Interoperability Standard for Data Exchange in Educational Documents in Professional and Technological Education: A Comparative Study and Feasibility Analysis for the Brazilian Context

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Abstract : The professional and technological education (EPT) plays a pivotal role in equipping students for specialized careers, and it is imperative to establish a framework for efficient data exchange among educational institutions. The primary focus of this article is to address the pressing need for document interoperability within the context of EPT. The challenges, motivations, and benefits of implementing interoperability standards for digital educational documents are thoroughly explored. These documents include EPT completion certificates, academic records, and curricula. In conjunction with the prior abstract, it is evident that the intersection of IT governance and interoperability standards holds the key to transforming the landscape of technical education in Brazil. IT governance provides the strategic framework for effective data management, aligning with educational objectives, ensuring compliance, and managing risks. By adopting interoperability standards, the technical education sector in Brazil can facilitate data exchange, enhance data security, and promote international recognition of qualifications. The utilization of the XML (Extensible Markup Language) standard further strengthens the foundation for structured data exchange, fostering efficient communication, standardization of curricula, and enhancing educational materials. The IT governance, interoperability standards, and data management critical role in driving the quality, efficiency, and security of technical education. The adoption of these standards fosters transparency, stakeholder coordination, and regulatory compliance, ultimately empowering the technical education sector to meet the dynamic demands of the 21st century.

Keywords : interoperability, education, standards, governance

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