Chapter 16
Using Artificial Intelligence to Promote Post-Pandemic Transformational Learning Experiences

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ABSTRACT

The pandemic gave rise to transforming student learning using readily available technology tools. As a result, it provided the authors an avenue for self-reflection in their use of various technologies to support their teaching. Given new advances in artificial intelligence, there is a lack of research on how educators can use these technologies. Through reflective practice, opportunities to support educators' teaching practices were created, supporting student learning. Generative AI tools guided the authors to teach efficiently, allowing for more student-focused practices. Following a teacher support model, one of the authors conducted a reflective analysis using word processing and spreadsheet software to record reflections and conversations generated with the AI tools. In this chapter, the authors intend to introduce how educators should focus on self-reflection, using available tools to efficiently improve their practice.

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INTRODUCTION

In a post-pandemic world, technology advancements and uses in education continue to emerge. Educators find themselves struggling to keep up with technological advancements and how to use it effectively for educational purposes (Mollick & Mollick, 2023; Nui et al., 2022). One of these technological advancements is artificial intelligence (AI). Given the latest advances in AI, there is limited research on how educators can implement or incorporate these technologies into their practice (İpek et al., 2023; Karaköse et al., 2023). Thus, it is essential for educators to share their experiences in leveraging AI tools to improve their teaching practices.

Previously, our research focused on mobile technology practices during pandemic times to support teachers by lowering barriers. Likewise, as a result of the pandemic, Karaköse et al. (2023) discussed the increased collaboration among teachers to improve their technology usage in the teaching and learning process. By using AI tools, educators can become content experts by lowering barriers they face (e.g. teacher workload) (Ertmer, 1999; Guissepe Hernández et al., 2024; İpek et al., 2023; Karaköse et al., 2023). Additionally, İpek et al. (2023) contend that by reducing the workload, AI can allow teachers to focus on other aspects of the classroom. Even more, İpek et al. argued that integrating AI tools has piqued considerable interest in education. In summary, the pandemic provided an avenue for many of us to reflect upon our use of various technologies to support our own teaching, using it as a means to reduce barriers that we encounter.

This chapter illustrates examples that will help readers understand exactly how we, the authors, employed AI technology and leveraged different AI platforms to reduce barriers and address challenges related to teaching a new content area. Our ideas presented in this chapter adds to existing literature as the need for *how* teachers use readily available technologies is discussed (Dias & Victor, 2017; Karaköse et al., 2023; Scarlett, 2022). Further, this study can aid in thinking about self-reflection, using tools to improve teaching practices (Guissepe Hernández et al., 2024; Moss et. al, 2018). These tools offer a means of self-help and stimulate creativity when designing courses and lessons. Conclusively, the content presented in this chapter is valuable to professionals interested in exploring how they can leverage AI to support their teaching practices.

THEORETICAL FOUNDATIONS

Given the massive release of ChatGPT in November 2022, it is important we educators share our experiences, ideas, and materials we have produced. Scarlett (2022) discussed the importance of sharing ideas with colleagues in order to learn how to