

Chapter 6

AI as a Collaborative Catalyst: Leveraging ChatGPT for Peer Feedback and Group Learning

ABSTRACT

The rise of artificial intelligence (AI) has brought transformative possibilities to the field of education, with ChatGPT emerging as a prominent tool in reshaping traditional teaching and learning practices. Building on the previous chapter's exploration of AI in cross-cultural peer learning, this chapter narrows the focus to examine ChatGPT as a specific tool supporting peer feedback and collaborative learning. This chapter delves into the role of ChatGPT, an advanced AI language model, in enhancing peer feedback and fostering collaborative learning among students. Through a secondary research approach, the study synthesizes existing literature to evaluate the effectiveness, benefits, and challenges of integrating ChatGPT into these educational contexts.

INTRODUCTION

Background on the Increasing Role of AI in Education

The integration of artificial intelligence (AI) in education has been rapidly expanding, transforming traditional teaching methods and learning environments. AI technologies, such as intelligent tutoring systems, adaptive learning platforms, and automated grading tools, are increasingly being adopted to enhance educational outcomes. These technologies offer personalized learning experiences, provide real-time feedback, and support educators in managing classroom activities more

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efficiently. As AI continues to evolve, its applications in education are expected to become more sophisticated and widespread, potentially reshaping the future of learning and teaching (Holmes et.al, 2019).

Importance of Peer Feedback and Collaborative Learning

Peer feedback and collaborative learning are essential pedagogical strategies that promote active learning, critical thinking, and the development of communication and teamwork skills. Peer feedback allows students to engage in reflective practice, receive diverse perspectives, and enhance their understanding of the subject matter. Collaborative learning, on the other hand, fosters a sense of community, encourages knowledge sharing, and improves problem-solving abilities. Both approaches are crucial for preparing students for real-world challenges and professional environments where teamwork and constructive feedback are vital (Nicol & Macfarlane, 2006).

ChatGPT and its Potential Applications in Education

ChatGPT, developed by OpenAI, is an advanced AI language model capable of generating human-like text based on the input it receives. It has shown great potential in various applications, including customer service, content creation, and virtual assistance. In the educational domain, ChatGPT can be leveraged to facilitate peer feedback and collaborative learning by providing timely, personalized, and constructive responses. Its ability to simulate human conversation allows it to support students in multiple ways, such as offering feedback on assignments, participating in group discussions, and assisting with project coordination (Brown, et.al., 2020).

OBJECTIVES OF THE RESEARCH

This chapter aims to explore the role of ChatGPT in facilitating peer feedback and collaborative learning within educational settings. Specifically, the objectives are:

1. To assess the effectiveness of ChatGPT in providing consistent and high-quality peer feedback.
2. To evaluate the impact of ChatGPT on enhancing collaborative learning experiences.
3. To identify the challenges and limitations associated with using ChatGPT in educational contexts.
4. To provide recommendations for educators and institutions on integrating ChatGPT into their pedagogical practices effectively.

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