

Chapter 19


Generative AI Tools and Education: Enabling Collaborative Intelligence Through ChatGPT, Canva, InVideo AI, and InShot

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ABSTRACT

Abstract This study explores the integration of generative AI tools—ChatGPT, Canva, InVideo AI, and InShot—into educational environments, aiming to enhance collaborative intelligence and support personalized learning. The methodology combines case studies, hands-on development guidelines, and user testing to assess the practical applications of these tools in real-world educational settings. Key findings reveal that these AI tools foster interactive learning, creativity, and collaboration by enabling personalized tutoring, content creation, and video production. Additionally, the tools promote critical thinking and student engagement. However, challenges such as ethical considerations, data privacy, and the need for teacher training were identified. The study concludes that generative AI has the potential to transform education by merging human creativity with machine intelligence, offering more dynamic and inclusive learning experiences. It emphasizes the importance of addressing ethical concerns and providing adequate support to educators for effective AI integration.

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1. INTRODUCTION

1.1 Overview of Generative AI Tools in Education

Generative AI tools, powered by advanced machine learning algorithms, have emerged as transformative assets in modern education. These tools, such as ChatGPT, Canva, InVideo AI, and InShot, offer diverse functionalities—from conversational AI for personalized learning to multimedia creation platforms that enhance educational content delivery (Suresh Babu, C. V. & Adhithya, S., 2023).. With their ability to generate human-like text, create dynamic visuals, and streamline video editing, these technologies support both educators and students in crafting engaging and efficient learning experiences (Molnar et al., 2023).

For instance, ChatGPT enables real-time interaction and feedback, simulating personalized tutoring experiences. Canva and InVideo AI simplify visual and video content creation, fostering creativity and accessibility, while InShot offers tools for refining educational video materials. Together, these tools enhance digital pedagogy, aligning with the evolving needs of learners in the 21st century (Zhou & Yu, 2022).

1.2 The Role of Collaborative Intelligence in Learning

Collaborative intelligence bridges the gap between human creativity and machine efficiency. In education, this synergy fosters a dynamic environment where AI complements human capabilities, facilitating co-creation, critical thinking, and problem-solving (Rahimi et al., 2022). Generative AI tools enable students and educators to collaborate more effectively by automating mundane tasks and providing real-time suggestions for improvement.

For example, a teacher might use ChatGPT to co-develop lesson plans, while students could collaborate on group projects using Canva for presentations and InVideo AI for video storytelling. This interaction promotes an iterative learning process where AI provides feedback and users refine their work, embodying the principles of collaborative intelligence (Molnar et al., 2023).

1.3 Scope and Purpose of the Chapter

This chapter explores the integration of generative AI tools in education, emphasizing their role in enabling collaborative intelligence. It aims to:

1. Analyze the functionalities of ChatGPT, Canva, InVideo AI, and InShot in educational settings.
2. Discuss how these tools support collaborative learning and foster creativity.
3. Provide practical insights and case studies to illustrate their applications in teaching and learning environments.

The chapter also examines the challenges associated with adopting these technologies, such as accessibility issues and ethical concerns, offering strategies to overcome them. The ultimate goal is to present a comprehensive understanding of how generative AI tools can reshape educational practices, promoting an inclusive and innovative learning ecosystem.

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