Abstract:
This paper provides an overview of research and findings related to the application of critical information literacy (CIL) theory in B.C., Canada, higher education library practices. A gap was identified in the literature related to information literacy teaching in Canada, leading to the question: How are librarians in B.C. higher education applying critical information literacy in their practice? A mixed methods research study was conducted with higher education librarians, through a survey of all public higher education libraries and subsequent semi-structured interviews. Findings include librarian awareness of critical information literacy and the ACRL Framework for information Literacy, but a gap in practical application. Indigenization, a form of de-colonizing library practices, is one area of common focus for B.C. higher education librarians in applying a critical lens to library practices. The research also identified areas where further support is required and recommendations for improving the application of theory in practice.

Keywords: Critical information literacy; Library pedagogy; ACRL Framework for Information Literacy; Academic Libraries, Canada
1. Introduction

Questions regarding librarians’ application of critical perspectives on information literacy have become an area of focus in the library literature in recent years. Concerns regarding information literacy as a fundamental requirement for citizenship in the digital world is now commonplace as a response to the rise of the ‘fake news’ phenomenon. The need to identify and implement practices in academic libraries based on critical theoretical approaches, such as through the new ACRL Framework formed the foundations of this research. A literature review on the concept of critical information literacy (CIL) and library pedagogy was conducted, and a gap was identified regarding the understanding of information literacy teaching theory and practices in higher education in Canada and, in particular, in the province of British Columbia (B.C.).

1.1 Academic librarianship in the higher education context in British Columbia, Canada

Tertiary education in Canada falls under the ten provincial and three territorial jurisdictions. In B.C., the publicly funded higher education institutions comprise 11 universities, 11 colleges and 3 institutes. Each higher education institution has a library staffed by librarians and library support staff, who provide a range of resources, research support, reference, data management, repositories, and teaching services to meet the needs of their institutions.

Academic librarians are responsible for the teaching of information literacy to their institution’s study body, through classroom and research support activities. The specific teaching practices vary by institution – based on their access to students within the curriculum of the disciplines, or on an ad hoc basis. As a result of this context, there are questions to be answered in this research about the state of information literacy teaching in BC higher education, and recommendations identified for the development of practices.

1.2 Critical Information Literacy

Critical information literacy (CIL) is a recent theoretical development in information literacy (IL) practice. It impacts the nature of academic librarians’ work by requiring that a critical lens be applied to more traditional IL practices. In this context, applying a critical lens is defined as examining library practices for social, economic and cultural biases. The discussion of a ‘critical’ information literacy has developed within the scholarship of library information literacy practices, within an environment of expanded use of technology and the digital delivery of information. The onset of digital publishing and digital educational environments has meant that information and digital literacies, among a wide range of other new ‘literacies’, have become more broadly recognized concepts (ACRL, 2015).

Tensions have arisen in library scholarship and communications, stemming from confusion over how to apply the concept of criticality to library teaching practice. The traditional authority-led instructional practices of many academic libraries are fundamentally at odds with a critical perspective on information literacy (Swanson, 2005; Elmborg, 2006; Jacobs, 2008), based on the challenge to dominant authority in the critical pedagogy tradition. These debates have led to ‘librarians’ recognition of the need to expand library instruction from a strict focus on retrieval tools and techniques, to critical analysis of the match between information documents and the searchers’ proximal goals” (Pankl and Coleman, 2010, p7). The recommendation from ACRL and in the library literature that librarians should find ways
to apply theories of critical pedagogy and critical literacy within their practice has resulted in a movement toward the development of a critical information literacy theory (Accardi, Drabinski and Kumbier, 2010; Swanson and Jagman, 2015).

While the newly adopted ACRL Framework for Information Literacy is not solely based on criticality, it incorporates critical theory along with scaffolding and other pedagogical theories, aimed at expanding librarians’ understanding of the broader purposes of, and more theoretical approaches to, teaching information literacy (ACRL, 2015). The degree to which librarians are adopting and attempting to apply criticality to their information literacy practices is continuing to grow (Accardi, Drabinski and Kumbier, 2010; Swandon and Jagman, 2015; Downey, 2016). This research furthers the scholarship of library practices based on these theories.

2. Methodology

In the autumn of 2017, research was conducted to address the question: How are librarians in B.C. higher education applying critical information literacy in their practice? The overarching research question was further expanded to identify: 1) How do academic librarians in B.C. higher education describe critical information literacy and its role in their instructional practices? and 2) To what extent are librarians in post-secondary education using the new ACRL Framework in their teaching?

The mixed methods study involved participant librarians representing the 25 public higher education institutions in the B.C., within four institution types: research universities; teaching universities; undergraduate or community colleges; and institutes. The lead individual responsible for each institution’s information literacy programme was identified for participation in the study. The first phase of the research involved an online survey of existing practices and librarian understanding of theory underpinning those practices, with a focus on the concept of critical information literacy. The second phase involved semi-structured interviews with individuals drawn from the set of survey respondents.

Of the total population of 25 public institutions, 24 survey respondents completed surveys from 22 institutions. In the second phase, 13 individuals, representing 13 institutions, participated in the follow-up interviews. The in-depth interviews were conducted online, across institution types, sizes, and geographic regions within the province. Demographic information related to participant institution and individual professional experience, and information related to awareness and application of theory in practice, were gathered.

An inductive approach was taken to analysing the qualitative data in both the surveys and the interviews, with the interviews conducted as an opportunity to further explore themes emerging from the survey. The quantitative data collected from each institution provided an opportunity to compare and contrast data between institutions. The data helped to assess whether institution type and location had an impact on the application of critical information literacy in higher education teaching. Themes arising from the research provide an understanding of how and why practices occur as they do, and recommendations for further research and information sharing were identified by the researcher and the participants.
3. Findings

3.1 Demographic information

Participants from 22 of the 25 public higher education institutions in B.C. participated in the survey (88% of the province’s tertiary institutions), with 13 librarians participating in follow-up interviews. The participants included representatives from all public institution types in both the survey and interviews. The interviews were conducted with ten women and three men, who had an average of 12.5 years of experience as academic librarians.

The following table provides information about the survey responses by institution type and geographic setting, as well as their relative size based on number of librarians.

<table>
<thead>
<tr>
<th>Institute Type</th>
<th>Geographic Region</th>
<th>Number by region</th>
<th>Total Number of Librarians</th>
<th>Average Number of Librarians</th>
</tr>
</thead>
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<tr>
<td>Colleges</td>
<td>Non-urban</td>
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<td>20.70</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>4</td>
<td>34.05</td>
<td>8.5</td>
</tr>
<tr>
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<td>Urban</td>
<td>2</td>
<td>13.90</td>
<td>7.0</td>
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<tr>
<td>Teaching</td>
<td>Non-urban</td>
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<td>8.30</td>
<td>8.3</td>
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<tr>
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<td>Non-urban</td>
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<tr>
<td>Total</td>
<td></td>
<td>24</td>
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</tbody>
</table>

Table 1. Institution type, and relative size.

3.2 How are librarians in BC higher education applying CIL in their practices?

Describing CIL

The perception that there are minimal theoretical underpinnings to library practice is prevalent in the library literature, and the view that librarians have a limited grasp of criticality with respect to their pedagogical practices is frequently reported (Radomski, 2000; Bruce & Candy, 2015; Downey 2016). Library scholars and professional associations, such as ACRL, are encouraging librarians to apply critical pedagogy and critical literacy theories within their practice as “critical information literacy” (Accardi, Drabinski and Kumbier, 2010; Swanson and Jagman, 2015; ACRL, 2015). Based on the library literature, however, the concept of a ‘critical information literacy’ is still in development. For the purposes of this research, critical information literacy was defined as helping students to develop awareness and learn to question “the cultural, social, and economic structures that underlie all of information production and dissemination” (Downey, 2016, p.18).

The results of this research indicate that the majority of academic librarians expressed an awareness of the concept of CIL. Furthermore, librarians identified a conceptual understanding of CIL and its potential impact on their library information literacy teaching even though they may not have been fully able to articulate a practical application of CIL. While the participant librarians demonstrated an awareness of CIL, only 58% (n=14) of respondents agreed or strongly agreed that they understood the concept; however, the majority of participants reported having been exposed to the concept. At the same time, 87.5% (n=21) felt the need to better understand CIL.
Applying CIL

CIL as defined by the research participants included practices related to supporting students to be more effective researchers and scholars. In many cases, librarians used language that indicated they were hesitant to confirm their application of a ‘critical’ information literacy in their practices: “I think we do something like CIL, although we don't call it that, but getting students to critique information and understand that there is more than one opinion/side/story/narrative, that there is more than one lens to be put on a topic” (Survey participant). Another participant defined CIL as: “I would say just a good grounding of being able to evaluate any sort of information source for its degrees of objectivity, what biases might be there, the quality of the information presented” (Interview participant 8).

The research also revealed that while there was an awareness of the term CIL, a number of librarians stated that they did not see a practical application for CIL in their context: “I think of it as more of an aspirational thing than a practical one…in my environment” (Interview participant 10). And finally, a minority indicated that there was a disconnect between the concept of information literacy, and a ‘critical’ information literacy: “The term doesn't meaningfully speak to my theoretical and practical experience with the concept of IL” (Survey participant).

Overall, librarians reported awareness of the concept, and in many cases, an attempt to apply critical information literacy in practice. Developing common language and shared practices across the province would be further supports to these initial approaches. These findings suggest potential opportunities for professional development and discussions within B.C. higher education libraries, regarding both the concept and application of critical information literacy teaching.

Critical approaches to library practices

Application of critical information literacy, beyond IL teaching, was also revealed in librarians’ reflections on their need to take a critical approach to library practices, generally. What emerged was a focus primarily on the concept of ‘indigenization’, as an aspect of ‘de-colonization’ in the Canadian academic context. De-colonizing the academy has become a focus of higher education in Canada in recent years, particularly since the publication of the Truth and Reconciliation Commission’s Calls to Action, which encourages institutions to implement responses to 94 Calls to Action for individuals and institutions within Canada, to address the impact of colonialism on the indigenous peoples in Canada (TRC, 2015).

The implications of taking a critical approach to IL teaching and other practices requires a change in understanding and behaviour (Elmborg, 2006; Jacobs, 2008; Downey, 2016). In this study, some librarians felt that applying a critical lens to their practices, such as through the work of indigenizing their academic environment, had already transformed their practices: “…we’re really focussed on decolonizing the institution…it’s really in conversation in the institution…so kind of bringing a de-colonial…lens to library instruction” (Interview participant 2); and: “…maybe we’ve been doing it all along just because of our subject areas. It’s just what we do…but definitely the library’s been involved with the indigenization of the curriculum, and…supporting faculty and students with that” (Interview participant 11).

Others had yet to implement changes but were anticipating how these perspectives would change their practices. For example: “I think the indigenization would help us in general to
bring that critical focus to everything” (Interview participant 8); and: “I think it’s just part of what’s going on in the country and as academic institutions we’re responding to it” (Interview participant 7). Finally, the perception of how critical approaches to library practice were expected to bring significant change to the academic library was also expressed: “…people are talking more about gender and indigenizing…institutions and those kinds of conversations. It brings, kind of a more critical lens to what we’re doing and we have to rethink and restructure everything in order to honour those perspectives” (Interview participant 2). This research identified strong support for efforts to apply critical approaches to library practices, particularly indigenization. What is interesting to note is that while librarians made some reference to applying a critical lens to their pedagogy generally, a sensitivity to indigenization, and a questioning specifically related to indigenization and broader library practices, was the most prevalent focus of the librarians’ critical reflections.

**IL Teaching Success**

One of the most consistent themes that emerged from the research is that of relationships. The concept of ‘relationship’, both with library peers and teaching faculty, was identified as one of the most important factors in librarians’ perception of ‘success’ in their IL pedagogy. Sharing information and successes with library peers, both within and across institutions, was identified as valuable in support of IL developments.

Most clearly defined by librarians was the necessity for a strong relationship between librarians and teaching faculty. This relationship was identified as having an impact not only on the ability of librarians to participate in teaching of IL across disciplines but also the ability to assess and measure the success of their IL teaching. In all but two of the survey responses, librarians reported that faculty were generally supportive of information literacy teaching, but only a small minority was able to assess their teaching as a component of the particular course. The most supportive teaching faculty were reported by the research universities, whose librarians stated most strongly the level of support for incorporating IL teaching into the disciplines.

Librarians reported faculty relationships ranging from lack of interest to fully engaged peer partnerships, resulting in shared curriculum development and teaching. Some participants spoke about their ability to work with faculty on incorporating IL teaching into their curriculum or course outcomes. Such collaborative practices ranged from the ability to participate in developing and assessing IL modules within courses: “I can say that we create the materials and we teach those components of it…so we create them, we teach them, we grade them…and then they are a component of the grade” (Pilot interview participant 2), to participation in developing assignments related to library research. Successful faculty engagement was also explicitly identified: “…so the best case scenario: I’m on the syllabus, the class is booked ahead of time, the faculty member is super involved, it’s related to a real assignment, and that’s where you get students who have retention of… what you’re saying” (Interview participant 10). Of particular interest within the results was that librarians frequently identified the concept of ‘success’ as the level of engagement of the discipline faculty, and the librarian’s participation in the development of the assignment associated with the IL teaching.

The literature has shown that librarians who have close relationships with faculty are better able to engage in IL teaching practices in an effective manner, including the ability to apply new theoretical approaches in their teaching (Drewes and Hoffman, 2010; Hooper and
Scharf, 2017). The surprising result from this study is the limited access that librarians report to a shared curriculum development approach to IL teaching, overall. While there were many references to successful partnerships with the teaching faculty, few librarians described full engagement with the discipline faculty at the curriculum development level. More frequently they reported frustrations with the limited benefit of IL tool-based (versus critical) information literacy teaching, much of which stems from the discipline faculty’s expectation of what librarian work is, and the limited time allotted to information literacy teaching.

Lack of access to the students in their courses, including the limited time allocated to information literacy teaching, was identified as a clear barrier of trying to apply more critical information literacy teaching approaches:

it’s hard to ask an instructor…for more than an hour or two with the students. And if we are really interested in…you know, having serious information literacy and having students that are…critical, and aware and engaged with the information that they’re looking at, it’s going to take way more time…I think that that’s probably our biggest barrier…is time.

(Interview participant 4)

Or simply the lack of faculty understanding of library pedagogy and CIL: “I had one instructor one time say ‘can you teach plagiarism and information literacy in 20 minutes?’ And I said ‘no’. Because…he’s like ‘oh, I’m really tight on time, I need that time’. And I can’t teach it in 20 minutes…it’s not possible…” (Interview participant 9).

B.C. academic librarians did not report any significant level of embedded teaching, beyond individual courses or individual disciplines. In comparison to other educational jurisdictions, B.C. academic institutions do not consistently create institutional student outcomes that incorporate information literacy, and library pedagogy is not well recognized within institutions themselves. While learning outcomes do exist for individual courses, information literacy is not always identified as an outcome, and this means librarian access to students is constrained.

3.3 To what extent are librarians in post-secondary education using the new ACRL Framework in their teaching?

Impact of ACRL on teaching practice

From the survey, 83.3% (n=20) of librarians had had a chance to review the ACRL Framework, but only a quarter of respondents specified how they applied the Framework. Two of the examples offered thoughtful applications of the Framework: “I aim to make every learning experience as authentic as possible, and I frequently bring in discussions about scholarly processes, the research process, authority, discovery, etc.” (Survey participant); or by “engaging students in the process of critically thinking about information and getting them to discuss with peers’ insights, reflections, results” (Survey participant). The majority of responses indicated that although librarians had reviewed the Framework, they had not yet applied it in practice.

Of the 20 responses related to the ACRL Framework, 14 librarians agreed or strongly agreed that they were familiar with the theories that underlie the Framework. The majority of librarians, therefore, felt that they did understand the principles behind the Framework (not
surprising in that they had earlier indicated that they made themselves familiar with the Framework, including its development and inception). Most (n=13) identified Threshold Concept Theory followed by Critical Information Literacy (n=11) as two of the theories underlying the Framework.

With regard to whether the Framework would have an impact on their teaching practices, of those familiar with the Framework, almost 2/3 (n=12) agreed or strongly agreed that it would have an impact on their teaching. This is an interesting result in that overall, it means that of those institutions who participated in the survey (n=24), only half believed that the ACRL Framework for Information Literacy would have an impact on their teaching.

Analysis of these data indicated that there were no differences by region (urban or non-urban) in the librarians’ or institutions’ expectation of the ACRL Framework to change their teaching; however, there was a clear difference in expectation based on institution type. Interestingly, of the 18 responses to questions related to the ACRL Framework, only the urban research universities did not report any clear belief that the Framework would impact their teaching practices. The third of respondents who selected ‘undecided’ (n=6) were the urban research universities. This may be accounted for in part by the different mandates of the research universities from those of the more teaching intensive colleges or teaching universities. Within the survey and the follow-up interviews, there was generally a positive response to the ACRL Framework, and librarians expressed interest in finding ways to apply it in practice.

4. Conclusions and Further Thoughts

This study, related to librarians’ understanding of critical information literacy and its application, identified data which form a baseline from which further research may be conducted. While it is clear that librarians in B.C. higher education are familiar with theories underpinning library practices, they also expressed an awareness of the need to develop a deeper understanding, specifically in the application of theory into teaching. The perceived connection between IL teaching and other library practices was also made clear, with the common understanding that library pedagogy extends beyond the classroom. This extension of library pedagogy encompasses reference and research support activities, as well as the development of guides and online modules to support student learning beyond the formal teaching setting. Further research in the area of the developments in library pedagogy related to CIL, as well as the outcomes from the initial developments of IL teaching with the new ACRL Framework, would be beneficial to the scholarship of academic librarianship in Canada and elsewhere.

While librarians acknowledge the theories that underlie their practices, few indicated a belief in their ability to create significant change within their teaching practices. Engagement in a truly critical approach to information literacy has not yet become systemic in the B.C. higher education environment. IL teaching tools, such as the ACRL Framework for Information Literacy, act as a mechanism for librarians to begin discussing the theory behind their library pedagogy, both among themselves and with their faculty peers. At the same time, minimal opportunities for coordination, and the lack of provincial-level guidelines, has necessitated institutions working in isolation to develop their information literacy practices. A number of librarians identified peer relationships and professional development opportunities with other academic institutions, and the potential of a province-wide approach to developing library
pedagogy, as potential solutions to improving librarian engagement with theory and application, in the BC context.

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References


