


Chapter 14

Revolutionizing Pedagogy: Exploring AI Coaching in Enhancing Teacher Professionalism

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ABSTRACT

This study investigates how AI coaching systems might boost Malaysian teacher professionalism. The study analyses how AI coaching affects teachers' teaching, self-reflection, and career advancement. Mixed-method research uses qualitative interviews, quantitative assessments, and observational analysis. Malaysian educational institution AI coaching system and instructor case studies are examined. This technology customises classes and gives professors professional development feedback. AI coaching appears to deliver quick, personalised feedback to improve instructors. These studies show how AI plus human expertise can improve education and meet student demands. This study promotes AI coaching as an educational innovation engine. To demonstrate how AI enhances digital educators' professionalism, learning, and stakeholder and policymaker comprehension. AI can alter education through teacher professional development, according to this study. Results improve Malaysian teacher development and technology by changing attitudes, policies, and beliefs.

INTRODUCTION

The use of artificial intelligence (AI) has profoundly transformed different facets of education in an era driven by technology advancements. This research paper examines the capacity of AI coach-

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Revolutionizing Pedagogy

ing to enhance teacher professionalism by investigating its influence on pedagogy and the wider educational environment.

The educational environment is given new tools by artificial intelligence (AI), which has the power to revolutionize traditional teaching and learning methods. This paper provides a thorough analysis of artificial intelligence (AI) technologies, their possible uses in education, including the challenges associated with them. We talk about chatbots and associated algorithms that can mimic human-human interactions and produce writing that appears human when given natural language input. Modern chatbots, such as ChatGPT, have many benefits, but their application in the classroom presents significant moral and practical issues as well. In addition to encouraging responsible and ethical use, the authors hope to offer valuable information regarding how AI may be successfully integrated into the educational environment to benefit both instructors and students (Tufan, 2023).

The role of educators is undergoing dynamic evolution as traditional teaching techniques collide with cutting-edge AI technologies. This study explores the complex relationship between AI coaching systems and teacher development, providing insight into how these systems enhance, supplement, and reinvent the educational environment (Kumar, 2009).

High-tech artificial intelligence is driving advancements and improvements in many facets of our life today (Kemal, 2021). Significant advancements in the disciplines of health, medicine, space exploration, informatics, industry, and communication have been produced by artificial intelligence. Furthermore, by improving education, artificial intelligence has advanced tremendously and gained momentum in this industry. The purpose of the study is to talk about the advancements and innovations that artificial intelligence has made in the field of education. In our study, the benefits, drawbacks, and necessity of artificial intelligence in education are explored. Artificial intelligence is a fundamental component of education. This study also looks at the benefits artificial intelligence offers to special education (disabled) students in terms of their educational experience and training. The report also discusses the global uses of artificial intelligence technologies. These applications include Quillionz, Classcraft, 3D holograms, Chatbots, Virtual Assistants, Virtual Reality, Augmented Reality, and Seeing AI. Thanks to technology, people may keep up their education throughout the current pandemic (Covid-19); learning can even be done virtually (online) to prevent civilizations from falling behind in terms of education. We therefore have a great deal to thank the machines for.

This research seeks to gain complete insights into the various aspects of integrating AI-driven coaching with teacher professionalism by analysing their synergy. This study aims to contribute to the ongoing discussion about the transformative power of AI in defining the future of education by carefully examining its implications, problems, and opportunities (Lizette 2023).

This study aims to clarify the potential and constraints of using AI coaching to improve teaching methods, enabling educators and stakeholders to successfully utilise new technological breakthroughs (Borromeo, 2023). The primary goal of this research is to facilitate a more profound comprehension of how AI coaching can initiate a significant change in teacher professionalism, hence changing the educational landscape in unprecedented manners. The purpose of this research study is to investigate the profound effect that coaching with artificial intelligence (AI) has on the professionalism of educators within the context of the field of teacher education. In this age of rapid technological growth, the incorporation of artificial intelligence (AI) systems has emerged as a driving force behind the transformation of the educational landscape. Examining the many facets of artificial intelligence coaching, the purpose of this study is to shed light on the role that AI coaching plays in promoting the growth of teachers and pedagogical methods.

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