

The Use and Instruction of High-Level Programming Languages in Online ALA-Accredited MLIS Programs

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ABSTRACT

This dissertation investigates the instruction and use of high-level computer programming languages in online American Library Association (ALA) accredited Master of Library and Information Science (MLIS) programs. While prior studies have shown that high-level programming skills are in demand for MLIS graduates, this study addresses the gap between the skills taught in MLIS programs and those needed in the workforce.

A mixed-methods approach was employed, with qualitative data gathered from one-on-one interviews with MLIS program administrators and faculty, as well as focus group interviews with MLIS program students. A follow-up quantitative online Qualtrics survey was then completed by each audience to build on what was learned. Three theoretical frameworks guided the research: the Technology Acceptance Model (TAM), Technology, Pedagogy, and Content Knowledge (TPACK), and the Theory of Self-Efficacy. Themes from the research include the challenges of integrating high-level programming skills into the curriculum, student and faculty satisfaction with program offerings, and the perceived importance of learning high-level programming.

While results varied, the study found that most online ALA-accredited MLIS programs teach high-level programming skills, at least in elective courses. All audiences recognize the importance of learning high-level programming skills but must balance this with the barriers they face. This study offers recommendations for ensuring the MLIS curriculum more adequately meets the demand for high-level programming skills in the field.

ALISE RESEARCH TAXONOMY TOPICS

Education of information professionals; Information technologies; Human-computer interaction & design.

AUTHOR KEYWORDS

Curriculum; Computer programming; Coding; MLIS; Education.

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