

INTRODUCTION

Emerging academic librarian positions related to online learning environments and educational technology, such as Online Instructional Design Librarian (California State University, 2017), E-Learning Librarian (York University, 2007), and Digital Pedagogy Librarian (University of Michigan Libraries, 2017), appear on job boards frequently. These jobs require skill sets that blend technology skills with traditional librarian instructional roles, as Bell and Shank (2004; 2011) suggest with the concept of blended librarianship, and emphasize the need for an understanding of the principles of learning in technology-rich environments. Librarians in these and similar emerging roles, design and deliver information literacy instruction both face-to-face and online, develop learning objects and instructional materials for inclusion in learning management systems, and must possess pedagogical knowledge in the higher education context.

While current academic librarians in instructional roles have developed their positions to include active roles in online learning, future librarians must learn relevant skills during their professional education to become job ready. The question of how Canadian educated academic librarians are acquiring the technology and pedagogical skills to meet the needs of these emerging roles remains.

PREVIOUS RESEARCH & PROBLEM AREAS

Instructional design and teaching skills are among the top professional proficiencies for academic instruction librarians (American Library Association, 2007). Despite this, the education of librarians for pedagogical roles has a long history of lagging behind the demands of the profession (Westbrock & Fabian, 2010; Hall, 2013; Davies-Hoffman, Alvarez, Costello & Emerson, 2013; Saunders 2015)—a problem which raises concern in a new era of online learning.

Literature Review Summary

Previous studies looked at librarians' preparedness for teaching roles (Bewick & Corral, 2010; Pappert, 2005; Saunders, 2015; Sproles, Johnson & Farison, 2008; Westbrock & Fabian, 2010).

Improvement of librarian education curriculum to better educate librarians as teachers (Davies-Hoffman et al. 2013; Miller, 2007)

More recently, one study looked at unpacking the necessary teaching skills required of academic librarians in the digital age (Raju, 2017).

Research Gaps

No research identifies the teaching skills required of academic librarian roles to span face-to-face and virtual learning environments in a Canadian context.

No evaluation of how Canadian librarian education programs are preparing academic librarians for instructional roles or how online learning impacts the roles and education of librarians in Canada.

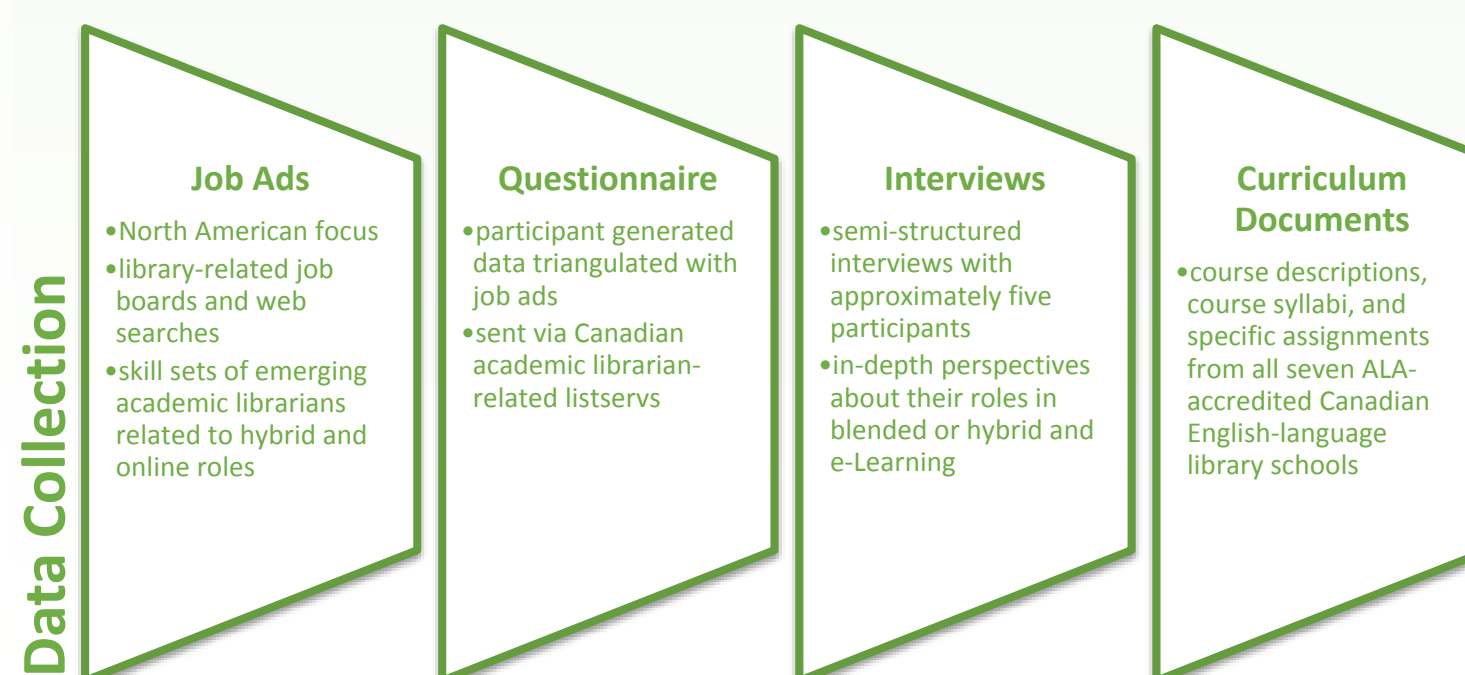
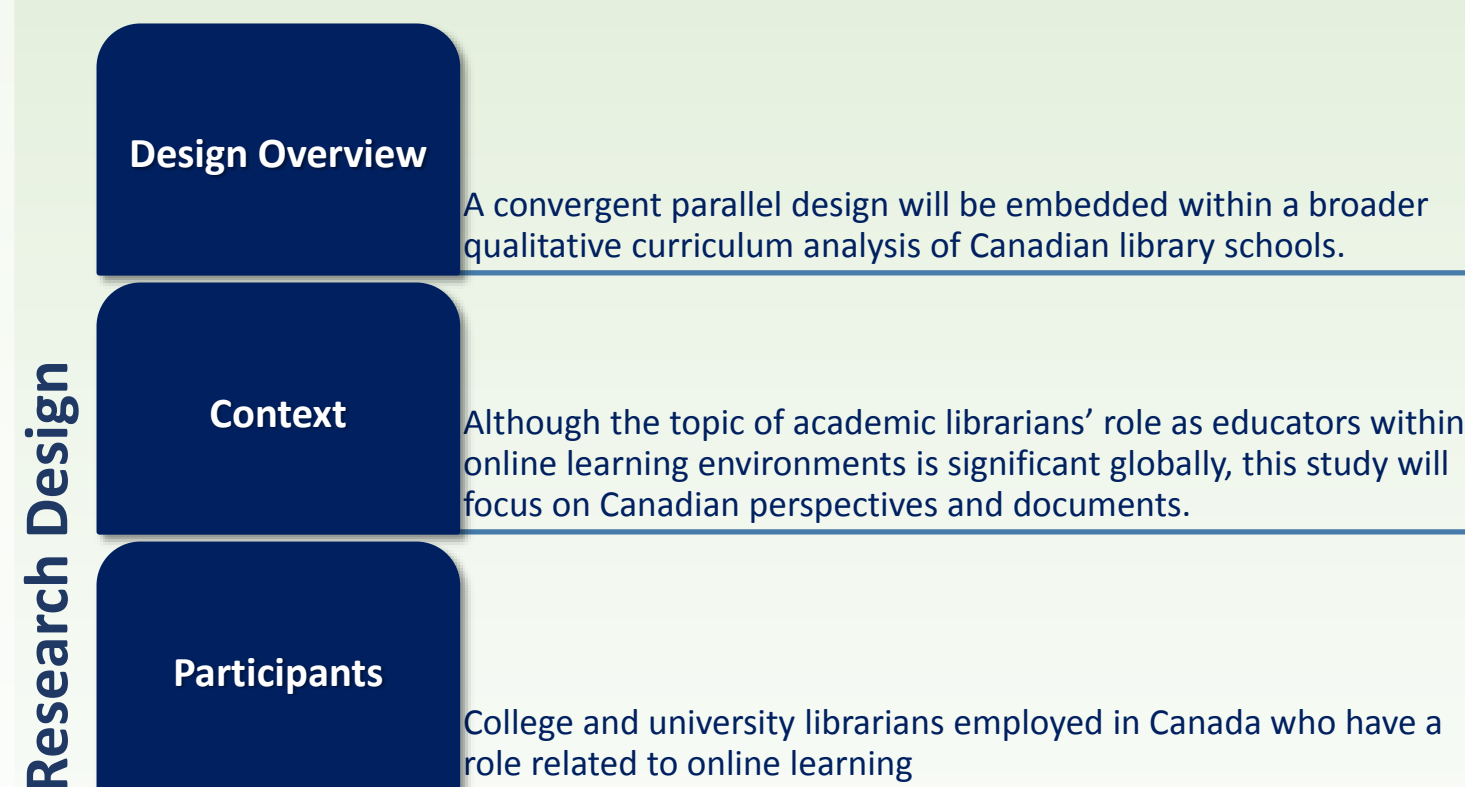
PURPOSE

This research will examine how librarian education in Canada is preparing academic librarians for pedagogical positions related to online learning and consider possible curricular additions to prepare better for these roles. As previous research has shown, there is a need for librarians to develop a strong foundation in pedagogy to fulfill the instructional expectations of their roles. As teaching and learning opportunities move online, it is even more important to be able to translate this knowledge across mediums (Otto, 2014). Specifically, the intersection of technology and pedagogy in current academic librarians' roles will be examined to extract the particular skills of emerging online pedagogical roles. Then the identified skills will be compared with Canadian library school curriculum to evaluate the depth and breadth of their inclusion.

DESIGN & METHODS

TABLE 1: SUMMARY OF DATA COLLECTION AND ANALYSIS

Research Questions	Data Collection	Data Analysis
1. What roles do academic librarians have concerning hybrid and online learning within their institutions?	<ul style="list-style-type: none"> Job Advertisements Questionnaire 	Quantitative analysis: <ol style="list-style-type: none"> Identified job titles in job ads Librarians with eLearning related job titles vs. non-eLearning job titles that identify online pedagogy as an aspect of their job E-Learning vs. face-to-face job distribution Identified skills, qualifications and responsibilities of the two groups
2. What are the specific responsibilities and skill sets required of emerging academic librarian roles related to hybrid and online learning?	<ul style="list-style-type: none"> Job Advertisements Questionnaire Semi-structured Interviews 	Qualitative analysis: <ol style="list-style-type: none"> Content Analysis Thematic Analysis
3. What skills do librarians in online pedagogical roles identify as essential to their job?	<ul style="list-style-type: none"> Questionnaire Semi-structured Interviews 	Qualitative analysis: <ol style="list-style-type: none"> Thematic Analysis
4. To what extent and in what ways are courses in English-language Canadian Librarian Master's programs incorporating elements of educational technology, digital pedagogy, and skills specifically related to hybrid and online learning?	<ul style="list-style-type: none"> Curriculum documents from English language ALA-accredited library masters' programs 	Qualitative analysis: <ol style="list-style-type: none"> Thematic Analysis – emergent themes compared with themes identified by research questions two and three to inform Canadian academic librarian education program evaluation and make recommendations for improvement <p>Quantitative analysis from research question one will have a supportive role</p>



METHODS CONT'D

TABLE 3: SAMPLE JOB POSTINGS

Job Title	Institution and Location
Instructional Design Librarian	University of Waterloo (2016) Ontario, Canada
E-Learning Librarian	York University (2007) Ontario, Canada
Online Instructional Design Librarian	California State University (2017) California, USA
Digital Pedagogy Librarian	University of Michigan (2017) Michigan, USA
Learning Technologies Librarian	Clemson University (2018) South Carolina, USA
Teaching and Learning Librarian	Carleton University (2017) Ottawa, Canada

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TABLE 2: CURRICULUM DATA COLLECTION

Canadian Librarian Graduate Programs	Anticipated courses to evaluate for online learning elements
Faculty of Information, University of Toronto	<ul style="list-style-type: none"> Design and Evaluation of Information Literacy Programs Public Programs and Education
Faculty of Information and Media Studies, University of Western Ontario	<ul style="list-style-type: none"> Academic Libraries Information Literacy: Theory and Practice
School of Library and Information Studies, University of Alberta (offered face-to-face and online)	<ul style="list-style-type: none"> Reference and Information Services Instructional Practices in Library and Information Services Emerging and Evolving Technologies
School of Library, Archival and Information Studies, University of British Columbia	<ul style="list-style-type: none"> Instructional Role of the Librarian Academic Libraries
School of Information Studies, McGill University	<ul style="list-style-type: none"> Reference and Information Services Information Literacy
School of Information Management, Dalhousie University	<ul style="list-style-type: none"> Information Sources, Services and Retrieval Managing Information Literacy Instruction
School of Information Studies, University of Ottawa	<ul style="list-style-type: none"> Information Literacy Learning and Instruction Information Resource Discovery

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