

Building Expertise with Technical Information in Support of Computational Literacies: A Research Project with MLIS Students and Instructors

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ABSTRACT

This developing research project aims to both widen and deepen future library and information science professionals' participation in computational literacies through a genre-based approach. *Computational literacies* include the knowledge of computational tools and methods, and how these are changing the ways in which librarians and archivists work. To develop and apply computational literacies, MLIS students must interact with technical information communicated through *genres*, such as documentation, instructions, manuals, reports, and specifications. Knowledge of technical genres is a crucial, but understudied, aspect of computational literacies. The project will consider to whom, why, and when technical genres enable or constrain students' transitions from newcomers to emerging professionals. The project will investigate students' experiences within technical MLIS courses, and their motivations for developing computational literacies. *Technical courses* require students to code with a computer programming language (e.g., JavaScript or Python). A goal of the project is to explore the challenges that students of different ages, gender identities, races, and curricular backgrounds encounter in technical courses, and to provide implications for the design of differentiated instruction. Findings will offer theoretical contributions regarding the relationship between genre and computational literacies, in addition to practical contributions to the design of curricula. Intended outputs of the project aim to better support students' development of computational literacies. In turn, MLIS graduates will be able to engage in the lifelong learning required to respond to ongoing technical change involving the representation, management, and retrieval of information, and consider the ethical implications of new and emerging technologies.

ALISE RESEARCH TAXONOMY TOPICS

Information literacy; Information use; Curriculum; Pedagogy; Students.

AUTHOR KEYWORDS

Computational Literacies; Curriculum; Pedagogy; Genres; Technical MLIS Courses.

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