Infrastructure, Governance, and AI: The Underside of the Online Learning Iceberg

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Abstract:

Generative Artificial Intelligence (GenAI) is emerging as a disruptive innovation, and one that can both improve as well as hinder the education of students around the world. Given the immense computational power required for GenAI, access to GenAI is closely linked to cloud computing infrastructure. This presentation is based on the findings of an exhaustive study of all 75 large K-12 districts in Canada's three western-most provinces: British Columbia, Alberta, and Saskatchewan. A data transformation model mixed methods triangulation design methodology was used in this study of over 1.1 million students across a geography of over 2.2 million square kilometres. A finding of this research is that Western Canadian K-12 relies heavily on cloud computing. This means that it is well-positioned for the adoption of emerging GenAI tools, and the Western Canadian IT approach can serve as a guide for jurisdictions around the world. This will provide valuable insights to other IT and educational leaders as they plan their IT strategy in the coming years. Moreover, as educational institutions realize the capabilities and opportunities presented by GenAI, this now raises important ethical and governance questions. This presentation will explore the GenAI governance questions that are currently at the forefront of board and practitioner conversations globally.

Keywords:

GenAI, governance, IT infrastructure, education, K-12.