A comparative analysis of data literacy competency frameworks

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ABSTRACT

Data literacy is regarded as a critical skill for the 21st century as the range of skills and knowledge needed to handle data is now essential in our personal and professional lives. There is a widening gap between the demand for a data-literate workforce and the supply of properly trained individuals with data skills. This gap is increasingly recognized by universities, with some now prioritizing data skills for students to ensure that they are fully equipped for the future. Higher education has recognized data literacy as an important learning outcome to help students survive and thrive in this complex job market.

There have been efforts to develop a data literacy competency framework to enhance our understanding of conceptions of data literacy and demonstrate how required data literacy skills and knowledge should be characterized. Such data literacy competency frameworks are found in multiple disciplines, including information science, computer science, and statistics. They serve as a descriptive tool that outlines and integrates the knowledge and skills needed to perform a specific job within the workforce and a guide for curriculum development and self-assessment tool for the students. This poster presentation will illustrate the preliminary results of a comparative analysis of data literacy competency frameworks to identify a set of common core competencies.

ALISE RESEARCH TAXONOMY TOPICS

big data; information literacy; standards.

AUTHOR KEYWORDS

data literacy; competencies; competency framework