
Cloud Literacy Among First-Semester Students: A Survey on Awareness, Usage, And Challenges

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Abstract

Cloud computing has become an essential component of modern education, enabling students to access, store, and share academic resources efficiently. However, the level of cloud literacy among students, particularly first-semester students, remains uncertain, potentially affecting their ability to maximize its benefits. This study investigates the awareness, usage patterns, and challenges faced by first-semester students in utilizing cloud services. A quantitative survey was conducted among 148 students from various Malaysian Polytechnic and Community College (PolyCC) institutions. The results indicate that while most students are familiar with basic cloud functionalities, many lack proficiencies in advanced features such as data security, multi-platform integration, and collaborative tools. This gap in cloud literacy may hinder students' academic performance and readiness for technology-driven workplaces. The findings emphasize the need for structured cloud literacy training in educational curricula to enhance students' digital competencies. This study concludes by recommending strategic curriculum integration of cloud computing to equip students with the necessary skills for academic and professional success.

Keywords: Cloud literacy; cloud services; digital tools; student awareness; education technology
