Chapter 10
Navigating Resistance: Overcoming Traditional Barriers to AI in Education

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ABSTRACT

AI in education is often opposed due to historical skepticism, institutional inertia, cultural conservatism, and concerns about professional identity and autonomy. This opposition varies by educational context and stakeholder, hindering the deployment of AI. Collaboration with schools, intensive professional development to improve AI literacy, and clear ethical frameworks that prioritize openness, equity, and inclusivity are needed to overcome these challenges. Rethinking competition as human-AI collaboration can turn resistance into proactive involvement and innovation. This analysis reveals the complexity of resistance and offers practical suggestions, based on global case studies, for overcoming traditional barriers to AI integration. To enhance teaching and learning, AI should be utilized responsibly, sustainably, and equitably in education.

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UNDERSTANDING THE LANDSCAPE OF RESISTANCE IN EDUCATION

Historical Skepticism Toward Educational Technology

The incorporation of new technology in education has traditionally been met with skepticism, resistance, and postponed adoption (Woodruff et al., 2025; Xu & Ouyang, 2024). Since the introduction of overhead projectors, followed by computers and learning management systems (LMS), each technology advancement has undergone examination by educators, administrators, and policymakers (Nguyen et al., 2022; Owoc et al., 2021). These reactions frequently arise not only from technological constraints but also from cultural, educational, and psychological unease surrounding alterations in routines, the redefinition of roles, and the relinquishing of authority to automated systems. In the late 20th century, when personal computers were introduced in classrooms, several educators questioned their pedagogical efficacy, fearing that screen-based learning would diminish human connection and compromise conventional teaching methods (Smith & Pérez, 2023). Comparable concerns arose with the advent of the internet and digital content, as detractors cautioned about diminished attention spans, the proliferation of misinformation, and the deterioration of fundamental reading skills (Jones et al., 2021). The emergence of LMS systems, such as Blackboard and Moodle, has raised concerns about surveillance, the depersonalization of education, and the commodification of learning. In every case, initial rejection progressively transitioned to selective acceptance, influenced by policy directives, user familiarity, and shown results (Owoc et al., 2021; Xu & Ouyang, 2024). Artificial Intelligence (AI) currently encounters a similar historical trend of opposition. A multitude of educators perceive AI as a disruptive entity that undermines their professional judgment, autonomy, and principles.

Although AI provides adaptive learning, automated feedback, and data-driven decision-making, its perceived lack of transparency, potential biases, and impersonal nature present significant issues (Woodruff et al., 2025; Nguyen et al., 2022). The remnants of past skepticism illustrate a cyclical pattern in educational reform, wherein innovations face early resistance not alone due to technological unfamiliarity but also because they challenge entrenched beliefs regarding teaching and learning (Xu & Ouyang, 2024). Comprehending this historical trajectory is essential. It situates contemporary opposition to AI within a wider framework of educational transition. Identifying these tendencies provides critical insights for anticipating, addressing, and ultimately converting opposition into involvement through informed, inclusive, and morally sound innovation.