Unleashing Human Creative Potential in the Age of Artificial Intelligence: An Academic Perspective

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Abstract
This study explores the connection between Artificial Intelligence (AI) and human creativity by examining perceptions, experiences, and reflections on AI-generated creative content. It examines the extent to which AI enhances or diminishes creativity and abilities across various domains. The study employed a qualitative research methodology that included thematic analysis to ascertain major patterns and percentage analysis to measure participants' awareness and perception levels. A semi-structured questionnaire was disseminated via Google Forms. AI has been found to have a significant impact on creative creation by rapidness of idea generation and increasing efficiency. However, concerns about over-dependence, ethical consequences, and the possible defeat of authenticity in human expression persist. The result shows a mixed response about AI and human creativity. When asked about the genuineness of AI-generated creativity, 26.2% of respondents rated it as very creative, while 32.3% considered it somewhat creative, on the other hand, 12.3% felt that AI had diminished their creativity. Meanwhile, 23.1% of respondents believe that AI will dominate and potentially replace human creativity, while the majority (63.1%) think AI will assist but not replace human creativity. Most of the respondents believe that careful action can complement AI and human creativity without taking the place of one another. People can increase their creativity and productivity by utilizing AI's capabilities. AI significantly contributes to the advancement of learning and skill development in education. This study emphasizes the need for ethical awareness and flexible methods to preserve individuality in creative occupations. Instead of replacing human imagination, AI should be viewed as a tool and co-pilot towards co-creation and enhancing the quality of outcomes.
Keywords: Creativity, Human, AI, Productivity

Introduction

Humans possess the highest level of intelligence among all living things. Artificial Intelligence, a human invention, has become maybe the most pervasive innovation in the entire globe. In the present world, AI is widely used in industries including healthcare, IT, and education to achieve efficiency with impact. However, people can occasionally be too lazy to do anything with their inflow. They attempt to create projects using AI because of its dynamic nature and extensive data reservoir that provides effective information about needed matters. Studies reported that people's desire to innovate and solve problems on their own is waning as a result of their increased reliance on AI-driven solutions due to their convenience. Every human being has a distinct personality and creative ability, making them immensely diverse. But if we do not use these creative skills, it will be like Darwin's theory of evolution, which stresses the survival of the fittest. Technological advancements are a double-edged sword, offering both opportunities and challenges (Caporusso, 2023; Christensen, 2018). This is especially true for paradigm-shifting innovations

like AI, which blur the lines between human and machine capabilities (Caporusso, 2023). The digital age has driven not just human-machine co-evolution but a true symbiosis, particularly with generative AI, redefining how we communicate, collaborate, and create (Caporusso, 2023; Yao, 2023). However, human effort and creativity tend to decline as a result of this growing reliance on AI. Instead of utilizing their natural abilities, they are increasingly depending on AI to complete activities and projects for them. Large volumes of data may be processed in a matter of seconds by AI, which is dynamic. Our natural creativity runs the risk of becoming outdated if we do not use our brains to come up with new concepts. Finding a balance is essential to preventing this, making sure that we actively foster and use our creative capacities while simultaneously taking advantage of AI's potential.

Defining Creativity and Artificial Intelligence

According to the Dictionary of the American Psychological Association, "*Creativity is the ability to produce or develop original work, theories, techniques, or thoughts. A creative individual typically displays originality, imagination, and expressiveness.*" Creativity extends beyond traditional arts to fields like business, technology, medicine, and education. True creativity combines novelty with effectiveness, yielding outcomes that range from inspiring new perspectives to creating innovative solutions, enhancing efficiency, or achieving societal and practical advancement (Cropley, 2020). As a foundation of innovation, creativity is a basic quality of new production. It encourages the creation of solutions that address new needs, ignite new ideas, and turn obstacles into opportunities. Boden (1998) identifies three primary categories of creativity. Combining well-known concepts in fresh ways, including analogies and lyrical imagery, is known as combinational innovation (Boden, 1998). The process of coming

up with new concepts by investigating organized conceptual regions that provide surprising but reasonable results is known as exploratory creativity (Boden, 1998). The most unexpected inventions are frequently the outcome of transformational creativity, which modifies basic elements of a conceptual space to produce concepts that were previously impractical (Boden, 1998).

Artificial Intelligence consists of codes, techniques, algorithms, and data that enable computer systems to mimic human behavior and make decisions comparable to or even superior to those of humans (Anantrasirichai & Bull, 2022; Russell and Norvig, 2020). With the growing power and ubiquity of AI, interactions involving communication by, with, and between AIs have become an integral part of daily life (Solum, 2014). "*Artificial Intelligence (AI) is a technology that enables computers and machines to simulate human learning, comprehension, problem-solving, decision-making, creativity, and autonomy*" (Stryker & Kavlakoglu, 2024).

Difference between Human Natural Creativity and Artificial Creativity

People naturally construct meaning through their thoughts and mental processes, which influence their writing and speaking. On the other hand, non-human entities, such as AI systems or organizations, provide manufactured meaning. By combining words in novel ways, AIs create meaning using algorithms that produce results that are outside the direct control of their programmers (Solum, 2014). Because of the meaning-based natural intelligence, all living things can make decisions, adapt, and meaning to their surroundings. Human creativity is driven by emotion, and personal expression while AI excels in speed and efficiency, it lacks originality, intent, and deep contextual understanding, as human artists innovate and improvise, whereas AI imitates and structures output from existing data (Ok, 2025).

Table 1 Difference between Human Natural Creativity & AI-Created Creativity

Themes	Human Natural Creativity	AI-Created Creativity
Nature of creativity	It rises from life experiences, feelings, intuition, and consciousness.	It comes from algorithmic experimentation under predetermined parameters and data-driven process

Connection making process	Humans commonly use a combination of expertise to produce unique ideas.	To create something, AI employs structured algorithms that explore a predefined creative domain.
Evaluation & autonomy	Humans use emotional resonance, external feedback, and internal criteria to assess their creative endeavors.	AI evaluates output using predefined goals or feedback loops.
Flexibility	Being imaginative creatures, humans can investigate novel subjects.	AI is restricted to the fields in which it is trained and cannot automatically transfer knowledge to unknown fields.
Limitations	Limited by biases in cognition, emotion, and body	Limited by pre-set objectives, the information, and its inability to recognize itself.

Gap Analysis

Our existing understanding of human creative potential is limited with very less researches on its intersection with AI. Education systems presently prioritize traditional skills over creative thinking and AI literacy. This study delves into a framework (delineated by awareness, perception, experience, and reflections on AI-powered content) for understanding human creative potential at the helm of AI-powered tools. The study attempts to uncover the premonition towards an insufficient emphasis on human creative thinking and the role of AI in a thriving knowledge society.

Objectives of the Study

- Analyze human awareness, perception, experience, and reflection on AI creative content and preferences on using AI.
- Examine the extent to which AI affects creative production in different domains, and whether it diminishes or enhances human originality and skills.
- Predict AI's impact on creative fields in the next decade and the challenges of maintaining a balance between AI capabilities and human innovation.
- Identify approaches to ensure the sustainable coexistence of AI and human creativity without compromising innovation or individuality.

Methodology of the Study

In this study we adopted a multi-method triangulation approach, enabling cross-validation and a deeper exploration of factors influencing decision-making (Johnson et al., 2017). As noted by Noble and Heale (2019), triangulation enhances research credibility and validity by integrating multiple theories, methods, or observers to reduce bias and provide a more comprehensive understanding of complex behavior. It validates data in both qualitative and quantitative studies, enriches research through diverse datasets, and helps confirm, refute, or explain findings. Triangulation strengthens confidence in research outcomes by ensuring consistency across different methods (Risjord et al., 2002). For the qualitative part, we have incorporated thematic analysis to identify key patterns, themes, and insights. Thematic analysis is a qualitative research method used across various epistemologies and questions (Nowell et al., 2017). It identifies, analyses, organizes, describes, and reports themes within data (Braun & Clarke, 2006). Additionally, we have employed descriptive statistics to quantify basic demographic information about participants and assess their levels of awareness, perception, personal experience, and reflections on creativity in the context of AI. To supplement our qualitative findings, we have designed a semi-structured questionnaire and collected data through a Google Form. The Google form link was circulated through email and WhatsApp. The sample of this study were undergraduate, and postgraduate students, research scholars, and higher educational institution teachers. This study has drawn its 66 respondents from the state of West Bengal, specifically focusing on five districts: Kolkata, North 24 Parganas, Nadia, and Murshidabad. These districts were selected to ensure a diverse representation of the region, allowing for a comprehensive analysis of the study objectives. They provided valuable perspectives on how individuals perceive AI's role in the creative process, its impact on originality, and potential future developments in

human-AI collaboration. By synthesizing insights from both secondary sources and primary data, this study aimed to contribute towards the ongoing discourse on the evolving nature of creativity in an era increasingly shaped and dominated by AI.

Analysis of Responses
Demographic Details of the Respondents

Table 2 Gender of the Participants

Gender	Percentage (%)
Male	50.8
Female	49.2

Table 3 Age of the Participants

Age in Years	Percentage (%)
18-24	43.1
25-34	35.4
35-44	13.8
45-54	7.7

Table 4 Current Educational Position of the Participants

Current Position	Percentage (%)
Student	47.7
Research Scholar	24.6
Teacher	27.7

Table 5 Level of Education of the Participants

Level of Education	Percentage (%)
Bachelor's Degree	7.7
Master's Degree	55.4
M.Phil.	4.6
Ph.D.	32.3

Phase I: Percentage Analysis of Responses

Data and information about people's interaction with AI-generated content were obtained from the semi-structured interview. From this, it is observed that 43.1% of people are daily, 27.7% weekly, 10.8% monthly, 16.9% rarely, and 1.5% never interact with AI-generated content. On the other hand, 61.5% of respondents are most familiar with AI-generated text, such as articles and stories. The familiarity with AI-generated videos was 36.9% and PowerPoint presentations were 26.2%. While 18.5% and 15.4% of respondents recognized that they are using AI for Visual arts and music respectively. A small

percentage (1.5%) indicates familiarity with other types of AI-generated content. When asked about their understanding of AI-generated content, 26.2% of respondents rated it as very creative, while 32.3% considered it somewhat creative. An equal percentage (32.3%) remained neutral on the topic. Meanwhile, 7.7% felt that AI-generated content is not very creative, and a small percentage (1.0%) believed it is not creative at all. Regarding the impact of AI-generated content on human creativity, 23.1% of respondents believed it strongly enhances creativity, while 46.2% think it somewhat enhances it. A small percentage (6.2%) see no impact, whereas 18.5% feel it somewhat enhances or erodes creativity, and another 6.2% believe it strongly erodes creativity. When asked whether AI-generated content can be considered genuinely creative, 16.9% responded with a definite yes, while 56.9% agreed but only in certain contexts. Meanwhile, 13.8 believe AI lacks true creativity, and 12.3% remain unsure. Opinions on the increasing use of AI in creative fields such as writing, art, and music are varied, with 29.2% feeling very positive and 33.8% somewhat positive. A neutral stance is held by 26.2% of respondents, while 7.7% feel somewhat negative, and 3.1% are very negative. Concerns about AI's influence on human skills and originality show that 20% strongly agree that reliance on AI could diminish this over time, while 44.6% agree. Meanwhile, 20% remain neutral, 13.8% disagree, and only 1.5% strongly disagree. When asked about their use of AI tools for creative purposes, 75.4% of respondents reported having used AI tools such as ChatGPT, Gemini, Gamma, Quillbot, or Canva, while 24.6% had not. Among those who used AI for creative tasks, 22.4% were very satisfied with the output, while 58.6% were satisfied. A neutral stance was held by 15.5%, and only 4.4% expressed dissatisfaction, with no respondents reporting being very dissatisfied. Regarding the impact of AI on personal creativity, 47.7% felt that it enhanced their creativity, while 29.2% believed it had no impact. Meanwhile, 12.3% felt that AI had diminished their creativity, and 10.8% were unsure. However, when asked about their preferences for content creation, opinions were evenly split, with 27.7% preferring to create solely by themselves and an equal percentage opting for

AI assistance. The majority (44.6%) preferred a combination of both AI and personal effort. Looking ahead to the next decade to the next 10 years, 23.1% of respondents believe that AI will dominate and potentially replace human creativity, while the majority (63.1%) think AI will assist but not replace human creativity. A small percentage (6.2%) feel AI will have little to no influence on creative industries, and 7.7 % remain unsure about its future impact.

Phase II: Thematic Analysis of the Responses Obtained

Among qualitative researchers, thematic analysis is a very potential method for examining qualitative data, which often consists of detailed descriptive information (Naeem et al., 2023).

This study followed Creswell's (2012) six step approach to qualitative data analysis and interpretation:

Step 1: Data Preparation and Organization

In this study, qualitative data collected via Google Form, was compiled into a Word document, printed, and manually received. Key responses were highlighted for further analysis. The data were already in written form, thereby streamlining the process.

Step 2: Exploring and Coding

An initial reading of the data allowed for the development of preliminary codes for each question. After a thorough reading, initial codes were developed for each question/statement to identify key patterns and assign code labels to relevant text segments.

Step 3: Building Descriptions and Themes

The initial codes were synthesized into broader themes, structuring the data to capture the complexity of the phenomenon.

Step 4: Representing and Reporting Findings

In this study, findings were visually represented through figures (figure 1-4) to illustrate the relationships between codes and themes. These visual displays enhanced clarity and comprehension of the analyzed data.

Step 5: Interpreting Findings

The results were analyzed in the context of existing literature. Additionally, interpretation considered personal viewpoint & literature comparisons.

Step 6: Validating Accuracy

To ensure the credibility and reliability of the findings, validation techniques such as triangulation and article review were employed.

Q1: What is the Most Significant Impact of AI on Human Creativity?

In this question, the respondents were asked about the impact of AI on human creativity.

Theme 1: Positive Perspective of AI on Human Creativity

Respondents acknowledge this theme and asserted that AI fosters creative potential. AI contributes significantly to increasing creativity. It advances human thoughts, resolves challenging issues, and enhances cognitive abilities. AI is a powerful instrument that promotes creativity and higher-order thinking. Additionally, AI greatly increases productivity, proficiency, and accuracy and also decreases the effort in teaching and learning and speeding up a variety of jobs.

Example of Responses

1. "AI helps to develop new ideas and provide insights on creative works."
2. "When humans and AI work together, it can truly be unique."
3. "The emergence of AI minimizes the workload of the whole teaching and learning process."
4. "AI helps humans be more creative by automating routine tasks."

Theme 2: Negative Perspectives of AI on Human Creativity

AI has many advantages but it also has some disadvantages. When it comes to creativity it hampers the human to think new. Over-reliance on AI-generated content can hinder people's ability to come up with original ideas. Furthermore, by offering rapid, predetermined solutions rather than promoting in-depth investigation and creative problem-solving, AI can have a detrimental effect on critical and divergent thinking. In this sense, AI is frequently seen as a stifler of creativity, which could restrict the capacity to think creatively and produce genuinely unique ideas.

Example of Responses

- "Day by day AI engulfs the purity of human thinking."
- "It reduces the positive impact of own thinking."
- "Over-dependency on AI is making humans lazy."
- "An individual limits his or her thinking process by using AI in the field of creativity."
- "AI hampers the creative thinking ability."
- "AI can foster creativity, but overuse can diminish the distinct human quality of imagination."

Theme 3: Balanced Perspective of AI on Human Creativity

AI is an effective tool, but human involvement is crucial. AI is unable to mimic the deep-rooted human character, experiences, and emotions that support creativity. AI enriches human creativity rather than replaces it. To make sure that AI enhances rather than replaces human innovation, it is important to strike a balance between ethics and contexts. AI significantly contributes to the advancement of learning and skill development in education. It also provides insights and assistance to researchers in addressing difficult problems.

Example of Responses

- "AI can help a person express their creativity, but it cannot make a person creative."
- "Mixing human creativity with AI produces better results."
- "If used under control and direction, AI may help in creativity."
- "AI helps to explore, create, and innovate more."
- "AI impacting on generating new ideas with respect to the human mind.
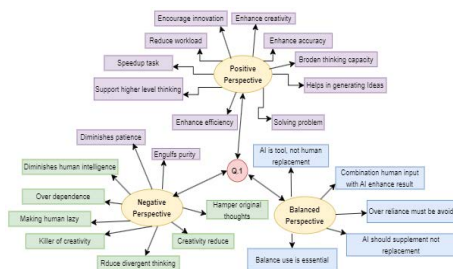
Figure 1 Thematic Coding on Question No. 1

Q2: What Steps can be taken to Preserve Human Creativity in the Age of AI-generative Creativity?

Respondents were asked to suggest approaches and steps to preserve human creativity in the age of AI-generated era under 50-100 words.

Theme 1: Encouraging Human Creativity

Preserving human creativity should be a major focus of education, making sure that people develop their capacity for critical thought and problem-solving. It is crucial to promote emotional intelligence and creative expression. Prioritizing creative and experiential learning will help children to develop their imagination and critical thinking skills. Reducing the usage of AI in daily tasks is essential for preserving originality. Promoting independence through exercises that prioritize human resourcefulness over mechanized support guarantees that creativity will always be a crucial component of education and problem-solving. Furthermore, using practical creative skills like deep thinking, brainstorming, and artistic expression encourages people to be more unique.

Example of Responses

1. "Foster environments that encourage curiosity, independent thought, creativity from early age."
2. "Develop critical thinking skills, cultivate curiosity, prioritize emotional intelligence."
3. "Focus on nurturing creative problem-solving and self-expression."
4. "To keep human creativity alive in the AI-generated era, use AI as a tool, not a replacement."
5. "Prioritize human and AI collaboration which can encourage creativity."
6. "Human creativity should be promoted first."
7. "Just take suggestions from AI but create on your own ability."
8. "People should believe in themselves, do daily practice, meditation."
9. "Emphasis on brain-storming and psychomotor domains."
10. "Cultivate open-mindedness, continuous learning, and experimentation."
11. "Focus should be given to individual growth enhancement programs like seminars, workshops, and demonstrations."

Theme 2: Integrating Human and AI Efforts

Combining human and AI efforts can result in a potent synergy that promotes hybrid innovation. AI augments human imagination rather than takes its place. Using AI as a tool to hone and broaden the creative potential of humans can attain the best outcomes. Gaining knowledge via AI can also help people become more creative and open-minded. Supporting the arts and culture is crucial to conserving genuine creative appearance in addition to utilizing AI. Putting money into arts education guarantees that creativity is firmly grounded in human experiences, and focuses on cultural sensitivity. By striking a balance between AI-driven support and human originality, we can create a future where technology enhances, rather than diminishes artistic and cultural expression.

Example of Responses

- "Mix human creativity with AI for optimal results."
- "Pursuing creative activities, engaging in critical thinking exercises, or cultivating authentic relationships."
- "Develop AI literacy and understanding of its limitations."
- "The information provided by AI needs to be verified by teachers and students."
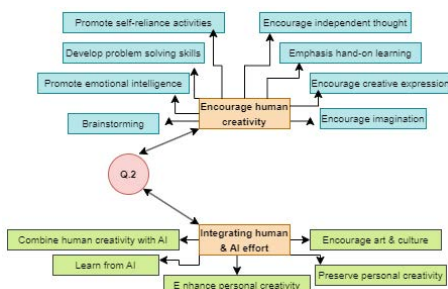- "Human creativity has great potential and can be enhanced with the help of AI."

Figure 2 Thematic Coding on Question No. 2

Q3: What are the Challenges in Balancing AI's Capabilities with Human Creativity?

Through this question, respondents were asked about the greatest challenges in balancing AI's capabilities with human creativity.

Theme 1: Challenges in Maintaining Balance

There are several difficulties in striking a balance between AI and human innovation. An over-reliance on AI-generated concepts may reduce human creativity and even replace it. People may become passive consumers of AI-generated content, which could weaken their capacity for critical thought and creativity. Humans must consciously select how much they rely on AI and make sure it stays a supportive tool rather than a replacement for original ideas.

Example of Responses

- "The greatest challenge lies in getting out of over-dependence on artificial intelligence tools."
- "The disruptive effect of this technology has been decreasing the power of critical thinking and brainstorming among AI consumers."
- "There is a risk that creators may become overly dependent on AI, stifling their creative instinct."
- "To preserve originality, humans should avoid complete dependency on AI."

## Theme 2: Lack of Ethical Awareness and Knowledge

Since many people do not fully comprehend AI and its consequences. A lack of ethical awareness and information about the technology might result in harm. This problem is intensified by a lack of ICT proficiency and knowledge of ethical issues related to AI. Also, it might be challenging to assure authenticity in creative works because AI-generated content frequently lacks the depth, emotional complexity, and uniqueness of human creativity. Maintaining ethical awareness and authenticity are still major problems.

Example of Responses

- "Challenges include lack of proper knowledge, ICT skills, and awareness on proper implementation of AI."
- "Lack of knowledge about AI technology and technological ethics."
- "One of the most significant challenges in the convergence of creativity and AI is the question of authenticity."
- "Critics argue that AI-generated art lacks

the authenticity and depth intrinsic to human creativity."

- "Human creativity is deeply connected to lived experiences and emotions, which AI cannot replicate."
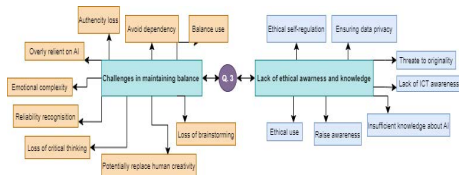
Figure 3 Thematic Coding on Question no. 3

Q4: Additional Comments on AI and Human Creativity

Under this statement, respondents were given the freedom to write their views on AI and human creativity.

Theme 1: Complementary Role of AI on Human Creativity

A careful action can complement AI and human creativity without taking the place of one another. People can increase their creativity and productivity by utilizing AI's capabilities, which allow it to produce ideas, improve concepts, and expedite work while preserving human originality and critical thinking.

Example of Responses

- "AI and human creativity are not inherently at odds; they can complement each other."
- "Human creativity can be increased with the help of AI, we should collaborate."

Theme 2: Overdependence Concerns and the Need for Regulation

Overuse of AI can harm human creativity by weakening originality and critical thinking. Ethical use and restraint are critical for balancing AI's capabilities with human brilliance. To enable the responsible use of AI, oversight and regulation are required.

Example of Responses

- "AI should be used judiciously; it should not dominate the human brain."
- "If humans depend entirely on AI, a day will

come when there will be no human creativity."

- "AI augmentation is desirable, but AI automation is something we all dread."
- "There should be some regulatory oversight to ensure we don't do something foolish."
- "Humans must accept AI partially and use it ethically."
- "AI is artificial, created by humans, we must decide how to use it wisely."

Theme 3: Uniqueness of Human Creativity

AI is incapable of fully duplicating the insightful emotional connection, sensitivity, and cultural context that make human creativity exceptional. AI can help to generate ideas but it lacks the uniqueness and authenticity that come from only human experiences.

Example of Responses

- "Human creativity is driven by emotion and cultural context, which AI lacks."
- "Emotion is highly required for creativity, which AI does not possess."
- "The essence of innovation and originality remains in human hands."
- "AI can support creativity but cannot replace human authenticity."
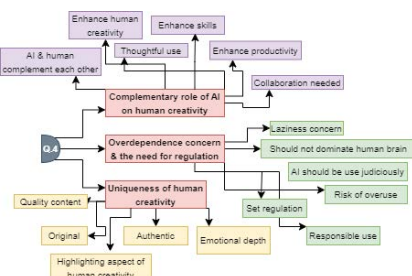
Figure 4 Thematic Coding on Question no. 4

Summary and Conclusion

Artificial Intelligence has transformed multifarious aspects of human life, including creativity. With the help of AI, people can enhance their cognitive abilities and think more creatively, methodically, and clearly (Youvan, 2024). AI is a useful tool for learning and development because of its effectiveness in accelerating procedures and lowering effort, especially in research and education. AI increases productivity and frees up time by

offering intelligent help. AI has so many advantages, but it also has drawbacks, especially when it comes to encouraging overreliance. Overreliance on content produced by AI can diminish creativity and decrease problem-solving skills. Because of AI's pre-structured solution and rapidity in producing information can stifle critical and alternative thinking. AI dialogue systems provide pre-formulated responses, which can limit students' ability to express their unique thoughts and perspectives and excessive dependence on dialogue systems may lead to decline in users' cognitive abilities (Krullaars et al., 2023; Ahmad et al., 2023). A significant challenge in AI's integration into creative fields is the lack of ethical awareness and knowledge regarding its proper use. To address these concerns, ethical self-regulation is essential. Users must consciously decide how much they rely on AI and ensure it supplements rather than replaces human creativity. Human creativity is deeply rooted in experiences, emotions, and intuition elements that AI cannot replicate. While AI can assist in idea generation and refinement, it lacks the originality and emotional depth that define human artistic expression (Ok, 2025). Concerns persist that excessive reliance on AI-generated content may lead to a loss of authenticity in creative works. It is crucial to preserve human-driven imagination and artistic vision. However, true creativity involves agency, intentionality, and autonomy, which AI lacks. AI reshuffles and optimizes existing data but does not generate ideas independently (Ezeani, 2024). A balanced approach to AI and creativity lies in mix creativity, where AI complements rather than replaces human originality. Education must transcend technical skills to nurture creativity and future-oriented learning. It must integrate the arts and humanities while utilizing AI as a tool to amplify rather than substitute human innovation (Peschl, 2024). AI can be used as a learning tool, helping individuals refine their skills and expand their creative potential. However, AI as a co-pilot and co-creator is a powerful force to reckon for social and economic change, but education must emphasize human creativity along with technology (Hassani, 2020). This discourse opens for authentic awareness of AI literacy for its judicious and ethical use in the hiatus of human creative potential and AI.

Future Recommendations

To address the challenges of AI overdependence in creative production, academicians must adopt a mindful approach. In teaching and learning, educators should prioritize experiential learning over rote memorization, encouraging students to think critically rather than rely on copy-pasting. UNESCOs global guidance on Generative AI in education advocates for a human-centered approach, assessing risks to values like education, equity, and diversity. The guidance urges governments to regulate GenAI use, enforce data privacy, and set age limits while required. It emphasizes the need for educational institutions to validate GenAI's pedagogical relevance. It also offers concrete recommendations to protect the human agency and maximize GenAI's benefits for education (UNESCO, 2023). Policymakers should emphasize holistic student development by ensuring faculty members continuously upgrade their knowledge through professional development programs. Additionally, counseling sessions for teachers, students, and parents can promote awareness of the ethical use of AI, fostering responsible integration of emerging technologies in education and daily life.

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