INTEGRATION OF ARTIFICIAL INTELLIGENCE IMPROVES DIGITAL SKILL DEVELOPMENT IN STUDENTS

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Abstract - The integration of artificial intelligence (AI) in education presents a transformative opportunity to enhance digital skill development among students.As 21st century education evolves with technological advancements, the use of AI enables learning, adaptive content delivery, and real-time feedback, promoting the academic performance of students. In 2024 and 2025 alone, more than 10,000 and 13,000 publications, respectively, have been indexed in Scopus, highlighting its prominence as a rapidly growing research area. A review of recent studies demonstrates that AI interventions have improved reading comprehension and self-regulated learning, with 77% of students reporting increased engagement and motivation, although 23% noted usability challenges. Among teachers, 65% were very satisfied, 78% expressed willingness to engage in future AI programs, and parents reported 70% were extremely satisfied, with 90% endorsing AI-based initiatives. AI-driven tools, such as adaptive learning systems, gamified coding platforms, and intelligent tutoring, helps in enhancing critical thinking of students and support individualized instructions. From teachers' point of view, the use of AI tools helps in administrative tasks, allowing teachers to focus on student-centered engagement. Despite these benefits, challenges remain, including infrastructure limitations, faculty training needs, and data privacy concerns. Evidence indicates that strategically implemented AI in education significantly enhances digital skill development, improves learning outcomes, and supports teacher effectiveness, while preparing students for a technology-driven future.

Keywords - Adaptive Education, Artificial Intelligence, Digital Learning, Student Engagement, Teacher Support