Chapter 10
AI on Teacher Roles:
A Transition Towards Facilitation

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ABSTRACT

AI in education in India is reshaping instructors as facilitators of customized and adaptable learning experiences. AI allows teachers to tailor lessons to each student, improving engagement and learning. AI automates repetitive administrative tasks, freeing teachers to spend more time with students. Teacher facilitators use AI insights to identify student strengths and weaknesses, apply specific treatments, and foster critical thinking and problem-solving. Teachers also select and organize AI-generated content to ensure curriculum alignment and ethics. Teachers must continue professional development and adopt new technologies to implement AI-enhanced education in India. This will give them the skills to use AI to transform education. This transition improves teaching and learning and meets India's large student population's diverse educational needs

INTRODUCTION

The introduction of AI in the classroom has changed educators' roles, particularly as they transition from traditional lecturers to more collaborative learning facilitators. This shift demonstrates AI's ability to personalise learning, enhance teacher-student interactions, and improve educational outcomes. This inquiry is supported by recent studies that highlight the revolutionary impact of AI on teachers' duties. Teachers can now meet their students' unique needs by utilising AI-powered personalised learning experiences. Adaptive learning systems such as Khan Academy and DreamBox Learning use algorithms to alter learning paths based on student performance, which greatly improves engagement and under-

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standing (Chen et al., 2019; Baker & Inventado, 2014). When instructors use AI to deliver personalised learning experiences, they can create an environment that is conducive to students' success based on their individual learning styles and rates (Johnson et al., 2020). Teachers will have more time to focus on developing meaningful relationships with their students as AI takes over mundane administrative tasks such as attendance and grade tracking. This transition is required to create a positive educational environment. Strong teacher-student relationships promote social and emotional development as well as academic performance (Zins and Elias, 2006; Durlak et al., 2011). Mentoring and one-on-one interactions may make students feel valued and invested in their education if teachers devote more time to them (Hamre & Pianta, 2006).

Educators now have access to critical data insights that can shape how they teach thanks to artificial intelligence. Examining student performance data allows teachers to learn a lot about what works and what doesn't (Siemens, 2013; Pardo & Siemens, 2014). According to research, students' classroom performance could be improved if teachers used data analytics more effectively to fill knowledge gaps (Hattie, 2009). Using this data-driven approach, teachers can adapt their lessons in real time based on student responses. To successfully transition into facilitators, educators must pursue ongoing professional development in artificial intelligence and digital literacy. Schmidt et al. (2019) emphasise the importance of training programs that equip teachers with the skills necessary to effectively incorporate AI technologies into their teaching methods. According to Hattie and Donoghue (2016), improving educators' confidence in using technology is critical for maximising the use of artificial intelligence (AI) in classrooms. Organisations that provide such training foster a culture of continuous learning and adaptation among their instructors.

Teachers, in their role as guides, should consider the moral implications of implementing AI in the classroom. To prepare students for success in a technology-driven world, discussions about data privacy, algorithmic bias, and ethical AI use are critical (Cath et al., 2017; O'Neil, 2016). Educators play a critical role in guiding student discussions to ensure that AI's broader social implications are understood. Teachers can help their students consider the moral implications of technological advancements by incorporating ethical principles into lesson plans (Zins & Elias, 2006). Teachers and AI systems can collaborate to improve classroom practices. According to research, the findings of this collaboration may improve instructional effectiveness and result in better student outcomes (Luckin et al., 2016; Woolf et al., 2013). AI has the potential to be a valuable tool for teachers by providing data on student needs, allowing them to focus on developing students' analytical and problem-solving skills in the classroom. When teachers adopt a more facilitative role, they can focus more on developing students' critical thinking and problem-solving abilities. AI has the potential to present students with complex scenarios and challenges, increasing their cognitive engagement (Bryk et al., 2010; Gee, 2013). To make this transition easier and ensure that teachers are prepared to succeed in a classroom with more technology, ongoing professional development is essential.

BACKGROUND RESEARCH REVIEWS

Artificial intelligence (AI) refers to the ability of machines to emulate human intelligence in domains such as learning, problem-solving, and decision-making. Education, healthcare, banking, and transportation are among the numerous sectors that could be significantly impacted. Increasing evidence indicates that artificial intelligence (AI) can enhance learning outcomes, customise curricula, and di-