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Symbiotic Relationship of Creativity with Technology in the Field of Education

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Abstract

This paper is an attempt to explore, analyse and evaluate the symbiotic relationship of creativity with technology in the field of education. Creativity has the potential to change the world and solve the problems of life. Future is looking towards creativity. Creativity is the capability which will remain in demand always. The technological advancement has changed every aspect of human life. It has brought new options, opportunities and alternatives to the teachers as well as learners. It has created new platforms to express the creativity in various forms. Development of social media like YouTube, WhatsApp, Facebook, Instagram etc. has given new ways to explore creativity for the learners. The learners are able to express their views, ideas and imaginations freely and fearlessly through different digital apps, tools and platforms. Technology has drastically changed the way we approach creativity. It has offered unparalleled opportunities for expression, exploration and experimentation in the field of teaching, learning and research. AI-powered tools, online workspaces and social media platforms have made the process of teaching and learning much more effective, creative, productive, interactive and collaborative in the field of education. The world of education is going through a paradigm shift.

Keywords: Technology, teaching, learning, evaluation, creativity, social media, education, AI.

Introduction

Technological advancement has revolutionized the way the learners get engaged, interact and learn with educational content. It has created an ecosystem that encourages the spirit of creativity like never before. Creativity keeps an individual active, alert, excited, energetic and productive. It is intimately linked with the idea of problem solving, divergent thinking and decision making. It is an attitude which affects all the aspects of human life. It keeps the brain ignited, sparked and illuminated. It facilitates exploration, experiences and experimentation in the field of education. Freedom, acceptance and positive ambience are the key factors in promoting the creativity of the learners at different levels of education. If we want to enhance the creativity of a child, we have to create an ecosystem where a child can express his or her own ideas freely and fearlessly without any hesitation. Technological advancement has played a vital, critical and decisive role in creating an environment which can facilitate the creativity of the learners in various ways (Zhou, 2018) [7]. It has created a climate where the learners are free to express, explore, experience, experiment and evaluate. This has led to the enhancement of creativity, innovation and collaboration amongst the learners empowering them to shape their own future alongwith the destiny of the upcoming generations (Bailey & Snow, 2021) [1]. The creativity of the learners plays a significant role in the growth, development and

advancement of a society or nation as a whole. A society cannot develop in a real sense without the creative contributions of its members.

Creativity as a Path to Build a Learning Culture

A leaning culture is a culture that values, facilitates and gives opportunities for continuous and lifelong learning for all the members of a society without any kind of discrimination. No culture can grow, develop and evolve without new ideas, thoughts and directions. Freedom to explore, opportunities for creativity and acceptance of new perspectives leads to the betterment, development and advancement of a society and its culture. New creations, relations and equations are required to solve the problems of present and future generations. Creativity acts as a driving force or foundation for the new ideas, insights and imaginations. It is the way to think differently and create something new and beneficial for the society. It brings novelty, newness and betterment. It plays a significant role in all the aspects, spheres and domains of life. It allows, enables and empowers individuals to think out of the box, to express them in a unique manner and solve different kinds of problems in innovative ways. By facilitating creativity, we can create unusual connections, improve existing products and make meaningful contributions to the society as a whole (Tsortanidou & Dagiene, 2020) [4]. In the field of education, research and lifelong learning creativity

has its own importance.

Facilitating the creativity of a learner is the prime responsibility of the education system of any nation or society. Each society faces several problems in various forms on daily basis. Creativity helps solve these problems of the society in an effective and productive manner. It acts as a powerful tool of social transformation, development and evolution. It can solve the various problems of the society in diverse ways. It helps explore the unexplored, experiment the unexperimented and experience the inexperienced. Innovation, divergent thinking and out of the box thinking are the results of creativity. The power of creativity must be realised, utilised and applied to make a better society to live in. Creativity plays a significant role in solving the problems of individuals, societies and world. It has the potential to explore the solutions of day to day life (Zhou, 2018) [7]. Society needs creative people who can create something beneficial to the society. The betterment of the society depends upon the quality of the life of people. And creativity plays a critical and vital role in deciding the quality of life. It focuses on the alternative uses, divergent thinking and making relationships between unrelated things. It has the potential to connect people, solve problems and transform societies.

Nurturing Creativity with Technology

Technology and creativity share a symbiotic relationship where both are interdependent on each other. Technology makes available various tools which facilitate creative potential of the learners (Henriksen & *et al.*, 2021) [2]. On the other hand creativity of the learners facilitates technological innovations. Digital platforms like AI-driven tools, social media, virtual reality etc. allow experimentation beyond traditional limits. Technology has played a significant role in facilitating the creativity of the learners irrespective of caste, creed and colour. Technological advancement has connected the whole world and made it as a global village. Social media, internet connectivity and AI-driven tools have empowered everyone to share his or her ideas, ideals and imaginations freely and fearlessly. This situation has facilitated the creativity of the learners. The learners are free to think, express and share without any limit, beyond the boundaries and across the borders. They are able to think out of the box. In the present era of postmodernism the digital technology has played a crucial, critical and decisive role in enhancing the creative thinking patterns of the learners without any pre-determined manner (Wu & He, 2025) [6]. The power of technology is being recognized, analyzed and utilized by the learners to promote their creativity, innovation and out of the box thinking irrespective of their domain, status and background.

Technology plays a major role in facilitating creativity by making opportunities available to learners with digital tools and platforms. With access to various apps, online resources and software applications learners can express themselves, experiment with new ideas and explore the untravelled paths. AI tools, virtual labs and social media further amplify the creativity of the learners by connecting them with the world. By rupturing the traditional barriers, technology opens new paths of thinking which makes creativity a limitless quest in the field of education (Henriksen & *et al.*, 2021) [2]. Furthermore, the technology has connected the learners with the experts of their fields worldwide. A learner of remote region can access and explore the best learning content of their own field and get connected with the experts globally without any hesitation. Creativity of the learners gets

enhanced, when the opportunities are given to express, explore and experiment. The acceptance of new and novel ideas gives confidence to the learners and motivates them to go further to explore and experiment more and more. Curiosity plays a vital role in facilitating the creativity of the learners. It acts as a stimulus or spark to facilitate the creativity of the learners irrespective of their field.

Technology as a Catalyst for Creativity

In chemistry a catalyst speeds up a reaction without getting consumed. Technology plays the same role in case of human creativity. It acts as a catalyst for facilitating the creativity of a learner. Creativity is the ability to connect with the unconnected. It makes a learner energetic, excited and enthusiastic to create something new, novel and unusual. Technology plays a vital, critical and noteworthy role in enhancing the creativity of a learner. Technological advancement has given opportunities to learners for expressing themselves in diverse ways using different platforms (Kolyvas & Koutsoukos, 2021) [3]. Social media platforms have evolved as a connecting tool for the learners. These platforms are being used frequently by the learners to share their ideas, views and thoughts freely and confidently. Modern gadgets, technological tools and new pedagogies have made the process of teaching, learning and evaluation much more effective, creative and productive for the teachers as well as the learners. The process of learning has become much more engaging, interactive, collaborative, transformative and meaningful. Education is experiencing a paradigm shift worldwide.

Technology has revolutionized the way teachers can facilitate the creativity of the learners (Zhou, 2018) [7]. With tools like educational apps, interactive whiteboards and different online collaboration platforms, teachers can create engaging lessons that spark ideas, innovations and imaginations. By using different technological tools, teachers can go beyond traditional teaching methodologies and create a dynamic, multidimensional and learner-centric learning environment that enhances divergent thinking, problem-solving attitude and decision making skills. The growth and development of creative technology in the present era has given a huge, diverse and global platform to the learners to connect, interact and integrate for the purpose of exchanging the ideas, insights and imaginations. Social media, AI-driven tools, educational apps, virtual classrooms, animated films etc. have entirely changed the face of education system worldwide (Tsorantidou & Dagiene, 2020) [4]. The traditional methods of teaching, learning and evaluation are being replaced by modern methods, methodologies, pedagogies, strategies and technologies. This has resulted into the new opportunities of creativity to the learners.

Creativity through Freedom Provided by Technology

An environment where the learners are free to express their original ideas enhances the creativity of the learners. Freedom and creativity go hand in hand. Freedom should be given to the learners to encourage their creativity. Freedom to engage, freedom to express, freedom to explore, freedom to experience and freedom to experiment is required to facilitate the creativity of the learners (Wong & Li, 2022) [5]. Modern Technology has the potential to provide this freedom to the learners to a great extent. Social media, digital platforms, AI driven tools etc. have created the desire, space and freedom to the learners to express and share their ideas, insights and imaginations with the world in a free and fearless manner.

Further, there is much possibility of acceptance of the unusual, unconventional and creative ideas by the like-minded people on the social media platforms. The acceptance of these ideas motivates the learners to think the new, novel and innovative ideas further. Technology can act as a powerful tool to promote the creativity of the learners in divergent ways. This technology may help the learners explore the hidden potential of their own creativity.

The role of digital technology in facilitating the creativity of the learners is crucial, critical and vital. Technological advancement has encouraged creativity by lowering barriers to experimentation, giving instant feedback and enabling new forms of collaboration and generation of ideas, insights and imaginations. Digital technology is just a tool. How do we use it matters a lot. It can be used to replicate as well as to create something new. In the field of education the use of digital technology to replicate or to create something new depends upon the attitude, mindset and creativity of the learners. If a learner uses the technology to replicate, his or her creativity will tend to shrink. On the other hand, if a learner uses the technology to create something new, his or her creativity will tend to grow and develop. Every learner has the freedom to choose either to replicate or to create something new with the help of technology. The technology can serve as both blessing as well as curse in shaping the creativity amongst the learners, depending on how it is used (Kolyvas & Koutsoukos, 2021) [3]. It can be beneficial as well as disadvantageous depending upon the purpose of using it. A learner of a remote region can shoot films using his or her mobile phone, design art using free apps or collaborate easily with others spending time on the platforms of social media for the purpose of turning his or her imagination into reality.

Conclusion

A paradigm shift is taking place in the field of education worldwide because of technological advancement. Technology plays a crucial, critical and vital role in nurturing the creativity of the learners by allowing them to access different tools, resources and platforms. It enables collaboration, innovation and divergent thinking which allows the learners to express themselves and apply new ideas to their lives. Technology has the potential to unlock new avenues and opportunities for creative exploration and learning. Further, it plays a significant role in shaping the creativity, behavioural patterns and the ways learners interact with others. Creativity and technology are interlinked, interdependent and interconnected with each other in a symbiotic manner. Both influence each other. Technology acts as a catalyst in facilitating the creativity of the learners. Technological advancement has given opportunities to the learners to explore the unexplored. It has made available the platforms to the learners where they can express their ideas, insights and imaginations freely. In a postmodern world it has facilitated the creativity of the learners through providing them freedom to think without any boundary. Creativity fuels growth and development by facilitating exploration, experimentation and innovation. It enables individuals to create new ideas, solve the problems in original ways and face the new challenges effectively. An ecosystem which gives freedom to the learner to express their original ideas enhances their creativity.

References

1. Bailey CJ, Snow K. Virtual reality and creative pedagogy: Exploring immersive technology as a tool for

student ideation. *Journal of Educational Technology & Society*. 2021;24(2):74–86.

2. Henriksen D, Creely E, Henderson M, Mishra P. Creativity and technology in teaching and learning: A literature review of the uneasy space of implementation. *Educational Technology Research and Development*. 2021;69(4):2091–2108.
3. Kolyvas S, Koutsoukos M. Technology and creativity on early adolescence: A case study in an innovative school. *Creative Education*. 2021;12(10):2345–2360.
4. Tsortanidou X, Dagiene V. Connecting moments of creativity, computational thinking, collaboration and new media literacy skills. *Informatics in Education*. 2020;19(2):293–314.
5. Wong TK, Li KC. The use of virtual reality platforms in teaching artistic disciplines as a factor in creative development. *Journal of Education and Training Studies*. 2022;10(3):34–44.
6. Wu B, He Y. A new realm of human AI co creative learning: AI empowered science and innovation education. *Journal of Teacher Education*. 2025;12(4):14–24.
7. Zhou C. Empirical study on creativity development by technology-enhanced learning in higher education. *Thinking Skills and Creativity*. 2018;29(4):1–11.