**School Leadership for AI Adoption: Insights from a Multi-Site Case Study in Malaysia**

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**Abstract**

The integration of Artificial Intelligence (AI) in education presents transformative opportunities to enhance teaching and learning. However, the success of AI adoption is influenced not only by technological readiness but significantly by school leadership practices. This study explores how school principals drive AI adoption to support teachers in enhancing instructional practices and personalizing learning experiences.

A qualitative multi-site case study approach was employed, involving six schools across Malaysia’s major regions. Data were collected through semi-structured interviews with principals and teachers, document analysis, and optional observations. Thematic analysis was conducted to uncover leadership strategies, challenges, and enabling factors associated with AI integration in schools.

Findings reveal that strategic leadership actions, such as fostering a growth mindset, empowering teachers to experiment with AI tools, and integrating AI into school development plans, can significantly influence the success of AI adoption. Moreover, data-driven insights—such as tracking teacher feedback and monitoring AI usage trends—enable principals to make informed decisions to sustain innovation. The study underscores the critical role of school leadership in facilitating AI integration and highlights the need for leadership development programmes focused on digital transformation.

This research offers actionable recommendations for school leaders and policymakers aiming to maximize the potential of AI to enhance teaching and learning outcomes, thereby contributing to a stronger evidence base for educational leadership in the digital age.

Keywords: school leadership, artificial intelligence, educational innovation, data-driven decision-making, personalized learning