



The Role of Creative Thinking in Education

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ABSTRACT

This paper examines the concept of creative thinking by firstly summarizing its core elements: the definitions and cognitive processes involved (divergent vs. convergent thinking), the importance of intuitive and logical reasoning in generating novel and useful ideas, and the distinction between passive and active creative thought. It then reviews the theoretical foundations, outlining how scholars like Torrance, Sternberg, and Lubart characterize creativity—emphasizing problem identification, hypothesis testing, and the refinement of ideas—and presents various educational approaches (e.g., Feuerstein’s Instrumental Enrichment, Lipman’s Philosophy for Children, Six Thinking Hats) that aim to foster creative skills. Secondly, the essay discusses how other researchers (e.g., De Cássia et al., Villegas, Campos et al.) integrate creative thinking into both classroom and workplace environments, highlighting the role of guided discovery strategies, multidisciplinary projects, and digital tools in enhancing students’ curiosity and inventiveness. It evaluates criticisms and challenges, such as the difficulty of measuring creative outcomes and the resistance within traditional school cultures, and offers the author’s own reflections on balancing assessment with freedom of expression. Furthermore, the paper considers the advantages and characteristics of creative thinking—its capacity to solve open-ended problems, promote deeper learning, and drive innovation across domains—and explores discussions on the development and importance of creativity in the 21st century. Finally, it concludes that while significant progress has been made in embedding creative thinking into educational and professional contexts, ongoing efforts are needed to reshape teaching methods, workplace training, and institutional cultures to fully realize creativity’s potential.

Introduction

Since scientific advancement is impossible without the development of creative talents, creative thinking is among the best human endeavors. According to Oudat et al. (2023), the capacity to think creatively is crucial for the evolution of human civilizations, and one of the key mechanisms for fostering creative abilities is education. Diversifying the usage of various teaching strategies is also essential to satisfy students' requirements and preferences. With a focus on physical education and the provision of suitable educational tools to foster and develop athletes' creativity and athletic performance, creative thinking enhances performance and excellence in a variety of areas. In this age of globalization, the ability to think creatively is essential since it allows one to make decisions on their own (Mo'een et al., 2025: 2).

Cognitive processes that generate novel ideas that others have not thought of are known as creative thinking talents. According to Ramly and Awang (2008), creativity is what creates new things. According to Johnson (2002), creative thinking emphasizes intuitive and logical thinking and generates unique and beneficial ideas. Therefore, the ability, mindset, method, and capability to comprehend issues and come up with solutions using a variety of approaches are all part of creativity.

Students have a variety of cognitive difficulties, and effective teaching techniques are essential to enhancing their performance. One successful technique for assisting students in learning difficult abilities is the Guided Discovery Strategy, which is described as an instructional approach in which students create important knowledge for themselves with little assistance from the teacher. Teaching strategies are crucial when it comes to teaching different sports skills, and the more sophisticated the approach, the better the learning process and the more chances there are to improve skill performance. As a result, scientists are now more interested in innovative kids who use critical thinking to address challenges in their academic or personal lives rather than high achievers (Mo'een et al., 2025: 2).

Creative Thinking and Education

"Only my schooling interrupted my education," Churchill stated. "We are all born as scientists, but we often lose our sense of curiosity in our school years," explains physicist Michio Kaku. Children are typically shaped in school, academic progress is monitored, and pupils receive report cards with grades at the end of the year. An alternative report card, according to Shade & Shade (2014), will significantly affect pupils' inventiveness. According to this report, children's creative productivity would have increased if the following traits could have been measured and evaluated: empathy, sense of humor, tolerance, observation, questioning level, self-confidence, imagination, risk taking, persistence, fields of interest, learning power from mistakes, adaptability, energy, and happiness. (Şenel & Bağçeci, 2019: 217).

Like all other types of thinking, creative thinking may be separated into two categories: active thinking and passive thinking. There is no tangible result or action at the conclusion of passive creative thought. In actuality, the majority of individuals ponder and come up with innovative ideas on a daily basis, but those ideas that are not put into practice are not really significant. Following active, creative thought, there is an action, a performance. This activity can take place in a variety of structures, including creative works like stories, poems, novels, plays, inventions, designs, paintings, and problem-solving. Of course, the creation of these things

requires more than just the capacity for creative thought; nevertheless, it also requires the ability to at least partially embody the notion.

There may be a problem at a school when the culture of creative thinking is being replaced. Does creative teaching take happen in schools, or is it just taught there? In a school whose goal is to develop students' capacity for creative thought, it is expected that teaching strategies and tactics would be imaginative and creative. Students should be immersed in the creative atmosphere and continue their education as part of the process, rather than learning creativity as an external aspect. Because of this, a learning environment that tries novel ways in addition to the conventional ones will be more effective. Humor has been found to have a favorable impact on both the amount and quality of creative thinking in groups, according to research on creativity (Shade & Shade, 2016). To accomplish both classroom management and curriculum fulfillment, instructors are, however, making the learning atmosphere more serious. Furthermore, homework tries to reinforce the principles acquired more than it does to help students become better thinkers.

The role of technology in creative thinking

In general, creative thinking is seen as a mental process that emphasizes reasoning and thinking in order to acquire new knowledge. The ability to believe is known as creative thinking, and it starts with knowledge of the current circumstance, which is viewed as a problem that has to be resolved. Khalil et al. (2023) define creativity as the capacity to forge new connections, view a topic from fresh angles, and mentally mix preexisting ideas in novel ways. Being attentive to issues, keeping an open mind while considering novel and unconventional solutions, and being able to link ideas to solve problems are all components of creative thinking. essential part in developing pupils' capacity to creatively tackle difficult problems inventiveness, and elaboration, all of which are essential in developing students' capacity to approach difficult problems creatively (Hambali et al., 2025: 2).

Conclusion

Since it helps to build the inventive skills required for advancing science and enhancing performance in a variety of sectors, creative thinking is crucial to the evolution of human societies. It is obvious that the educational process is essential to the development of creative thinking capabilities, thus it is necessary to use a variety of teaching strategies that cater to students' requirements and foster their creativity. According to research, one measure of a person's creative potential is their capacity for divergent thinking, which involves solving issues in novel ways.

In the context of education, research demonstrates that the use of digital technology, interactive learning settings, and disciplinary integration all help to foster students' creativity. Another important element in promoting creative thinking is an educational setting that values experimenting and acknowledges errors as a necessary component of learning. Furthermore, by offering suitable training and encouraging an innovative culture, businesses and educational institutions must establish settings that encourage creativity.

Even though there has been progress in incorporating creative thinking into professional and educational contexts, there are still issues that need for changes to teaching strategies, workplace management techniques, and curriculum. Therefore, it is crucial to keep studying and creating practical ways to encourage creative thinking in order to drive innovation and change in a variety of disciplines as well as to adapt to the needs of the times.

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