THE ROLE OF INNOVATIVE INTERACTIVE METHODS IN DEVELOPING CREATIVE THINKING AMONG PRIMARY SCHOOL PUPILS

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Annotatsiya: *Mazkur maqolada boshlang‘ich sinf o‘quvchilarida ijodiy tafakkurni shakllantirish va rivojlantirishda innovatsion interaktiv metodlarning ahamiyati tahlil qilinadi. Bugungi kunda ta’lim jarayonining samaradorligini oshirish, o‘quvchilarning mustaqil fikrlash ko‘nikmalarini rivojlantirish, ularning qiziqishi va faol ishtirokini ta’minlashda interaktiv yondashuvlar muhim o‘rin tutmoqda. Maqolada, xususan, “aqliy hujum”, “rolga kirish”, “klaster”, “konseptual xarita” kabi usullarning amaliyotdagi qo‘llanilishi, ularning ijodiy fikrlashga ijobiy ta’siri misollar orqali yoritiladi. Shuningdek, innovatsion yondashuvlar orqali o‘quvchilarda muammoni mustaqil hal qilish, yangi g‘oyalarni ilgari surish va ijodiy yondashuvni shakllantirish mexanizmlari ilmiy asosda bayon etilgan. Tadqiqot metodlari sifatida kuzatuv, eksperiment va suhbat usullaridan foydalanilgan. Olingan natijalar innovatsion interaktiv metodlar boshlang‘ich ta’limda o‘quvchilarning ijodiy fikrlash salohiyatini sezilarli darajada oshirishi mumkinligini ko‘rsatdi. Mazkur maqola boshlang‘ich sinf*

o‘qituvchilari, metodistlar hamda pedagogik ta’lim yo‘nalishida tadqiqot olib borayotgan olimlar uchun foydali ilmiy-amaliy manba bo‘lib xizmat qiladi.

Kalit so‘zlar: *ijodiy tafakkur, boshlang‘ich ta’lim, interaktiv metodlar, innovatsion yondashuv, o‘quv faoliyati, pedagogik texnologiya, aqliy hujum, klaster, konseptual xarita, ta’lim samaradorligi.*

Annotation: *This article examines the significance of innovative interactive methods in shaping and developing creative thinking among primary school pupils. In today’s educational process, increasing effectiveness, fostering independent thinking skills, and ensuring student engagement require interactive approaches. The article explores the practical application of methods such as “brainstorming,” “role-playing,” “clustering,” and “concept mapping,” highlighting their positive impact on creative thinking. It outlines how these innovative strategies help students solve problems independently, generate new ideas, and develop a creative approach. Observation, experimentation, and interviews were used as research methods. The results show that innovative interactive methods can significantly enhance the creative thinking abilities of primary school students. This article serves as a valuable scientific and practical resource for primary school teachers, methodologists, and researchers in the field of pedagogical education.*

Keywords: *creative thinking, primary education, interactive methods, innovative approach, learning activity, pedagogical technology, brainstorming, clustering, concept map, educational efficiency.*

Аннотация: *В данной статье рассматривается значение инновационных интерактивных методов в формировании и развитии креативного мышления у учащихся начальных классов. В современных условиях повышения эффективности образовательного процесса, развития у учеников навыков самостоятельного мышления и активного участия в обучении особое значение приобретают интерактивные подходы. В статье*

анализируется практическое применение таких методов, как «мозговой штурм», «ролевая игра», «кластер», «концептуальная карта», и их положительное влияние на развитие творческого мышления. Также раскрываются механизмы формирования способности к самостоятельному решению задач и выдвижению новых идей. В качестве методов исследования использовались наблюдение, эксперимент и интервью. Полученные результаты показали, что инновационные интерактивные методы значительно способствуют развитию креативного потенциала младших школьников. Статья представляет собой полезный научно-практический материал для учителей начальных классов, методистов и исследователей в сфере педагогического образования.

Ключевые слова *творческое мышление, начальное образование, интерактивные методы, инновационный подход, учебная деятельность, педагогические технологии, мозговой штурм, кластер, концептуальная карта, эффективность обучения.*

Introduction

In the context of the 21st century, characterized by rapid technological advancements and an increasing demand for innovative problem-solving skills, the development of creative thinking in primary school pupils has become a key priority in educational systems worldwide. Creative thinking, defined as the ability to generate original ideas, approach problems from multiple perspectives, and construct novel solutions, is not only essential for academic success but also for the holistic development of young learners. Traditional teaching methods, which often rely on rote memorization and passive learning, have proven insufficient in fostering creativity among students. In contrast, innovative interactive methods provide dynamic and engaging learning environments that stimulate curiosity, encourage active participation, and support the development of higher-order

thinking skills. Methods such as brainstorming, role-playing, concept mapping, and clustering have been shown to be particularly effective in enhancing creative capacities among young learners when integrated thoughtfully into the curriculum. This paper aims to explore the role of innovative interactive methods in nurturing creative thinking in primary education. The research focuses on identifying the most effective strategies, analyzing their practical implementation in classroom settings, and evaluating their impact on the cognitive and creative development of pupils. Through a combination of theoretical analysis and empirical evidence, the study seeks to provide educators and policymakers with actionable insights to enhance the quality and creativity of primary education.

Main Body

The Importance of Creative Thinking in Primary Education. Creative thinking is a fundamental skill that contributes to cognitive flexibility, problem-solving, and innovation. In primary education, the early stimulation of creative abilities helps children to develop confidence in expressing their thoughts, approach challenges with an open mind, and cultivate a lifelong love for learning. According to Torrance (1974), creativity is not a trait limited to a select few, but a universal capacity that can be developed through appropriate educational strategies. Therefore, integrating methods that foster creativity from the early years of schooling is essential for preparing students for complex future demands. Innovative Interactive Methods: Concepts and Principles. Innovative interactive methods are pedagogical approaches that actively engage students in the learning process, transforming them from passive receivers of information to active participants. These methods encourage collaboration, critical thinking, experimentation, and reflection. Some of the most widely used interactive methods in primary classrooms include. Brainstorming: A technique used to generate a wide range of ideas in a non-judgmental setting, allowing pupils to express creative thoughts freely. Role-

playing: A method that helps students understand different perspectives by simulating real-life situations, enhancing empathy, communication, and creative problem-solving. Clustering: A visual strategy that enables pupils to organize and connect ideas, facilitating deeper comprehension and encouraging associative thinking. Concept mapping: A tool for representing relationships among concepts that aids in knowledge structuring and promotes analytical and creative thinking. These methods are grounded in constructivist learning theory, which emphasizes learner-centered instruction and the importance of social interaction in cognitive development (Vygotsky, 1978). Practical Implementation in the Classroom. Effective implementation of innovative interactive methods requires thoughtful planning, teacher training, and a supportive classroom environment. Teachers must design activities that are age-appropriate, align with learning objectives, and allow for flexibility and student choice. For example, during a language arts lesson, students might engage in brainstorming to develop story ideas, then use role-playing to act out characters' experiences, and finally organize their thoughts using concept maps before writing their narratives. In science classes, students may work in groups to explore hypotheses through experiments, discuss findings collaboratively, and present results through creative formats such as posters or digital storytelling. Observational data and case studies from primary schools that have adopted interactive teaching practices indicate significant improvements in student engagement, creativity, and motivation. Moreover, teachers report increased collaboration among students and a noticeable enhancement in problem-solving abilities. Challenges and Considerations. Despite the numerous benefits, there are challenges associated with the integration of interactive methods in primary education. These include limited instructional time, lack of teacher preparedness, large class sizes, and insufficient teaching resources. Addressing these barriers requires systemic changes, such as professional development

programs for teachers, curriculum redesign to incorporate creativity as a core component, and policy support for innovative practices.

Empirical Analysis.

To evaluate the effectiveness of innovative interactive methods in developing creative thinking among primary school pupils, a mixed-method research design was employed. The study was conducted over a 12-week period at three public primary schools located in urban areas. A total of 90 pupils from Grades 3 and 4 participated in the research, divided equally into experimental and control groups. The experimental group was taught using various interactive methods—brainstorming, role-playing, concept mapping, and clustering—while the control group followed the traditional teacher-centered approach. Research Instruments. The following tools were used for data collection. Torrance Tests of Creative Thinking (TTCT) – administered pre- and post-intervention to assess fluency, originality, elaboration, and flexibility in students' responses. Classroom Observation Checklist – to record the level of student engagement and interaction during lessons. Teacher Interviews – conducted to gather qualitative insights on student behavior, participation, and creativity. Student Feedback Forms – to evaluate pupils' perceptions of learning activities and their own creative involvement. Quantitative Findings. The pre-test results of both groups indicated similar levels of creative thinking. However, post-test results revealed a statistically significant improvement in the experimental group compared to the control group. The average score increase on the TTCT was: Experimental group: from 58.2 to 79.4 (an increase of 21.2 points). Control group: from 57.8 to 62.3 (an increase of 4.5 points).

The largest gains in the experimental group were observed in the areas of originality and flexibility, suggesting that interactive methods effectively stimulated divergent thinking. Qualitative Observations. Classroom observations

showed that students in the experimental group displayed higher levels of engagement, asked more open-ended questions, and collaborated more actively during group tasks. Teachers noted that students were more willing to share unique ideas and showed increased confidence in presenting their thoughts. In contrast, students in the control group remained largely passive, focusing on recall-based activities with limited creativity involved. Interviews with teachers further confirmed the effectiveness of the interactive methods. One participant noted: "Students who were usually shy or inattentive began to participate eagerly when we used role-playing or brainstorming sessions. It gave them a platform to express ideas without fear of being wrong." Summary of Empirical Findings. The empirical data strongly support the hypothesis that innovative interactive methods significantly enhance creative thinking in primary school pupils. Not only did students in the experimental group demonstrate measurable growth in creative thinking scores, but they also developed key soft skills such as collaboration, communication, and critical inquiry.

Conclusion

The findings of this study clearly demonstrate that innovative interactive methods play a pivotal role in fostering creative thinking among primary school pupils. Through the integration of strategies such as brainstorming, role-playing, clustering, and concept mapping, students were not only more actively engaged in the learning process but also exhibited significant improvements in their ability to think creatively, solve problems independently, and express original ideas. The empirical analysis provided strong evidence that learners exposed to interactive teaching approaches outperformed their peers in traditional classrooms in key dimensions of creativity, including fluency, flexibility, and originality. Additionally, qualitative data from classroom observations and teacher interviews highlighted improvements in student motivation, self-confidence, and cooperative

learning behaviors. Despite the challenges associated with implementing these methods—such as time constraints, teacher preparedness, and class size—this study reaffirms the necessity of shifting towards a more student-centered and creativity-oriented pedagogy in primary education. To fully realize the benefits of interactive methods, education stakeholders must prioritize teacher training, resource development, and curriculum reform that embeds creativity as a core objective of early education. In conclusion, fostering creativity through innovative interactive methods is not only desirable but essential in equipping young learners with the cognitive and social tools they need to navigate an increasingly complex and dynamic world. This approach holds significant promise for enhancing the quality and relevance of primary education in the 21st century.

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