate their imagination, add flexibility to their thinking, and motivate them to create new ideas.

When teaching literature, in addition to simple question-and-answer methods, using engaging techniques such as *"*Write a different ending," "What would you do if you were the character?" "Modernize the story," and *"*Create a new fairy *tale"* activates students' creative thinking. These approaches help shape thinking based on principles of freedom, choice, and innovation.

At the same time, literature allows the teacher to understand the child's inner world and interests, enabling an individualized approach. As a result, the educational process nurtures a creatively thinking and independent individual.

In recent years, the development of technology, particularly the rapid advancement of artificial intelligence (AI) technologies, has led to fundamental changes in the education system. Artificial intelligence refers to a set of technological solutions that simulate human thinking, learning, analysis, and decision-making processes through machines and algorithms. With the help of this technology, it is possible to automate the learning process, strengthen individualized approaches, deeply analyze students' knowledge, and create content tailored to their interests. This contributes to increasing the effectiveness of education, reducing the workload of teachers, and engaging students as active participants.

The opportunities of artificial intelligence in education can be considered in several key directions:

First, AI enables the personalization of the learning process. Each student has a different level of knowledge, learning speed, and approach to studying. While it is difficult to take these differences into account in traditional education, AI-based

platforms (such as Khan Academy, ScribeSense, ChatGPT, Quizizz AI) analyze students' activity and offer tasks, questions, or learning materials suited to their level. This ensures that students receive education that matches their individual capabilities.

Second, AI tools help make the learning process interactive and engaging. Through virtual assistants, voice-based communication systems, interactive quizzes, and animated learning software, students become active participants rather than passive listeners in class. Especially for primary school students, such tools increase motivation, turn learning into a game, and activate their thinking processes.

Third, artificial intelligence offers analytical capabilities. It can detect how fast students complete tasks, their mistakes, the topics they understand well, and the ones they struggle with. Based on this data, teachers can adjust their methods and strengthen individualized approaches. Additionally, students' creative works (such as texts, stories, poems, and drawings) can be analyzed by AI, providing feedback and evaluations.

Fourth, AI saves time and resources. Tasks prepared for the class can be automatically assessed, test results can be generated, texts can be edited, lesson plans can be created, and methodological recommendations can be written by AI. This allows teachers to focus more on creative work and provide individual attention to each student.

Fifth, AI-based visual tools — such as drawing programs, animations, and graphic builders — enhance children's imagination and creative thinking. For example, a student writes a fairy tale, and based on it, an AI system creates a visual scene. This process allows the student to "see" what they have written, which boosts their imagination and develops creative thinking.

Artificial intelligence also creates significant opportunities for students with disabilities. Text-to-speech software, sign language learning systems, automatic translators, and other assistive technologies promote the development of inclusive education.

Of course, AI cannot fully replace a teacher. However, it can become a powerful assistant to educators. Especially in complex psychological-pedagogical processes like developing creative thinking, AI tools can serve as sources of inspiration, offer new ideas, and encourage independent thinking in students.

In conclusion, AI tools are opening the door to great opportunities in education. Through these tools, students become more engaged, lessons become more interesting and meaningful, and while easing the teacher's workload, an individualized path of development is created for every child. These qualities make

artificial intelligence a powerful pedagogical tool for fostering creative thinking, particularly in primary education and in harmony with children's literature.

In today's modern educational process, the effective use of technology is becoming a key component of pedagogical mastery. In particular, when working with children's literature, using the potential of artificial intelligence (AI) can help organize lessons in an interactive, engaging, and creative way. This method activates students' creative thinking, cultivates their literary and aesthetic taste, and develops skills in independent thinking, analysis, and expressing their own ideas.

The methodological approach using artificial intelligence can be organized in several stages:

1. **Analyzing the selected literary text through AI**: First, the selected fairy tale, story, or poem is analyzed with the help of artificial intelligence. For example, tools like ChatGPT can provide quick and accurate recommendations regarding the main idea of the work, character traits, and key turning points in the plot. These analysis results are used for lesson planning, creating question-answer systems, and designing tasks.

2. **Creating new questions and tasks based on the work**: Artificial intelligence can be used to create various questions and creative tasks based on a specific work. For example: "What would change if the fairy tale took place in modern times?", "If you were in the place of the hero, what would you do?", "Write a new chapter for the continuation of the work?" These tasks stimulate students' creative thinking. AI tools can instantly generate such tasks and even adjust them to suit the class level.

3. **Creating visual and audio content based on the literary text**: With the help of AI, it is possible to create visual representations of the characters, environment, event animations, or audio versions (audiobooks) of the work. For example, turning a fairy tale written by a student into an image through AI (using tools like DALL·E, Midjourney) enriches their imaginative world. This method is especially motivating for elementary school students.

4. **Creating stage scenes based on texts**: AI can be used to divide a work into roles, write a brief script, and adapt it for staging. Students are given the task of internalizing the characters, speaking in their voice, and creating new scenes. Artificial intelligence serves as a text-based assistant and helps analyze dramatic composition.

5. **Analyzing and evaluating created creative works**: Students' written poems, stories, and fairy tales are evaluated with the help of AI, analyzing aspects such as language, expressiveness, logic, and emotional strength. This analysis helps identify the student's strengths and weaknesses and set directions for further

development. The teacher participates in this process as a guide, explaining the results in a personalized manner.

6. **Teaching students to work with AI tools**: In this stage, students learn to independently write fairy tales, stories, or poems using AI. For example, they can use ChatGPT with prompts like "Help me write a poem about spring" or "Create a new fairy tale with three characters." This enhances their technological literacy and develops their ability to express their thoughts algorithmically.

In the course of our research, the relevance, effectiveness, and wide opportunities of using artificial intelligence technologies in the development of creative thinking in elementary school students based on children's literature were analyzed. The results showed that the educational process can be visualized, gamified, personalized, and made more creative with the help of AI tools (such as ChatGPT, DALL·E, Canva, Text-to-Speech, and other interactive programs).

Children's literature is not only a collection of aesthetically pleasing texts but also an important tool that shapes the student's thinking, expands their imagination, enriches their vocabulary, and nourishes their spiritual world. Analyzing, expanding, and mastering it with the help of artificial intelligence encourages students to go beyond traditional thinking, propose their views, express their ideas through text or image, and create alternative endings. This, in turn, serves the formation of creative thinking.

The following key conclusions were drawn during the research:

- Artificial intelligence makes it easier to analyze literary texts from multiple angles and create tasks based on various stylistic approaches.
- Elementary school students show interest in working with AI, as these technologies are compatible with their imaginative world and serve as sources of inspiration.
- Teachers can quickly and effectively plan lessons with the help of AI, preparing materials tailored to students' needs.
- To develop creative thinking, it is essential to introduce AI tools in a playful, integrated, and hands-on manner.

Based on these conclusions, the following suggestions are made:

1. First, it is necessary to organize professional development courses on "Increasing Lesson Effectiveness with Artificial Intelligence" for teachers working in primary education. This will help teachers gain the skills to correctly and purposefully apply modern technologies.

2. Second, it is recommended that AI-interactive platforms specialized in children's literature be developed and used in schools. For example, local programs

that allow students to create, animate, and assign roles to fairy tales could be a valuable resource.

3. Third, by introducing the subject "Artificial Intelligence and Creative Teaching Methodology" in pedagogical universities, future primary school teachers can be prepared to master technologies in-depth.

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