



Review paper

Fostering Creativity in Education

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KEYWORDS

- Creativity
- Experimentation
- Mental
- Well-being
- Reformation
- Curriculum
- Emotional Intelligence
- Self-expression

ABSTRACT

Creativity is one of the vital life skills which unlocks new avenue to self-express. The classroom is the perfect place where students spend more hours to learn and grow. A creative ambience motivates the students to learn through experimentation, use their imagination and to think critically in developing their own theories, ideas and set them in motion. Teachers are the major asset of an institution who can help the students nurture and cultivate their creative capacity. Creativity is possible by bringing reformation in curriculum, by incorporating creative activities into lesson plans, promoting brainstorming sessions, group projects and hands on learning experiences to explore students' interests and passion by encouraging its continuous development. Fostering creativity is a major challenge for the teachers and it is crucial for personal and professional development of students which promotes emotional intelligence, self-expression and mental well-being.

1. Introduction

1.1 The Importance of Creativity in Education

Education is a powerful tool to enhance our competency in personal and professional life. All nations have different culture, level of economy, different approaches to reform which are reflected in educational outcome. The fundamental goal of education is equality in education. Education needs to be more than just passive reproduction of information and the missing element is creativity. Whatever may be the discipline, creativity is an essential component of progression, growth and motivation. Classrooms are the places where more creative thinking and actions occur. Teachers are not prepared to teach creativity, but they are working toward finding new ways of teaching. In the article, *Creativity in Education System*, says, "Teacher should introduce innovative ways of teaching by giving priority to activity-based learning and enable learning with experience and observation" (Chetty, n. d.).

Creativity requires several preconditions to function within a system of education. Equal education promises all students would have the same chance competing justly with the opportunity of employing creativity



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rationally. As an educator it is important to inject some creativity in the classroom environment. Creativity is not just paints and pencils, but it's a process and a way of thinking to execute and self-express original ideas. To foster creativity in the classrooms, the teachers must understand how creativity originates. Creativity is a silent issue it would be hard to recognize. Usually, Creative individuals do not live a good impression as a gifted student. Students who are active in solving problems fast or answering questions quickly resonates with gifted students, but it does not necessarily mean they are creative. The article *Gifted Education in India* states two significant statements, "Professionals working with gifted students recognize that creativity is a salient issue and an important component for giftedness, ..., while some further stress that creativity is actually the highest form of giftedness" (Roy, 2016).

Schools and society both play an important role on creativity. To unlock the power of imagination, to transform creative thoughts into creative actions become significant in the educational agenda. Teachers can almost teach anything in a creative way possible so that students need to do things in new ways and come up with novel ideas. Teaching students to think creatively is perhaps the efficacious and comprehensive skill necessary to leading change in the future (Harding, 2010).

Creativity is freedom of expression. When students learn their academic subjects, they learn a specific way of solving things. With creative subjects there is no 'right' way, only the way an individual would like to do something. The process of creative education teaches them to view the world through different lenses, instead of the one single way that an academic education provides. It can also foster productivity and efficiency; when a student comes up with an idea, they are more likely to be able to find ways to work around impending barriers and achieve this idea because of learning to think 'out of the box' (Windebank, 2020).

If creativity is one of the desired learning goals, then teacher capacity is pivotal in teaching for creativity, but many teachers think that they are not themselves creative and therefore can't teach creativity. Moreover, there are many issues teachers face: conflicts in policy and practice, tensions in meeting the subject matter requirements and designing learning tasks to foster student creativity, the fear of curricular chaos, the call for subject-content-based curriculum to teach for creativity and so on. All these dilemmas impede teachers' understanding of creativity, and attitudes towards creativity. Craft (2003) points to the need for teachers to know what creativity is all about, so that they know how to teach for creativity.

Writing is a requirement at every grade level of students' academic journey and hence it can be used to foster artistic expression, stimulate the imagination, clarify thinking, and explore the value of writing and its range of functions. Creative writing provides opportunities for students to explore different kinds of writing, while still incorporating critical thinking skills. It also "promotes teamwork and peer editing," and "gives students liberty of expression, interest, and purpose in the course of work" (Avila, 2015, p. 98).

Fostering creativity in the classroom has profound implications for social development. Collaborative and imaginative projects encourage students to work together, share ideas, and appreciate diverse perspectives. These collaborative efforts not only enhance teamwork and communication skills but also promote empathy and understanding. Beyond individual cognitive benefits, creativity fosters collaboration, communication, and teamwork. Creative classroom environments encourage students to express their unique perspectives, fostering a sense of inclusivity and diversity. This collaborative spirit prepares students for the collaborative nature of the modern workplace and societal interactions (Runco, 2014).

Creativity in classrooms also plays a crucial role in enhancing students' emotional well-being. Engaging in creative activities promotes a positive emotional climate, reduces stress, and contributes to a sense of accomplishment. This emotional well-being is linked to increased motivation and a more positive attitude towards learning (Beghetto & Kaufman, 2014).

To harness the benefits of creativity, educators must adopt pedagogical approaches that prioritize creative thinking. Integrating project-based learning, inquiry-based methods, and incorporating arts into the curriculum are strategies proven to enhance creativity in classrooms (Craft, 2013).

2. Literature Review

2.1 The Vital Role of Educators

Educators play a pivotal role in shaping the learning environment, which significantly influences students' creative expression and exploration. According to Amabile (1996), the work environment is a key determinant

of creative performance, encompassing factors such as freedom, support, and challenging tasks. Similarly, in educational settings, classrooms characterized by openness, encouragement of diverse perspectives, and a tolerance for risk-taking foster creativity (Sawyer, 2012). Educators can cultivate such an environment by promoting a culture of experimentation, valuing originality, and celebrating diverse forms of expression.

Autonomy and intrinsic motivation are the innate drivers of creativity, enabling individuals to pursue self-directed learning and take ownership of their creative endeavours (Deci & Ryan, 1985). Educators play a crucial role in fostering autonomy by providing opportunities for choice, autonomy, and self-regulation within the learning process. By offering autonomy-supportive feedback and scaffolding, educators can nurture students' intrinsic motivation, thereby fostering a sustainable drive for creative expression (Ryan & Deci, 2000). Furthermore, fostering a growth mind-set, characterized by a belief in one's capacity for growth and learning, enhances students' resilience and willingness to experiment creatively (Dweck, 2006). Through these supportive practices, educators empower students to embrace challenges, persevere in the face of setbacks, and realize their creative potential.

Pedagogical approaches employed by educators profoundly impact students' engagement and creative development. Traditional methods centred on passive learning and rote memorization often stifles creativity by limiting opportunities for exploration and experimentation. In contrast, innovative pedagogies such as inquiry-based learning, project-based learning, and problem-solving approaches stimulate creativity by encouraging active participation, collaboration, and critical thinking (Craft, 2005). For instance, in project-based learning, students engage in real-world challenges, requiring them to devise creative solutions through interdisciplinary inquiry and application of knowledge (Thomas & Brown, 2011). By embracing these pedagogical approaches, educators empower students to unleash their creative potential and develop essential skills for innovation.

2.2 Pedagogical Approaches to Prioritize Creativity

Creativity stands as a fundamental human trait that drives innovation, problem-solving, and adaptation to change. In the contemporary landscape, characterized by rapid advancements and unpredictable challenges, fostering creativity has emerged as a central goal in education. Creativity is a critical skill in today's rapidly evolving world, and educators are continually exploring innovative pedagogical approaches to foster and enhance creative thinking in students. This research article provides a comprehensive review of various pedagogical approaches proposed to enhance creativity in educational settings. Drawing on a range of research articles, this analysis aims to shed light on effective strategies that educators can employ to cultivate creativity in their students. One of the pedagogical approaches that has gained attention for fostering creativity is Problem-Based Learning (PBL). PBL is an instructional method where students collaboratively solve complex, real-world problems. By engaging in open-ended problem-solving, students are encouraged to think critically, analyze information, and develop innovative solutions. Research by Savery and Duffy (1995) highlights the positive impact of PBL on creativity, as students are motivated to explore diverse perspectives and apply creative problem-solving skills.¹⁰

Design Thinking is another pedagogical approach that has gained popularity for fostering creativity in various disciplines. Rooted in the principles of empathy, iteration, and collaboration, Design Thinking encourages students to approach problems with a human-centred perspective. A study by Brown (2008) emphasizes the role of Design Thinking in enhancing creativity by promoting a mind-set that embraces experimentation, failure, and continuous improvement.¹¹

Inquiry-Based Learning (IBL) is an approach that encourages students to explore and investigate topics independently. By posing open-ended questions and guiding students through the process of discovery, educators create an environment that stimulates curiosity and creativity. A study by Pedaste et al. (2015) supports the effectiveness of IBL in enhancing creativity, emphasizing the importance of student autonomy and intrinsic motivation.¹²

Project-Based Learning involves students working on an extended project that addresses a real-world challenge. This approach allows for the integration of various skills and encourages students to apply creativity in designing and executing their projects. Thomas (2000) emphasizes the positive impact of Project-Based Learning on creativity, highlighting the authentic and meaningful learning experiences it provides.

The Flipped Classroom model involves students learning content at home through instructional materials, allowing class time to be dedicated to interactive and collaborative activities. This approach provides educators with the opportunity to engage students in creative problem-solving, discussions, and hands-on projects. A study by Lage, Platt, and Treglia (2000) suggests that the Flipped Classroom model positively influences student engagement and creativity.

These are some of the effective pedagogical approaches which contribute to the enhancement of creativity in educational settings. Problem-Based Learning, Design Thinking, Inquiry-Based Learning, Project-Based Learning, and the Flipped Classroom model are a few strategies that educators can employ to nurture creative thinking in students. By understanding and implementing these approaches, educators can create dynamic learning environments that inspire innovation and prepare students for the challenges of the future.

3. Impact and Outcome

The efforts of educators in fostering creativity yield profound outcomes that extend beyond academic achievement to encompass personal growth, adaptability, and societal impact. Research indicates that students exposed to creative learning experiences demonstrate enhanced problem-solving skills, critical thinking abilities, and resilience in the face of challenges (Kim, 2011). Moreover, fostering creativity cultivates a sense of agency and empowerment among students, enabling them to envision alternative solutions to complex problems and effect positive change within their communities (Craft, 2012).

Fostering creativity in classrooms fosters a sense of engagement and motivation among students, driving intrinsic interest in learning. Robinson (2009) argues that traditional educational approaches often stifle creativity by prioritizing conformity and standardized assessments. Conversely, environments that encourage creative expression and exploration empower students to take ownership of their learning journey, resulting in greater enthusiasm and commitment to academic pursuits.

Furthermore, individuals who develop creative competencies in childhood are more likely to exhibit creativity in adulthood, contributing to innovation and advancement in diverse fields (Root-Bernstein & Root-Bernstein, 2013). Thus, the investment in fostering creativity by educators yields far-reaching benefits that extend beyond the confines of the classroom. The outcomes of fostering creativity in classrooms extend beyond academic achievement to encompass broader personal and societal benefits. Csikszentmihalyi (1996) proposes that engaging in creative activities fosters a state of flow, characterized by deep focus and satisfaction, which contributes to students' overall well-being.

Research indicates a positive correlation between creativity and academic performance across diverse disciplines. Kim (2011) conducted a meta-analysis of studies examining the relationship between creativity and academic achievement, revealing a significant association between the two constructs. Students who engage in creative activities demonstrate higher levels of motivation, persistence, and cognitive flexibility, ultimately translating into improved academic outcomes.

4. Discussion

4.1 Challenges in Fostering Creativity in Classrooms

Education is not merely about imparting information; it's about nurturing critical thinking, problem-solving skills, and creativity. Research consistently shows that fostering creativity in the learning process enhances student engagement, motivation, and overall academic performance (Amabile, 1996; Runco, 2003). The current emphasis on standardized testing often stifles creativity, leaving many students disengaged and struggling to find relevance in their studies (Sternberg, 2003). To address this issue, it is essential to explore research-backed strategies for infusing creativity into the syllabus.

Despite its importance, fostering creativity in classrooms poses several challenges. One of the primary challenges is the traditional education system, which often prioritizes standardized testing and rote memorization over creative expression (Runco & Jaeger, 2012). Moreover, the pressure to perform well on standardized tests can create anxiety among students, hindering their ability to think creatively and explore innovative solutions (Kim, 2011). Additionally, limited resources, time constraints, and teacher training gaps hinder the integration of creative practices into curricula (Craft, 2005). Further, the misconceptions about

creativity, such as the belief that it is an innate talent rather than a skill that can be developed, further inhibit its promotion in education (Sternberg & Lubart, 1999).

Even curriculum constraints pose significant obstacles to fostering creativity in classrooms. With curricula often heavily focused on meeting content standards and achieving predetermined learning outcomes, there is limited flexibility for teachers to incorporate creative activities and open-ended tasks (Sawyer, 2012). Furthermore, the time constraints imposed by packed schedules and rigid curriculum frameworks leave little room for exploration, experimentation, and reflection—essential components of fostering creativity (Craft, 2005). As a result, teachers may feel pressured to prioritize coverage of material at the expense of allowing students the freedom to engage in creative pursuits (Sternberg & Lubart, 1999).

The attitudes and beliefs of teachers also play a critical role in either fostering or inhibiting creativity in classrooms. Educators who hold misconceptions about creativity may unintentionally undermine students' creative development by emphasizing conformity, adherence to rules, and fear of failure (Cropley, 2006).

Moreover, teachers who lack confidence in their own creative abilities may feel ill-equipped to cultivate creativity in their students (Sawyer, 2012). Additionally, time constraints, workload pressures, and institutional expectations may lead some teachers to prioritize more traditional instructional methods over creative approaches (Craft, 2005). Without adequate support and training in fostering creativity, educators may struggle to create environments that encourage imaginative thinking and innovation (Plucker et al., 2004). Cultural factors also exert a significant influence on the fostering of creativity in classrooms. Cultural attitudes towards creativity, risk-taking, and conformity vary widely across different societies and can impact educational practices (Simonton, 2017).

Cultural stereotypes about creativity and the arts may lead to undervaluation of creative pursuits in favour of more "practical" or "utilitarian" fields of study (Kim, 2006). As a result, students from certain cultural backgrounds may face unique challenges in expressing their creativity and pursuing creative endeavours in the classroom.

4.2 Strategies for Bridging the Gap

Despite the numerous challenges in fostering creativity in classrooms, several strategies and interventions can help educators create environments that support and nurture creative thinking among students. One approach is to integrate creative activities and open-ended tasks into the curriculum, providing students with opportunities to explore, experiment, and collaborate (Craft, 2005).

Teachers can also incorporate techniques such as brainstorming, divergent thinking exercises, and project-based learning to foster creativity and innovation (Sawyer, 2012). In addition to, professional development programs and workshops can help educators develop the knowledge, skills, and confidence needed to effectively foster creativity in their classrooms (Plucker et al., 2004).

Furthermore, fostering a supportive and encouraging classroom climate where students feel safe to take risks, make mistakes, and express their ideas can help cultivate creativity (Amabile, 1996). By implementing these strategies and interventions, educators can begin to overcome the challenges and create environments that promote and celebrate creativity in classrooms.

5. Conclusion

Fostering creativity in classrooms is a complex and multifaceted endeavour, fraught with numerous challenges. From the prevalence of standardized testing to curriculum constraints, teacher attitudes, and cultural influences, various factors can inhibit the development of creative thinking among students. However, by recognizing these obstacles and implementing strategies and interventions to overcome them, educators can create environments that support and nurture creativity. By prioritizing creative activities, fostering a supportive classroom climate, and providing professional development opportunities for teachers, schools can better equip students with the creative skills necessary for success. Ultimately, by addressing these challenges, educators can help cultivate a generation of innovative thinkers capable of navigating an ever-changing world.

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