

THE STATE OF THE FIELD OF CRITICAL INFORMATION LITERACY IN HIGHER EDUCATION

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Dissertation Prepared for the Degree of

DOCTOR OF PHILOSOPHY

UNIVERSITY OF NORTH TEXAS

August 2014

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Downey, Annie L. *The State of the Field of Critical Information Literacy in Higher Education*. Doctor of Philosophy (Higher Education), August 2014, 249 pp., 8 tables, 3 figures, references, 151 titles.

The purpose of this dissertation was to explore the state of critical information literacy (CIL) in higher education as it is enacted and understood by academic librarians. This qualitative study investigated the institutional support, nonsupport, and barriers to CIL programs and the effectiveness of experiential critical pedagogy for information literacy (IL) learning as taught and studied by 19 CIL specialists. Purposeful sampling was used to gather a sample of 17 academic librarians and two professors of library and information science who had previously worked as academic librarians. The sample included 11 females and eight males; 18 participants were Caucasian and one was African American. Data were collected through 40-60 minute semi-structured interviews and a brief demographic survey. Experiential education served as the broad theoretical framework for this study, which stems from the tradition of critical theory. This study was guided by the work of two major experiential learning theorists and theories: Paulo Freire and critical pedagogy and Jack Mezirow and transformative learning. Mezirow and Freire focused their work on adult education and grounded their approaches in critical theory and focused on power relationships, reflection, and the emancipatory potential of education. The findings were framed through a lens of Freire's conception of critical pedagogy because it was the major theoretical framework that most of the study participants used to guide their work.

Findings suggest that academic librarians who teach CIL do not learn about it in their MLS programs. They tend to use three major critical teaching methods, including student-

centered approaches, discussion and dialogue, and problem-posing methods. Participants tended to struggle more with using critical methods than with incorporating critical content. Slightly more than half regularly used critical methods in their teaching, but all participants incorporated critical content, including critical source evaluation and subject headings and language used in information production and dissemination. The findings also suggest that CIL specialists are likely to believe that CIL is best taught within the broader context of academic disciplines and that strong relationships with faculty are crucial for successfully implementing information literacy programs of any kind, including CIL programs. Most participants felt supported by their library administrators and at least minimally by college or university administrators, even though they thought administrators did not have a clear idea of what they do in the classroom. The professional identity and culture of librarians and librarianship played a large role in whether and how librarians were drawn to CIL and in their ability to practice it. The results of this study will allow librarians and educators to make more informed decisions about how to design, teach, and implement programs and will benefit library science scholars and policy makers in terms of knowing how it is being taught and supported at the institutional level.

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By

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ACKNOWLEDGEMENTS

Thanks so much to Dr. Amy Fann, who provided me with continuous and thoughtful guidance, feedback, and expert support and never lost faith that I would finish, even as I had a baby and moved across the country. My committee members, Dr. Yunfei Du and Dr. Beverly Bower, provided excellent feedback that improved the final product. This dissertation is the direct result of my work with many smart, insightful, and dedicated librarians, including those I interviewed for this study and many wonderful colleagues, including but not limited to: Jo Monahan, Lilly Ramin, Starr Hoffman, Julie Leuzinger, Cindy Batman, Linda Maddux, Dena Hutto, and Joe Marquez. Special thanks to my mentor, Gayla Byerly, who helped me grow into the kind of librarian I wanted to be and has always provided me with honest and encouraging words, gestures, and kindnesses.

My mother, Margie Lockler, has always shown me the value and importance of hard work and never giving up, and made sure I knew that I was smart enough to do anything. My sister, Kendra Keefer-McGee, introduced me to Paulo Freire and has always encouraged me to work for a more just world. My brothers, Andrew and Jesse Keefer, let me know all the time that they believe in me and are proud of their big sister.

My beautiful children, Maggie, Livvie, and Sophie, inspire me every day. Harry Potter World – here we come! And finally, thank you to my dear husband Mike, who took care of the house, the kids, and me unfailingly throughout, all while providing constant encouragement. If there were any way for me to put your name on this dissertation and degree along with mine, I would. It is half yours.

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CHAPTER 1

INTRODUCTION

1.1 Background

“In 2008, Americans consumed information for about 1.3 trillion hours, an average of almost 12 hours per day. Consumption totaled...100,500 words and 34 gigabytes for an average person on an average day”(Bohn & Short, 2009, p. 7). Interestingly, reading has seen a sharp increase – tripling from 1980 to 2008 – because so much of the information people receive on the Internet is in written words (Bohn & Short, 2009). While the next iteration of a comprehensive study measuring information consumption has yet to be published, we can get an idea of the magnitude of its growth over the past six years based on the astonishing amount that access to and dissemination of information has expanded. From 2008 to 2013, the percentage of adults using the Internet grew from 75% to 85%, with 98% of teens and young adults in the United States regularly using the Internet (Zickuhr, 2013). In the same span of time, the Internet grew in size from over 186 million to 634 million websites (Pingdom, 2009, 2013). Further, 91% of all Americans are now cell phone owners, the majority of whom use their phones to access the Internet, providing constant access to information (Zickuhr, 2013).

While information consumption continues to rise, the information landscape has shifted and promises to continue to change in unpredictable ways. Information production used to be limited to a relatively small number of authors, scholars, journalists, and other experts. Today it is so easy and inexpensive to create websites,

videos, e-books, and the like and disseminate this information online, the type of content and number of providers is larger and more diverse than ever. For example, looking only at word consumption, the words entering our minds come from many sources, with only 9% from print sources as opposed to 26% in 1960. Today the overwhelming majority of our information consumption is from television, cell phones, and computers (Bohn & Short, 2009; Zickuhr, 2013).

The Internet has become ubiquitous in modern society and affects almost every aspect of contemporary life. Gasser, Cortesi, and Malik, et al argued that “the Internet has led to structural changes in the information environment” (2012, p. 6). Similarly, Castells (2010) contended that the changes created by the rise of the Internet has resulted in a new type of society, which he calls “the network society.” He argues that as we have shifted from traditional mass media and old patterns and formats of communication to “a system of horizontal communication on networks organized around the Internet and wireless communication,” we have experienced a “fundamental cultural transformation”, “virtuality [has] become an essential dimension of our reality,” and a constant incoming stream of information is the norm (p. i).

With these structural and cultural changes come important issues that need to be addressed. Traditional gatekeepers to information such as editors, publishers, and producers of newspapers and magazines, books, and television are far less important than in the past. This has resulted in a virtual disappearance or devaluation of many of the processes and standards that we used to rely on to ensure information was accurate and of good quality. In many ways, individuals must now become their own gatekeepers

and have to determine the quality of the information they are finding with little to no help. Gasser, et al. (2012) observed that the ability to make “quality judgments about information in the digital media ecosystem [is] arguably more challenging [than for the previous information landscape] and corresponding skills [are] even more important” (p.6).

Additionally, more careers require an understanding of digital technologies, which affects education and job training just in terms of basic financial survival. The Internet has also become central to participation in cultural activities and civic engagement (Gasser et al., 2012). Because networks are not constrained by geographic boundaries, the network society is global, meaning participation can potentially be more inclusive. However, it is not *all* inclusive as some people and places are included while others are left out, creating a new geography of social, economic, and technological inequality (Castells, 2010). Savvy information and technology use is quickly becoming a prerequisite to success in contemporary society and those who fail to learn the necessary skills are at risk of being left behind both economically and socially.

The changes caused by technology and the information explosion make it necessary for educators to develop new understandings of learning and thinking. Students have to successfully navigate the new information environment and be able to respond to the rapid changes that have proven to be one of the major characteristics of the information landscape. The concept of information literacy emerged to fill these needs. As educators and policymakers have searched for ways to help individuals develop the skills and knowledge they need to be successful in this new environment,

many librarians, teachers, and scholars have argued that schools should teach information literacy from kindergarten through graduate school.

As the United Nations Educational, Scientific and Cultural Organization (UNESCO) and International Federation of Library Associations and Institutions (IFLA) written “Alexandria Proclamation” states:

Information Literacy lies at the core of lifelong learning. It empowers people in all walks of life to seek, evaluate, use and create information effectively to achieve their personal, social, occupational and educational goals. It is a basic human right in a digital world and promotes social inclusion of all nations. Lifelong learning enables individuals, communities and nations to attain their goals and to take advantage of emerging opportunities in the evolving global environment for shared benefit. It assists them and their institutions to meet technological, economic and social challenges, to redress disadvantage and to advance the well-being of all. (2005, para. 2)

1.2 Statement of the Problem

The big ideas that are presented as arguments for information literacy have not come to be reflected in the reality of how information literacy is actually taught and included in school and organizational goals. Most intentional information literacy instruction is taught by school and academic librarians in a hit or miss fashion (Nardine & Meier, 2010; Wilkinson & Cairns, 2010). Librarians teach whomever they can whenever they can, but are at the mercy of teachers, faculty, and administrators who often treat information literacy as something that will just magically come to students as they complete their coursework. This has led to a lot of information literacy instruction being mostly skills-focused, without including much of the higher-level thinking and critical reflection that true information literacy requires (Swanson, 2004).

In 2000, the Association of College and Research Libraries (ACRL) published foundational standards to guide information literacy efforts in the form of the widely used *Information Literacy Competency Standards for Higher Education*, but the “standards do not adequately address the fact that knowledge is socially constructed” (Keer, 2010, p. 151). Likewise, historical models of literacy have conceptualized it as a set of competencies and defined it as simply the ability to read and write. However, “critical literacy scholars recognize literacy as a culturally-situated phenomenon, embedded within specific social, political, and economic systems, subject to (and potentially constitutive of) the power relations and ideologies that define particular moments in history” (Accardi, Drabinski, & Kumbier, 2010, p. xi). Further, “our understanding of literacy needs to expand to encompass the multiple literacies students develop in response to new technologies and new media” (Accardi et al., 2010, p. ix).

The critical element is of utmost importance because as Brabazon (2007) stated, “the web is large, occasionally irrelevant,...outdated and increasingly corporatized” (p. 155). She was especially critical of Google: “Google is the Internet equivalent of reality television: popular, fast, and shallow” (p.156) and “in a fast-food, fast-data environment, the web transforms into an information drive-through. Google facilitates empty caloric searches, loaded with fat but little nutrition for knowledge building” (p.158). But students have to learn to use this and other digital content and print resources appropriately. They must be taught to think about what they are finding and how to evaluate for credibility and quality and how to ask questions of the books, articles, and websites that they read. The purpose here is not to demonize Google, but

rather to place it and all other resources in their appropriate context and to be critically reflective of all information.

To deal with the issues of overly simplified, mechanistic IL skills teaching within the context of a confusing and largely corporatized information rich world, a growing number of librarians and information literacy scholars have begun to study and teach a relatively new subset of IL called *critical information literacy (CIL)*, which looks at the cultural, social, and economic structures that underlie all of information production and dissemination. CIL scholars and practitioners urge students to approach all information, regardless of the type or source, with a critical eye and to be reflective of their role as information consumers and producers. Many also argue that students need to go beyond critical reflection and actively disrupt dominant modes of information production in order to challenge oppressive power structures.

A further challenge to all of IL is that librarians alone cannot harness and deal with the huge challenges students must deal with in the current information landscape; this is a problem that confronts all of education. One solution that has gained popularity in recent years is the idea of embedding information literacy in and across the curriculum. Although this is hardly a new concept – interestingly, the first major library instruction study published in 1966 reached this same conclusion (Knapp & Wayne State University, 1966) – it is gaining more support. Some librarians have argued vehemently that information literacy instruction should be provided by librarians because they are the information experts. However, train-the-trainer models and collaborations between librarians and faculty have been shown to be more successful because librarians do not

have enough direct access to students to be able to fully teach and reinforce the complexities of information literacy. Additionally, considering that the Internet and its various applications have become the “communication fabric of our lives,” (Castells, 2010) it is ridiculous to think teaching students to understand and use it well should be limited to only one discipline, especially a discipline with such limited reach in terms of direct instructional opportunities.

1.3 Purpose of the Study

The purpose of this study was to explore the state of critical information literacy (CIL) in higher education as it is enacted and understood by academic librarians. This qualitative exploratory study explored the institutional support, nonsupport, and barriers to CIL programs in higher education and the effectiveness of experiential critical pedagogy for information literacy learning. Providing a picture of how academic librarians with CIL understanding and expertise perceive institutional support and approach the problems of teaching CIL knowledge and skills to students strengthens the knowledge base in this area. Because it is a relatively new field of study in which little research has been done, an in-depth understanding of the strengths, issues, barriers, and limitations of IL programs is needed. The results of this study will allow librarians and educators to make more informed decisions about how to design and implement programs.

1.4 Research Questions

The research questions that guided this study are:

- What is the state of the field of critical information literacy in postsecondary institutions?
- What approaches are effective in teaching critical information literacy?
- What type and amount of institutional support is given to critical information literacy programs?
- What are the obstacles to creating and/or expanding critical information literacy programs in higher education?
- What methods have librarians found to be successful in efforts to embed critical information literacy into the college curriculum?
- What type and amount of professional support is given to the ideas and practice of critical information literacy?

1.5 Significance of the Study

Leading education scholars of the 20th and 21st centuries, such as Castells, Freire, Giroux, and Boyer have written on the importance of adapting education in response to the Information Age (Boyer, 1997; Castells, 1999). These scholars and others provide support for the argument that IL is *the* campus wide issue of this century (Rockman, 2004). As it relates to undergraduate education specifically, IL is essential because it is a crucial requirement for a socially just democratic society and individual and societal economic success. Bundy argued “information literacy is a prerequisite for participative citizenship, social inclusion, the creation of new knowledge, personal empowerment,

and learning for life” (2004, p. 8). The Educause 2009 Horizon Report stated that “there is a growing need for formal instruction in key new skills, including information literacy, visual literacy, and technological literacy. The skills involved in writing and research have changed from those required even a few years ago. Students need to be technologically adept, to be able to collaborate with peers all over the world, to understand basic content and media design, and to understand the relationship between apparent function and underlying code in the applications they use daily” (Johnson, Levine, & Smith, 2009, p. 6).

Unfortunately, numerous studies (Hart, 2005; Head & Eisenberg, 2011; Katz, 2007; Kolowich, 2011; Latham & Gross, 2008) have shown that students do not typically enter college with these skills or learn them in their coursework. Librarians and other educators have been largely unsuccessful with teaching IL because of how they teach it, due to a lack of teaching skill and training, poorly devised curriculum, inability to embed information literacy in the overall curriculum, and limitations of common instructional models (Fister & Eland, 2008).

Further, as IL is currently conceptualized and taught, the focus is on mechanistic, surface skills that do not provide students with a deep enough understanding of how information is produced, disseminated, and consumed. The power structures that are embedded within the entire information lifecycle are typically left out of the average IL instruction program, leaving students with an anemic view of how the information world really works. This means that most students leave college being able to find basic information and usually can do some rudimentary evaluation of their information finds,

but they do not typically learn to critically evaluate and reflect on the information from the perspective of the larger sociopolitical system in which it was created and distributed (Accardi et al., 2010; Elmborg, 2006; Harris, 2010).

This study investigated the teaching techniques of librarians who teach CIL, how they have worked to embed CIL in their organization's curriculum, what methods of developing and implementing programs they have found successful, and what barriers tend to get in the way of advancing IL efforts in higher education. The results of this study give individuals who are interested in teaching CIL or developing programs information to help them make sound decisions to guide their practice. It also benefits higher education and library science scholars and policymakers because it presents a picture of how CIL is being treated at the organizational level.

1.6 Definitions

1.6.1 Information Literacy

It is generally agreed upon in the literature that the term 'information literacy' (IL) was first coined by Paul Zurkowski in 1974 in a paper for the US National Commission on Libraries and Information Science. Zurkowski's initial conception of IL was significantly different from its current iteration. His focus was on the private sector and the changing work environments in the United States (Maughan, 2001).

In the years since Zurkowski presented the basic idea of IL, several major national and international organizations have developed definitions to guide their work and that of their members. All of these definitions include descriptions of some of the

major skills that could be used to identify an information literate person, including being able to find, use, and evaluate information. Beyond these basics, the definitions tend to vary in how encompassing they consider IL to be, including differences in what is designated 'information.'

According to the American Library Association (ALA), "information literate people are those who have learned how to learn. They know how to learn because they know how knowledge is organized, how to find information, and how to use information in such a way that others can learn from them.(...) [T]hey can always find the information needed for any task or decision at hand" (1989, para. 3).

The Society of College, National and University Libraries' (SCONUL) definition of IL is that it is "an umbrella term which encompasses concepts such as digital, visual, and media literacies, academic literacy, information handling, information skills, data curation, and data management" (2011, p. 3).

UNESCO defined IL "broadly...as the ability to access and use a variety of information sources to solve an information need. Yet, it can also be defined as the development of a complex set of critical skills that allow people to express, explore, question, communicate and understand the flow of ideas among individuals and groups in quickly changing technological environments" (2009, p. 150).

Beyond the major definitions that have gained approval from national and international organizations, many individual scholars have also developed useful definitions of IL. Babu argued that it is a "natural extension of the concept of literacy" in our information society and is "pivotal to the pursuit of lifelong learning" (2008, p. 56).

This clearly articulates that IL has become a new basic and essential literacy in the 21st century. The most well-rounded and complete definition I have identified in the literature and the one that will guide this study comes from Bundy (2004):

Information literacy is an intellectual framework for recognizing the need for, understanding, finding, evaluating, and using information. These are activities which may be supported in part by fluency with information technology, in part by sound investigative methods, but most importantly through critical discernment and reasoning. Information literacy initiates, sustains, and extends lifelong learning through abilities that may use technologies but are ultimately independent of them. (p.4)

1.6.2 Information

Li and Lester (2009) challenged the definitions of IL written by ALA and ACRL because they did not define ‘information’ prior to defining ‘information literacy.’ They argued that it is impossible to determine what makes someone literate in something without first defining what that something is.

At its most basic, “information means interpreted data, news or facts” (Bundy, 2004, p. 9). Li and Lester (2009) were more expansive, saying that “information can be anything around us, such as breaking news, codes, events, images, names, numbers, pictures, signals, signs, tables, texts, and so on” (p. 571). Elmborg agreed that information should be defined prior to defining IL and provides his own definition, which focuses on the social nature of information. He argued it is “the product of socially negotiated epistemological processes and the raw material for the further making of new knowledge”(2006, p. 198). For the purposes of this study, information encompasses all of the above. It includes data, texts, images, news, facts, and so forth and it is socially constructed.

1.6.3 Literacy

If it is important to define 'information' before trying to develop an understanding of IL, it makes sense to define 'literacy' as well. "Literacy is conventionally the ability to read, but increasingly has become associated with the ability to understand or to interpret specific phenomena" (Bundy, 2004, p. 9). Therefore, in the broadest sense, literacy is being "knowledgeable or educated in a particular field or fields" (UNESCO, 2005, p. 148). However, scholars have written on and debated the meaning of literacy and how it relates to education and knowledge so extensively that this broad definition overly simplifies the concept as it is used in the academic literature. To try to reconcile the many definitions of literacy being used across disciplines, UNESCO (2005) highlighted "four discrete understandings of literacy: literacy as an autonomous set of skills; literacy as applied, practiced and situated; literacy as a learning process; and literacy as text" (p.148).

While the common usage of the term literacy primarily means the ability to read and write, it has evolved far beyond simply letters. "For a long time writing provided the only medium for preserving and transferring information beyond the face-to-face oral tradition. To know letters meant to be literate, learned. This meaning might be described as a level one meaning of literacy," (Marcum, 2002, p. 13) but a more accurate definition of literacy should include more than just written text. It is the "ability to read, interpret, and produce 'texts' appropriate and valued within a given community." In this sense, 'texts' means "anything that can be read and interpreted" (Elmborg, 2006, p. 195).

Further, the idea of literacy as being dichotomous in nature has also evolved. Most literacy experts no longer conceive of an individual as either “literate” or “illiterate,” but rather see literacy as a continuum (Bawden, 2001). Some of the above definitions of information and literacy touch on the cultural and social aspects of the concepts, but they do not delve deeply enough into the criticality that critical theorists think should be included in conversations about information and literacy.

1.6.4 Critical Literacy

The prime function of education is to create knowledge and truth (Brookfield, 2005). Learning to read texts, images, media, and other documents is fundamentally about learning to understand the meaning of such things in order to develop knowledge and find truth. Foucault and Gordon (1980) argued that “the exercise of power perpetually creates knowledge and conversely knowledge constantly induces effects of power” (p. 52). Critical literacy instruction encourages students to analyze the power structures underlying the texts under study in an equitable and empowering learning environment.

Critical theorists argue that all teaching embraces and reinforces a specific perspective or belief system (Kellner, 2003). The students and the teacher are a part of their social and cultural system and what transpires between them takes place within that context. To argue that teaching can be neutral is false and misleading. That which is supposedly neutral typically reinforces the status quo and supports the power structures already in place. Therefore critical literacy may be defined as “learning to read and write as part of the process of becoming conscious of one’s experience as

historically constructed within specific power relations (Anderson and Irvine as cited in Shor, 1999, para. 3).

According to Shor (1999), “critical literacy [is] for questioning power relations, discourses, and identities in a world not yet finished, just, or humane [and] challenges the status quo in an effort to discover alternative paths for self and social development” (para. 1–2). Shor’s definition combines the personal with the communal so that critical literacy learning is about the internal reflective process of the students’ personal understandings along with the analysis of power structures in their communities and society. Therefore the critically literate student is both “reflective and reflexive: language use and education are social practices used to critically study all social practices including the social practices of language use and education” (Shor, 1999, para. 24).

The final component of critical literacy is that it leads to social activism or change. In his seminal 1936 essay defining critical theory, Horkheimer argued that critical theory can only be judged as successful if it ends in revolutionary change. Brookfield (2005) contended that critical theory is “full of activist intent” (p. 350). Critical literacy falls under the wider critical theory umbrella and has the same aim, as does CIL.

1.6.5 Critical Information Literacy

There is not currently a well-defined theory of CIL and there is no fully developed and agreed upon definition. The definition I used for this dissertation came from layering the ideas of several IL scholars and librarians, using praxis as a starting point.

Praxis is an essential element of the CIL definition because a critical theoretical tradition dictates that “theory and practice are both vital parts of a critical whole” (Cope, 2010, p. 15). Practicing librarians and library scholars often bemoan the almost total separation of research and theory from the everyday practice in libraries (Stortz, 2012). Library research and theoretical development is often considered the domain of graduate library schools, while librarians are so enmeshed in their day-to-day work, or practice, that they either do not have the time or do not take the time to study the theoretical underpinnings that would ideally inform their work. Praxis connects theory and practice, which is “vital to information literacy since it simultaneously strives to ground theoretical ideas into practicable activities and use experiential knowledge to rethink and re-envision theoretical concepts” (Jacobs, 2010, p. 181).

CIL starts with “a library instruction praxis that promotes critical engagement with information sources, considers students collaborators in knowledge production practices (and creators in their own right), recognizes the affective dimensions of research, and (in some cases) has liberatory aims” (Accardi et al., 2010, p. xiii). In addition, CIL must take into account the complex power relationships that undergird all of information, including its creation, presentation, storage, retrieval, and accessibility. “Most discussions of [information literacy] stress the development of applied skills that assume a rational, unconstrained, information-seeking agent operating in an environment free of social hierarchies,” but “a critical [information literacy] will see information-seeking as situated within particular contexts” (Cope, 2010, p. 15).

CIL looks beyond the strictly functional, competency-based role of information discovery and use. It goes beyond the traditional conceptions of IL that focus almost wholly on mainstream sources and views. It “will seek to develop students’ capacity for social questioning and act to denaturalize the social structures and world views they inhabit” (Cope, 2010, p. 19). Further, it “moves beyond assessable objectives to question the social, political, and economic forces involved in the creation, transmission, reception, and use of information. Ultimately, this deployment of critical pedagogy should result in information literate activity that recognizes the complicity of the individual – and the individual as a community member – in information-based power structures and struggles” (Harris, 2010, p. 279).

1.6.6 What Information Literacy is Not

IL is often confused with computer literacy and information retrieval. These two skill sets, while they can inform IL, are very different. Computer literacy and information retrieval are focused on the technical aspects of using technology and finding information while IL is focused on the content found with the technology and information retrieval systems. IL and library literacy are also often confused with one another or used interchangeably. Library literacy and information retrieval have a much narrower scope than IL.

Shapiro and Hughes “recognize and point out the differences between information literacy and computer use, noting ‘information and computer literacy, in the conventional sense are functionally valuable technical skills. But information literacy should in fact be conceived more broadly as a new liberal art that extends from knowing

how to use computers and access information to critical reflection on the nature of information itself, its technical infrastructure, and its social, cultural, and even philosophical context and impact – as essential to the mental framework of the educated information-age citizen as the trivium of basic liberal arts (grammar, logic, and rhetoric) was to the educated person in medieval society” (as cited in Rockman, 2004, p. 7).

Information Retrieval (IR) skills are also often confused with IL skills. Computer-based IR has been a burgeoning field since the 1940s. IR is much more technical and focused on a limited set of skills, mostly involving search. While search and retrieval have been a focus of research and development for several decades, it is only in the recent past that search has become a well-known and oft discussed topic of the global brain. Nonetheless, what is now commonly termed search (i.e. “Google has a monopoly on the development of search” or “students must learn how search works to be successful in today’s world.”) is interchangeable with IR. These skills run the gamut from low-technical to highly technical, with information seeking on one end of the continuum and compression and algorithms on the other.

IL has a much wider scope than library literacy. Information exists in a variety of formats all around us. It cannot all be found in the library and the majority of students do not use the library to find the information they need for their coursework. Therefore, focusing only on library literacy rather than sharing our knowledge of the much larger information world does students a disservice and does not adequately prepare them to succeed in the current world environment. Li and Lester (2009) argued that “we need to

teach students' adaptable, transferrable skills for accessing, utilizing, and synthesizing multi-format and multimedia information across heterogeneous applications, databases, and systems" (p. 572).

CHAPTER 2

LITERATURE REVIEW

John Dewey (1916) argued in *Democracy and Education* that the primary goal of education is to produce functioning, well-rounded, reflective, and thoughtful citizens that could further and enhance democracy. He posited that to reach this goal, education has to be grounded in experience, useful and meaningful for students, and should help us move towards a socially just society. In short, social justice depends on informed and engaged citizens.

In the not too distant past, to be an informed citizen was fairly simple and could be accomplished by watching the evening news and reading the daily newspapers and an occasional book or magazine. Newspapers, television, and radio are easy to use information formats that were limited in terms of the programming and content available. For example, most households had access to three major networks on television, a limited dial of available radio stations that could be reached via antenna, and one or two local newspapers along with some access to a major city newspaper like the New York Times or the Wall Street Journal.

In the current world, the amount of information available in the traditional formats is essentially limitless as cable television has provided us with hundreds of channels, the Internet has opened up access to virtually every small local and large national newspaper, and every radio station imaginable is available for streaming online or on offer via satellite radio. Meanwhile, other types of information sources have exploded to include blogs, news and content aggregators, homegrown video and radio,

commercially created content, online journals and newspapers, massive archives, constantly growing government documents and databases, enormous online e-book libraries, and on and on.

According to Rockman (2004), “the issue is no longer one of not having enough information; it is just the opposite—too much information, in various formats and not all of equal value. In a time of more than 17 million Internet sites, three billion Web pages, and more than a million items in a typical medium-sized academic library, the ability to act confidently (and not be paralyzed by information overload) is critical to academic success and personal self-directed learning” (p. 1). Kellner and Share (2005) argued that “in our global information society, it is insufficient to teach students to read and write only with letters and numbers...[because] the majority of information people receive comes from highly constructed visual images, complex sound arrangements, and multiple media formats” (p. 3). IL is a new basic literacy.

As the information landscape has become more complex, so to have the requirements for socially and economically just societies. To have a fully informed citizenry, individuals must have a strong understanding of how information is created, organized, distributed, and accessed. Ernest Boyer (1997) argued that “information is, in fact, our most precious resource. In such a world, education should empower everyone, not the few. But for information to become knowledge, and ultimately, one hopes, wisdom, it must be organized. And, in this new climate, the public interest challenge, beyond access and equity is, I believe, sorting and selection. The challenge of educators

is to help students make sense of a world described by some as ‘information overload’” (p.140).

Gathering and analyzing information has largely become the center of gravity in higher education. In the recent past, the material undergraduate students were expected to learn was presented to them in easy to use prepackaged formats, such as textbooks or photocopied course packs. It is becoming less and less likely that professors will simply supply a textbook and expect their students to develop knowledge through the use of that one source. They expect them to find and use a variety of sources, making it necessary for students to develop a whole new skillset that previous generations of college students did not have to have (Hounsell, 2005). Today’s students are often expected to either find their own information, supplement the information provided by professors with their own findings, or access materials from a variety of providers.

Based on the importance of IL to student success and ultimately societal success, investigating how it is taught and seeking improvements to such teaching are of critical importance. However, as Kapitzke stated, “traditional information literacy as a pedagogy is objectified and externalized, its core values (‘information,’ ‘facts,’ ‘knowledge’) reified into book collections and databases, and its methodology instrumental” (as cited in Riddle, 2010, p. 136). She advocated instead for a transformative information literacy practice that assumes that all information and knowledge are “culturally mediated, socially constructed, and especially now through digital technology, decidedly fragmented and non-linear” (Riddle, 2010, p. 136).

This literature review begins by laying out the theoretical framework that guided my study of CIL. It starts with a discussion of experiential education and describes the work of two educators, Freire and Mezirow, in critical pedagogy, and transformative learning. Next I will discuss deep and meaningful learning as essential to any transformative learning process and contrast this with the surface learning approaches that are typical in IL instruction. Then I will briefly describe the major IL models and standards and illustrate how they reinforce mechanistic and surface learning. Next, I will describe some of the research done on CIL. The next section will present academic librarians' relationship with pedagogy, including the limitations and obstacles that get in the way of CIL instruction and programs. Finally, I will detail some of the research on students' IL skills to show where they need the most help and to illustrate that the status quo is failing to create an information literate citizenry.

2.1 Theoretical Framework

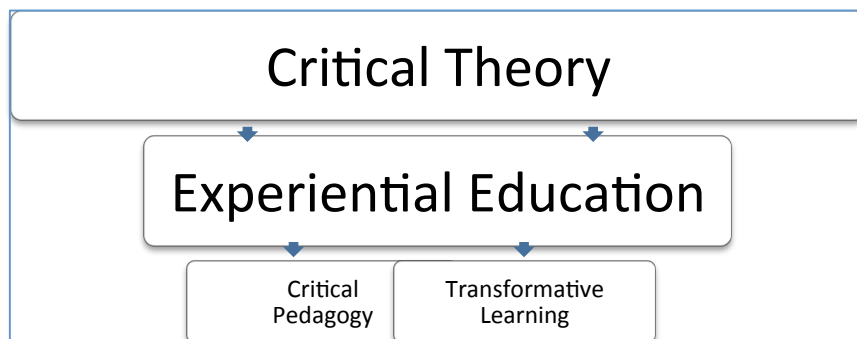
Experiential education served as the broad theoretical framework for this study, which stems from the tradition of critical theory. In the broadest sense, theories that seek to emancipate individuals from any circumstances of domination or oppression are critical. Specific to education this means that "critically oriented researchers attempt to understand processes in education in relation to their cultural, economic and political context" (Ferrare, 2009, p. 465).

Kellner (2003) asserted that all of education needs to become more grounded in critical theory because of the changes in technology and information. According to him,

“emergent technologies and literacies require a careful rethinking of education in literacy in response to its new challenges that will involve an era of Deweyan experimental education, trial and error, and research and discovery” (p.60).

Two major theories of experiential education are critical pedagogy and transformative learning. There is some overlap between critical pedagogy and transformative learning such that some transformative approaches are considered a part of the critical pedagogical tradition and some stand alone under the experiential education umbrella (see figure 1). Meaningful learning is an essential component to critical pedagogy and transformative learning and infused my theoretical framework.

Figure 1: Concept Umbrella



Experiential education, critical pedagogy, and transformative learning are sometimes used interchangeably and sometimes treated as complementary. Just like with critical theory, concrete definitions of any of these are hard to formulate and depend a great deal on the interpretation of the particular author or theorist writing the definition. For example, Apple, Au, and Gandin (2009) argued that critical pedagogy has become a “sliding signifier” that “seems to have been used in such broad ways that it can mean almost anything from cooperative classrooms with somewhat more political

content, to a more robust definition that involves a thorough-going reconstruction of what education is for, how it should be carried out, what we should teach, and who should be empowered to engage in it” (p.3). Likewise, “the notion of experiential learning has been used to refer to everything from kinesthetic, directed instructional activities in the classroom to special workplace projects interspersed with ‘critical dialogue’ led by a facilitator to learning generated through social action movements, and even to team-building adventures in the wilderness. Definitional problems continue when one tries to disentangle the notion of experiential learning from experiences commonly associated with formal education, such as class discussions, reading and analysis, and reflection” (Fenwick, 2000, p. 2).

The definitions that guided this study stay as true as possible to the original ideas, while also reflecting the positive revisions that have resulted from continued study:

“Experiential education is a philosophy and methodology in which educators purposefully engage with learners in direct experience and focused reflection in order to increase knowledge, develop skills and clarify values” (Association for Experiential Education, n.d., para. 3).

“Critical pedagogy is a way of thinking about, negotiating, and transforming the relationship among classroom teaching, the production of knowledge, the intuitional structures of the school, and the social and material relations of the wider community, school, and nation state” (McLaren as cited in Wink, 2000, p. 31).

“Transformative learning involves a process of disorientation, critical reflection on assumptions, dialogue, and action on new meaning perspectives” (Stevens-Long, Schapiro, & McClintock, 2012, p. 184).

2.1.1 Experiential Education

Dewey was the first major proponent of experiential learning, which he expounded on in his classic book *Experience and Education* (1938). Dewey argued that education should be based on learning by doing and that educators need to help students connect their past experience and knowledge to new experiences. Further, students have to actually do something in their environment to test out and solidify what they have learned with the new experience. All subsequent experiential learning theories and approaches have built on Dewey’s work.

Since Dewey published *Experience and Education*, experiential theories and practice in education have exploded. There are so many theories and schools of thought that define themselves as falling under the experiential learning umbrella that scholars have begun to try to organize the various perspectives and approaches to make talking about and understanding this body of work manageable. Different authors have developed various categorizations for experiential learning (see Fenwick, 2001). Fenwick divided it into four categories, including psychoanalytic, situative, critical cultural, and enactivist; Jarvinen argued for three categories, including phenomenological, critical theory, and situated and action theory; and Saddington said there were three categories, including progressive, humanist, and radical (Fenwick, 2001). All three of these schemas include a category for the type of experiential learning we are most

concerned about here, which is the critical approach. The respective authors named this approach critical cultural, critical theory, and radical, which I refer to as the critical approach in this study.

This study built on the work of two major experiential learning theorists: Paulo Freire and Jack Mezirow, both of whom focused their work on adult education. Mezirow and Freire grounded their approaches in critical theory and focused on power relationships, reflection, and the emancipatory potential of education.

2.1.2 Critical Pedagogy

Freire is one of the best-known figures in experiential learning. In his classic book *Pedagogy of the Oppressed*, he introduced critical pedagogy to educators all over the world, describing the critical pedagogical methods he used to teach Brazilian peasants to read and write. He strongly opposed teaching literacy with a mechanistic approach because he argued that it strips people of their ability to question the world around them and leads to them simply accepting dominant world views and assumptions. Freire called this mechanistic approach the “banking” concept of education, in which the educator deposits knowledge into the student and ideas and content are presented as static, concrete, and not open for question or interpretation. Banking education focuses on recording, memorizing, and repeating. To Freire, this type of education is meaningless and repressive (Freire, 1993).

The goal of education using critical pedagogy is liberation and the process to get there is guiding people to become critical of their thoughts, society, education, power, and so on. Freire thought the process of individuals becoming more critical of the world

around them was akin to them waking up or becoming conscious. He called this process “conscientization,” which he believed would lead to transformation of the individual and society. According to Freire, transformation through conscientization is what makes education meaningful (Freire, 1993; Wilson & Burket, 1989).

2.1.3 Transformative Learning

Transformative learning focuses on the meaning structures that we have, use, and revise in the process of learning. Specifically it addresses how our experiences shift and change within the framework of our cultural assumptions and understandings, which are often called ‘frames of reference’. Mezirow defined these as “structures of assumptions and expectations that frame an individual’s tacit points of view and influence their thinking, beliefs, and actions” (Taylor, 2008, p. 5). Frames of reference serve as the container for the transformative process. The heart of the transformative process is “to raise consciousness and then to critically reflect on assumptions” (Tisdell, 2008, p. 51) and to revise a frame of reference, resulting in “a more fully developed (more functional) frame of reference . . . one that is more (a) inclusive, (b) differentiating, (c) permeable, (d) critically reflective, and (e) integrative of experience” (Mezirow, 1996 as cited in Taylor, 2008, p. 5-6).

Mezirow’s work on experiential emancipatory learning also recognized change as evidence of learning. He conceived emancipatory learning as a process of critical self-awareness where the learner begins to critically evaluate and reflect on why they see a situation or an event the way they do and then critique their assumptions and values regarding their understanding of that event. He said this reflection is typically the result

of a disorienting dilemma and is what provides the meaning to learning. Mezirow argued that educators have a responsibility to help learners transform and emancipate their thinking, which goes far beyond simple subject matter mastery. Achieving emancipatory learning requires different teaching methods than what is required to teach students how to perform a task (Wilson & Burket, 1989).

Mezirow was influenced by Freire, which is clearly seen in the similarities between his perspective transformation and conscientization. Mezirow defined perspective transformation as “the process of becoming critically aware of how and why our presuppositions have come to constrain the way we perceive, understand, and feel about our world; of reformulating these assumptions to permit a more inclusive, discriminating, permeable, and integrative perspective; and of making decisions or otherwise acting upon these new understandings” (Jarvis, 1992, p. 97). See Table 1 for a comparison of the main ideas of transformative learning and critical pedagogy.

Table 1: Comparison of Transformative Learning and Critical Pedagogy

	Transformative Learning	Critical Pedagogy
Goal of Education	Transformation and emancipation (individual)	Liberation (individual and society)
Evidence of Learning	Change in thinking based on critical evaluation and reflection on self within society (frames of reference)	Change in thinking based on critical evaluation and reflection on self and society
Evidence of Critical Reflection	Perspective transformation	Conscientization
What makes education meaningful?	Reflection	Transformation
Ineffective methods		Mechanistic, banking

One of the main criticisms of Mezirow's conception of transformative learning is that it is too focused on the individual learner and their singular perspective. Since Mezirow first introduced his theory of transformative learning in 1978, his ideas have been expanded on and theorists and practitioners have developed alternate perspectives of how they believe it should be conceptualized. One of these different perspectives is the 'social-emancipatory' view, which is grounded in the work of Paulo Freire. While the goal of Mezirow's transformative learning approach is personal transformation, the goal of the social-emancipatory approach is social transformation. The social-emancipatory approach could also be called a critical pedagogy of transformative learning and illustrates where the overlap of critical pedagogy and transformative learning is likely to occur (Taylor, 2008).

2.1.4 Deep and Meaningful v. Surface Learning

Transformative learning depends on pedagogy that requires the learner to delve deeply rather than focusing on teaching surface skills or concepts. Many scholars have investigated the difference between deep and surface learning, what leads to deep and meaningful learning, and why recognizing the difference is important. Experiential learning theorists in particular have spent considerable time investigating what makes learning meaningful. While "deep learning" and "meaningful learning" are not necessarily synonymous, learning does have to be meaningful to be deep. Therefore it is reasonable to look more closely at what experiential theorists have identified as the characteristics of meaningful and deep learning. These theorists argue that experience is

a necessary and central component of meaningful learning and use the individual's real world experience as a starting place for learning (Wilson & Burket, 1989).

Jarvis and Ausubel are two experiential learning theorists who have studied the characteristics of deep and meaningful learning as opposed to surface learning. Jarvis's model of the learning process argued that "learning and action are inextricably intertwined" (Jarvis, 1992, p. 69). He "suggests that learning is always an individual process: that individual change is indicative of learning, and that non-learning is reinforcement or the absence of change" (Hay, 2007, p. 41). Jarvis's model contributes to our understanding of deep versus surface learning in particular because he argues that any experience can lead to either learning or non-learning, even experiences within an educational enterprise. He argued that memorization on its own leads to non-learning if the other steps in the learning process are ignored. Non-learning is the potential outcome of any experience if the experience is deemed unimportant, not given consideration, or rejected because the learning is trivial. Further, he equated meaningful learning with reflective learning (Hay, 2007; Jarvis, 1992).

Like Freire and Mezirow, Jarvis situated learning within the social context of the learner and he reasoned that it is the educator's responsibility to take into account the social past that learners bring with them to the classroom. While a disjuncture between past experience and current experience are necessary for learning to occur, gaps that are too wide prevent learning. Therefore, the teacher must bridge cultural boundaries and remain mindful of gaps in experience (Wilson & Burket, 1989). Jarvis contended

that the evidence of learning is change and a lack of change indicates non-learning (Hay, 2007).

Ausubel found learning to be a process of assimilating new concepts into existing concepts on a continuum from rote to meaningful. Rote learning occurs when students memorize information without trying to relate or integrate the information into their existing knowledge structures, which is similar to Jarvis's description of non-reflective learning. Meaningful learning is at the other end of the continuum and occurs when students build substantial relationships between existing knowledge structures and newly acquired information. Meaningful learning results in the assimilation of new concepts and the building of new conceptual structures (Novak, 1984; Taricani, 2000).

However, meaningful learning approaches are typically left out of academic librarians' work on IL, both in theory and practice (Kopp & Olson-Kopp, 2010). The use of only surface level teaching strategies in information literacy degrades academic librarians' role in the learning process even as it is increasingly emphasized in the literature. A few authors have specifically addressed the need for librarians to move from focusing on surface learning to deep learning (Accardi et al., 2010). They have argued that librarians need "to design learning environments that encourage deep learning rather than the surface learning typically associated with skills training, reinforcing the shift in librarians' role from trainer to educator" (Bewick & Corral, 2010, p. 99).

2.2 Limitations of the Major IL Standards and Models

In efforts to create information literate communities and societies, educators, librarians, and policymakers have created IL standards that provide behavioral outcomes and characteristics of information literate students to guide instruction and evaluation design. Researchers and others have fleshed out the standards and developed models to define and illustrate the research and information seeking process. Models have been developed in many countries, including the United Kingdom, the United States, Canada, Scotland, Australia, and New Zealand (Moore, 2005).

Most of the major information literacy instructional models in wide use today tend to focus on a set of tasks or stages and were originally developed over ten years ago. Some have been updated in the last two or three years, but most of those that originated more recently expand on older models. Whether the model is meant to be linear, cyclical, or iterative, it is thought that the student progresses through a set of steps or stages to develop competency. The models tend to focus heavily on the search process. Those that include evaluation and synthesis still do not go far enough in terms of stimulating meaningful learning. See Appendix A for a breakdown of the major models.

Kopp and Olson-Kopp criticized the *ACRL Information Literacy Competency Standards for Higher Education*, the most widely used IL standards in American higher education, for failing to encourage meaningful learning and critical thinking. They argued that “when learning outcomes are couched primarily in mechanistic and behavioral terms, we should not be surprised if students remain uncritical” (Kopp & Olson-Kopp, 2010, p. 58). While countries outside of the US have developed their own

standards and models specific to their citizens, they have not strayed far from those outlined by ACRL. For example, the Society of College, National and University Libraries (SCONUL) in Great Britain developed a model made up “seven pillars” of IL, which outline the skills and abilities an information literate individual should possess. Unfortunately, the seven pillars “do not extend beyond the skills-based [ACRL] model of IL development and do not suggest a relationship between information and the values of either the information provider or the information literate person” (Harris, 2010, p. 284).

While there has “been substantial international debate and research on IL and there have been repeated efforts to draw up skill lists, standards, and models” (Johnston & Webber, 2003, p. 340), there have not been the same efforts put into curriculum design for IL or efforts to teach librarians – the primary teachers of IL – how to teach. Harris (2010) contended that “in some ways, the standards have taken the place of pedagogy in library instruction, resulting in a profession-wide dependence on lists of educational outcomes to define both the theory and practice of IL instruction” (p. 279).

2.3 Librarians and Pedagogy

University and library administrators and accreditation bodies increasingly require or expect academic librarians to find ways to teach students IL skills (Association of College and Research Libraries [ACRL], 2011; Middle States Commission on Higher Education, 2003; Saunders, 2007). However, librarians face powerful obstacles to

effectively teaching IL concepts and skills to students. Two of the most pervasive obstacles are an extremely limited time with students and a lack of training in pedagogy.

Most IL or library instruction is taught in one hour or less class sessions at the discretion and mercy of teaching faculty (Veldof, 2006). “Most librarians agree that this approach is ‘broken’ and that meaningful research is embedded throughout course material” (Peterson, 2010, p. 72), but professors continue to request these sessions and it is often the best option available to academic librarians. It is very difficult to delve deeply into a complicated and multifaceted topic like IL in such a short period of time. Librarians have to decide what the students need to know for the research-related assignments for that specific class and provide information on those resources (Sinkinson & Lingold, 2010). This means most library instruction sessions aren’t truly IL-based in the sense of IL being a rich area of study and certainly do not reach the goals of CIL. Rather, they are resource-based and only skim the very surface of what students need to know for lifelong success (Accardi, Drabinski, and Kumbier, 2010).

Bruce (1997), Maybee (2006), Limberg (1999), and others (Maybee, 2006) investigated undergraduate students’ perceptions of information using phenomenographical research methodologies to determine how students experience information and information seeking. The researchers used this methodology with the aim of developing a student-centered understanding of information seeking behavior so that they could design instruction more in line with students’ information literacy needs. Their studies revealed “that undergraduate students experience information use in a complex, multi-tiered way that needs to be addressed by higher educators when

creating information literacy pedagogy” (Maybee, 2006, p. 83). Their findings show that information literacy instruction needs to encompass more than most of the current IL models suggest with their focus on simple lists of skills (Maybee, 2006). Unfortunately, time limitations often leave librarians in a quandary as they try to isolate the most important concepts that students need to know that they can teach in one hour or less.

Mokhtar, Majid, and Foo (2008) found in their study of 479 students that “information literacy competencies cannot be sufficiently learned and applied when the competencies are learned through one-time training, such as lecture-tutorials and, workshops, or hands-on sessions. The competencies need to be reinforced through close coaching or mediated learning so that students can identify their learning gaps, rectify them, and improve their learning under the close supervision and guidance of an expert” (p. 199). Unfortunately, most of today’s professors started their careers prior to the explosion in online information and “the rule in the print-based environment tended to be information scarcity, not information overabundance” (Swanson, 2004, p. 262). Additionally, they are often unwilling or lack the time to teach research skills in addition to the disciplinary content of their course.

Another obstacle to the effective and meaningful teaching of IL is that most librarians who teach are accidental teachers. While “professional interest in information literacy can be traced back several decades” (Bewick & Corral, 2010, p. 99), most do not take any classes on teaching or learning during their MLS programs and have to learn to teach on the job and as they go. Walter, Arp, and Woodard (2006) argued that “even after thirty years of discussion and debate, teacher training is still a relatively minor part

of the professional education for librarians even as it becomes an increasingly important part of their daily work” (p. 216). Most are self-taught, relying on reading books, articles, and websites and attending very focused conference sessions rather than learning in the classroom from experts or having the luxury of spending time fully engaged with the theoretical understandings of teaching and learning prior to being thrown in front of a class (Walter et al., 2006).

ACRL touches on pedagogy in the *Information Literacy Competency Standards for Higher Education*, encouraging librarians and teachers to create “student-centered learning environments where inquiry is the norm, problem-solving becomes the focus, and thinking critically is part of the process” (ACRL, 2000, p. 4). The authors cited the Boyer Commission Report, *Reinventing Undergraduate Education*, to encourage using teaching strategies that require students to develop significant questions and undergo creative research to find answers. They argued that this is best achieved through integrating information literacy into the larger higher education curriculum, weaving the development of IL competencies into all disciplines using problem-based learning approaches (ACRL, 2000).

Despite ARCL’s recommendations of how librarians should approach IL teaching, little actual research has been done on approaches to teaching IL. The literature is abundant with examples of “what worked” and how-to articles and research on students’ IL and library research skills. But rigorous research connecting specific pedagogical approaches and techniques to IL competencies is limited. “Existing studies on [IL] have mainly focused on students’ information skills, students’ library skills,

student learning outcomes, or ICT education. However these studies did not look at [IL] teaching approaches that are grounded in the sound pedagogy which informs educational research” (Mokhtar et al., 2008, p. 195). Meanwhile, scholars and librarians alike increasingly argue for the importance of today’s academic subject librarians to learn about pedagogical knowledge, theory, and skills (Bewick & Corral, 2010).

The how-to articles are replete with examples of surface and mechanistic approaches to teaching IL. Mechanistic approaches to learning limit the ability of students to critically engage with their world. Literacy, for example, is a complex process that goes much deeper than the simple ability to recognize and read words. True literacy opens up worlds of possibility and provides the student with the opportunity to interact in a much more meaningful way. Unfortunately, failure to recognize this complexity leads to mechanistic and surface teaching approaches, such that “literacy is reduced to the mechanical act of ‘depositing’ words, syllables, and letters *into* illiterates” (Freire, 1985, p. 8). Kopp and Olson-Kopp (2010) asserted that “library instruction functions within the banking concept of education to the extent it can be described merely as a *transfer of objects that fosters the development of skills in the service of others* (italics in original)” (p. 56).

Another issue that arises from librarians’ lack of teacher training is that they struggle with finding ways to make their instruction meaningful to students. They often confront the problem of students being unable to relate the information they are supposed to learn in library instruction sessions to what they may be doing in their classes or to their lives in any meaningful way, which according to Jarvis and Ausubel,

limits the possibility of deep learning (Hay, 2007). A lot of the current methods for teaching IL and library instruction strip the endeavor of any meaning to students. When students do not believe the information being taught has any significance for them, they are not open to finding ways to relate it to their existing knowledge structures (Ladenson, 2010). So even if librarians use methods that they hope will promote discovery learning, if the student does not find the task potentially meaningful or relevant to them personally, they are not likely to experience meaningful learning. Therefore, this important subject that perfectly aligns with critical pedagogy and is the perfect vehicle for educational empowerment is being taught in such a way that it actually goes against the theories of critical pedagogues.

2.4 Critical Information Literacy

As a burgeoning field, the research on CIL is sparse. However, scholarly writing on CIL continues to grow in the form of essays and ideas for lesson plans and instructional design. Elmborg is the most cited author on CIL according to Google Scholar and Web of Knowledge. He made the case for why librarians and educators need to adopt CIL as a foundational element of education in his seminal 2006 article “Critical Information Literacy: Implications for Instructional Practice.” In it, he argued that the library literature “has been slow to embrace critical approaches to literacy or to integrate critical perspectives into research or practice” (2006, p. 193).

Cushla Kapitzke is widely regarded as one of the first scholars to meld IL with critical approaches (Accardi, Drabinski, and Kumbier, 2010). She argued that librarians

need to teach a transformative literacy practice that presents to students the power structures that are inherent in the production of all information, whether that information comes from a trusted encyclopedia or from the “infoglut” of the web. This transformative practice should “adopt a critical perspective not only to information resources but also to its own practice and methodology [that would] broaden analysis to socio-political ideologies embedded within economies of ideas and information” (Kapitzke as cited in Riddle, 2010, p. 137).

Another noted name in IL scholarship is Swanson, who argued for a CIL model that includes the following six characteristics:

1. *Views the information world as a dynamic place where authors create knowledge for many reasons.* One size does not fit all in selecting information to support new ideas. Information is created with a purpose and should be judged according to that purpose.
2. *Seeks to understand students as information users.* Students use information on a daily basis. Information literacy should be viewed as a growth process over time.
3. *Emphasizes that information evaluation is a continual process during research.* Evaluation of sources does not happen at one single point during the research process. Instead, it occurs constantly as information is found.
4. *Recognizes that information evaluation is relative to the point of view of the reader.* Individuals use their own experiences and views to evaluate information. Credibility is as much a function of the reader as it is of the information creator.
5. *Provides opportunities for students to increase their understanding of finding, evaluating, and using information.* Using information effectively takes practice over time and must continue throughout our lives as information users. This calls for a concerted effort to build information literacy skills within the curriculum.
6. *Centers libraries within the curriculum as the experts on overcoming many of the obstacles to conducting successful research in the ever-changing information world.* Libraries are positioned to work between academic departments to bring information skills to curriculum (2011).

The one book that has been published to date on CIL is *Critical Library*

Instruction: Theories and Methods edited by Accard, Drabinski, and Kumbier (2010).

Many of the chapters in this book are cited throughout this literature review and cover

topics such as developing theories for CIL, methods for teaching IL using critical approaches, and how institutional power limits the growth of CIL.

2.5 Current Level of Students' IL Skills and Knowledge

Given the myriad of obstacles that get in the way of effective and meaningful IL learning, it is not surprising that research shows that a large majority of college-bound high school and college students are not information literate. In 2006, the Educational Testing Service (ETS) administered their ICT Literacy Assessment to 6300 students at 63 institutions. The ICT Literacy Assessment is a standardized test based on the *ACRL Information Literacy Competency Standards* and was developed under the guidance of college librarians, faculty, and administrators. On average, students were only able to answer around 50% of the questions correctly. While ETS urged educators to use caution in evaluating the preliminary results based on limitations of the sampling method used, the results are interesting and not terribly surprising. Only 49% of students were able to evaluate a set of websites correctly; 44% could successfully choose an appropriate research statement for a class assignment; 35% could effectively narrow a search; and only a handful of test-takers were able to adapt material for a new audience (Katz, 2007). In another study in 2008, ETS tested 3000 college students and 800 high school students. Of those, only 13% were information literate according to their scores on the ICT Literacy Assessment (Latham & Gross, 2008).

Project Information Literacy (PIL) has been studying students' information skills on campuses across the country since 2005. In the spring of 2010, they surveyed 8353

students to try to find out more about how students conduct everyday life research, such as keeping current on news, how they would find information on a car they wanted to buy, or how they would conduct research for a health issue. While IL encompasses much more than an understanding of academic research, the overwhelming majority of IL research is within the context of formal learning environments. The PIL studies are very important for developing a better understanding of students' research skills because they look beyond the classroom (Head & Eisenberg, 2011).

The PIL researchers found that 95% used Web search engines for their everyday life research; 87% asked friends and family for this type of information; 53% turned to instructors and only 14 % asked librarians. This is not surprising nor should be alarming to librarians, especially if we consider it our job to teach students to find, retrieve, and analyze information on their own. One surprising finding was that 40% of students used library databases for their everyday life research (Head & Eisenberg, 2011).

Studies have also shown that professors do not believe that most college students are prepared to do college-level research. Achieve conducted a national survey and discovered that 59% of college instructors felt that their students were poorly prepared to do research. Self-assessments by students on these same skills provide mixed results. In the Achieve study, 40% of recent high school graduates who went on to attend college felt that they had only some gaps in their ability to do research, with 10% reporting large gaps (Hart, 2005). Meanwhile, the National Center for Postsecondary Improvement found that only 48% of students surveyed felt confident in their ability to find information (Rockman, 2004).

Most professors expect students to either come into their classroom already possessing the skills necessary to complete research assignments or to quickly teach themselves the skills needed to accomplish these tasks. DaCosta (2010) surveyed faculty in the U.S. and England to determine how important they believed IL skills were and to what extent they were incorporating teaching these skills into their classes. 93% of the English and 98% of the American faculty surveyed agreed or strongly agreed that students should learn IL skills. Only 55% and 57% of these same professors took actions to embed learning IL skills in their courses. Singh surveyed over 400 American faculty members teaching undergraduates and found that 33.8% believed their students' research skills were poor (Alvarez & Dimmock, 2007).

"A particular challenge for today's students is understanding the relationships between types of information resources, how to evaluate the appropriateness and reliability of these resources, and how to make intelligent choices among them" (Rockman, 2004, p. 14). Studies by the California State University and the University of Rochester found that students and faculty agree that critically evaluating sources is the most difficult aspect of research for undergraduates (Alvarez & Dimmock, 2007; Rockman, 2004). In the PIL studies, students also said that the concept they struggle with the most is evaluating the sources they find. They have a hard time determining which source is the "right" source and with filtering the relevant out from the irrelevant (Head & Eisenberg, 2011).

Finding and evaluating information underpins everything that students do in the current classroom, but faculty and students alike do not often turn to librarians for help

with these skills. Singh found that despite 55.2% of faculty reporting that they believed library instruction improved their students' research skills, only 8.6% included it in their courses (Alvarez & Dimmock, 2007). Meanwhile, the University of Rochester study revealed that despite almost universal problems with IL concepts during the course of completing their research assignments, 79% did not ask a librarian for help (Burns & Harper, 2007).

2.6 Conclusion

The Australian and New Zealand Institute for Information Literacy (ANZIIL) and Council of Australian University Librarians (CAUL) argued that "the key characteristic of the postindustrial 21st century is that it is information abundant and intensive...The uncertain quality and expanding quantity of information also pose large challenges for society. Sheer abundance of information and technology will not in itself create more informed citizens without a complementary understanding and capacity to use information effectively" (Bundy, 2004, p. 3).

While librarians have done a good job of making the case for the importance of IL in higher education, they have over-simplified the concepts and relied on static sets of standards and outcomes to drive their pedagogy. Meanwhile, students in study after study demonstrate that they are not information literate. Librarians have tried to combat this when and where they can, but their methods are falling short due to lack of time with students, poor teaching skills, and a limited understanding of pedagogy. A small number of librarians have turned to experiential education, critical pedagogy, and

transformative learning theories looking for answers to help them address the complex problems posed by the continuously changing information landscape. These librarians see in IL the opportunity to help students transform themselves and their worlds by seeking “to develop teaching practices that [will] empower self-directed learners who actively and critically examine information systems and accepted codes of legitimacy” (Sinkinson & Lingold, 2010, p. 81).

John Raulston Saul asserted that a critical approach to information is more important than ever because the ruling elites have, rely on, and must control more knowledge than ever before. But while the knowledge they control is part of their power or strength, it also makes them more vulnerable. “The possession, use, and control of knowledge have become their central theme – the theme song of their expertise” but he contends that it is not their *use* of knowledge that gives them the most power. Their power comes from how effectively they control that knowledge (Comor, 2011).

CIL scholars ask what role libraries do and should play in disrupting existing power structures. Elmborg has asked if “the library [is] a passive information bank where students and faculty make knowledge deposits and withdrawals, or is it a place where students engage existing knowledge and shape it to their own current and future uses?” (as cited in Kopp & Olson-Kopp, 2010, p. 55). This study attempted to investigate these ideas further.

CHAPTER 3

METHODOLOGY

This research project was an exploratory study of the state of the field of critical information literacy (CIL). I was interested in the lived experiences of CIL practitioners in order to understand how they think about, approach, understand, and evaluate their teaching practices and the context in which they teach. I chose to use a qualitative method for this study so I could delve deeply into the topic rather than casting a wide, yet shallow, net. The method of inquiry used for a study should be one that best addresses the research questions (Stainback & Stainback, 1985), and in an exploratory study of this nature, qualitative methods are the best fit.

There are several typical characteristics of qualitative research that have been defined by numerous authors (Creswell, 2009; Eisner, 1998) that served me well as I sought to understand and develop a holistic picture of the current state of CIL. First, they tend to be field focused, studying a situation or object intact, meaning “qualitative researchers observe, interview, record, describe, interpret, and appraise settings as they are” (Eisner, 1998, p. 33). Qualitative researchers typically use multiple sources of data, inductive data analysis, and the self as the key instrument that interacts with the situation and people under study and interprets their significance. This research study was approved by the University of North Texas’ Institutional Review Board.

3.1 Sample

Purposeful sampling was used to gather a sample of 19 CIL specialists.

Purposeful sampling is “a form of sampling in which the selection of the sample is based on the judgment of the researcher as to which subjects best fit the criteria of the study” (Oxford Reference Online). Participants were chosen based on their knowledge and practice of CIL. Specific individuals were invited for participation based on their previous writings or conference presentations on CIL for academic journals or at conferences such as those hosted by ALA and ACRL, and the LOEX Annual Conference and Librarians’ Information Literacy Annual Conference (LILAC).

After gathering an initial sample based on publications and presentations, I used snowball sampling to identify additional interview subjects (Patton, 1990), by asking participants to recommend additional CIL specialists to be invited for interviews. I personally invited 14 participants. Of these, 11 agreed to participate and were part of the final sample. I also recruited eight lesser known CIL specialists by submitting invitations to interview interested parties on listservs, such as the Information Literacy Instruction Discussion List (ILI-L) and the Information Literacy Discussion List (INFOLIT). Using these methods, I gathered a sample of 19 CIL specialists, including 17 academic librarians and two professors of library and information science.

Initially an additional criterion was that the sample should include some international subjects because based on the literature review, it appeared that it may be hard to find enough participants studying and using CIL in the United States. Fortunately, this did not end up being the case. The response rate from possible

interview subjects was strong enough that I was able to gather a sample that included 17 participants from the United States and two from Canada.

The sample was 57.9% female and 42.1% male. 10.5% were ages 18-29; 73.7% were ages 30-49; and 15.8% were ages 50-64. Eighteen participants were Caucasian and one was African American. All of the participants held a Master's in Library Science (MLS). 57.9% also held a second master's degree in another discipline and 31.6% held a PhD in addition to their MLS. Most of the participants were mid-career professionals, with 52.6% having worked as a librarian for 5-10 years and 26.2% having worked as a librarian for 11-15 years; 10.5% had worked as a librarian for only two years and the remaining 10.5% had been a librarian for over twenty years.

3.2 Data Collection

Data for this study was collected via 40-60 minute interviews. The interviews were semi-structured and included a short series of semi-structured open-ended questions. Since "the goal of the research is an ideographic explanation of some phenomenon, [that is] detailed information about a single topic [,] a few loosely structured interviews are best" ("Interview," 2001). The flexibility inherent in open-ended semi-structured interviews was important to the exploratory nature of this study. This flexibility allowed me to probe, going into more depth when necessary to get additional questions answered and opened up the possibility for me to hear unexpected answers and allowed me to see ideas and connections I would not have considered otherwise (L. Cohen, Manion, & Morrison, 2003). "The interview is a powerful resource

for learning how people perceive the situations in which they work” (Eisner, 1998, pp. 81–82). The interview questions were designed with this aim in mind; to gather rich and detailed information from each individual interviewed.

While interviews can be a source of rich data, there were some potential pitfalls that I had to be careful to avoid. In order to avoid leading the responses of the interviewees, I used neutral phrasing for the interview questions. Related to this is the response effect bias, which is when an individual tells the interviewer what they think she wants to hear. An effective method to combat response effect bias is to create a carefully constructed interview protocol, which I did for this study. It was imperative that the questions were open-ended and that they encouraged “meaningful and deep responses that take the shape of narratives” (Butin, 2010, p. 97). In addition to including open-ended questions, the interview protocol for this research included space for follow-up questions and encouraged deep discussion. See Appendix B for the complete list of interview questions.

Once a participant agreed to participate in the study, I sent a consent form and basic demographic survey electronically prior to their interview. The consent form included information about how I would maintain the confidentiality of the participants. All oThe purpose of the survey was to gather basic demographic information about the interviewee and the organization in which they worked, such as age, sex, race, highest degree attained, institutional type, and geographic location (see Appendix C). The survey was administered using the Qualtrics software and took each interviewee less than five minutes to complete. I chose to ask these questions using a demographic

survey so that the information was collected systematically, and the interview time was spent on broad open-ended questions.

All of the interviews took place over the phone and were recorded and transcribed verbatim. I also took handwritten notes during the interviews in case there were equipment failures and to capture my impressions and make notes of emerging questions. All notes were scanned and typed in preparation for data analysis.

3.3 Data Analysis

In order to understand the findings, I used interpretive and inductive analysis of the data. Qualitative analysis is about developing in-depth descriptions and interpretations of a situation or phenomenon and it should occur throughout the data collection process. This is typically done through asking questions of the data, finding themes and relationships, and summarizing those findings via narrative descriptions, explanations, and discussion (Merriam & Merriam, 2009).

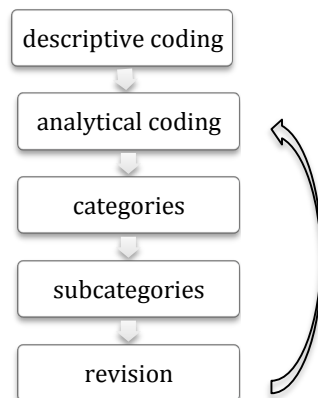
Analyzing and interpreting data are highly subjective tasks and are difficult to pull out of the qualitative research process as standalone steps. It is integral and threaded throughout the entire research process from first conceptualizing and defining the research problem and question to the final analysis. However, interpretation at this phase of the study is distinct in that it requires the use of specific analytic strategies to interpret the whole dataset. This is where the raw data is transformed into something new and illuminating (Peshkin, 2000).

Codes are typically hierarchical, including a relatively small number of main categories with several subcategories, which held true for this study. Codes may be defined in advance using the literature and the research questions or they may be defined during and after data collection. The codes for this research were developed during and after data collection. Coding was done to take all the little contextualized elements that comprise the data such as a specific comment, when it happened, who said it, and when they said it and move them to a higher conceptual level. Items that seemed to be similar were given the same code so that eventually items from different records could be moved around into similar and dissimilar groups and patterns, themes, and relationships were found (Merriam & Merriam, 2009)

Assigning codes and sorting the coded data led to category construction. Categories were informed by the purpose of the study and the conceptual framework. Merriam and Merriam describe five criteria that categories should meet. First, they should be responsive to the purpose of the research and provide answers to the research questions. Second, they should be exhaustive, in that all important or relevant data fits in a category or subcategory. Third, categories should be mutually exclusive so that each piece of data only fits in one category. Fourth, they should be sensible to outside readers so if they read the categories, they will be able to understand to some extent what they mean. Fifth, categories should be conceptually congruent; “the same level of abstraction should characterize all categories at the same level” (2009, pp. 185–186).

While there is no rule regarding how many categories a study should include, researchers generally agree that fewer categories are preferable. Fewer categories allow for a greater level of abstraction and are more manageable (Merriam & Merriam, 2009). Constant comparative analysis was used to develop the categories and subcategories which “involves taking one piece of data (one interview, one statement, one theme) and comparing it with all others that may be similar or different in order to develop conceptualizations of the possible relations between various pieces of data” (Thorne, 2000, para. 8). I continued the inductive process of refining and revising categories and subcategories until saturation was reached. Saturation is “the point at which you realize no new information, insights, or understandings are forthcoming” (Merriam & Merriam, 2009, p. 181). See Figure 2 for a visual representation of the steps that guided category construction for this study.

Figure 2: Steps to Sort Coded Data and Construct Categories



Google Docs and Dedoose qualitative analysis software were used to help manage and organize the data. These software tools were helpful during the analysis process because they helped keep the data organized and allowed me to retrieve coded

data more easily so that comparisons could be done quickly and with less tedium than using paper files alone. I used Google Docs to do initial coding by uploading all transcripts as separate documents and then using the highlighting function to select passages and the comment function to categorize passages for descriptive coding and to write notes for possible analytical coding for each highlighted passage. Then I created a document for each category and coded the subcategories within those documents. Google Docs was helpful for this process because the text and comments were both searchable so I was able to easily maneuver between documents as I coded.

Next I uploaded all of the transcripts, notes, and survey results into Dedoose, which is browser-based, qualitative and mixed-methods analysis software. I read through each transcript and coded it based on my coding in Google Docs and also took the opportunity to check my categories and subcategories against Merriam's five criteria listed above. Dedoose allowed me to create reports for each category and subcategory so I could see where there were subcategories that did not have enough substance and needed to be collapsed into other subcategories or perhaps reconceptualized. I also used Dedoose to find connections between the demographic survey data and the interview data.

Newing (2010) recommends creating annotations, memos, and coding during data collection. Annotations are simply comments written in the margins of the notes about interpretation, possible links in the data, and ideas for further action during the interviews or immediately after. Memos are longer and free standing dated reflections on the data and may be based on one interview or broader reflections on the data

collected up to that point. Memos can be important when it comes to finding a focus in how to think about the data. I created annotations and memos and did preliminary coding throughout the data collection process. I used the annotations and memos extensively during data collection, coding, analysis, and in the writing process to help me stay focused on the research questions, revise my interview questions after the four pilot interviews, make connections in the data, and to help clarify and understand the data. See Table 2 for the research timeline.

Table 2: Research Timeline

Submit IRB application	Recruit participants	Interviews	Transcription, initial coding	Final coding and analysis	Write final findings and discussion
March 2013	May-June 2013	May-August 2013	June – September 2013	September- November 2013	December 2013 – February 2014

3.4 Credibility (Validity), Believability (Reliability), and Ethics

Credibility is qualitative validity and refers to “whether the findings of a study are true and certain—“true” in the sense that research findings accurately reflect the situation, and “certain” in the sense that research findings are supported by the evidence” (Guion, Diehl, & McDonald, 2011, p. 1). “Qualitative reliability indicates that the researcher’s approach is consistent across different researchers and different projects” (Creswell, 2009, p. 190) and that “the results are consistent with the data collected” (Merriam & Merriam, 2009, p. 221). In qualitative research, many of the methods used to strengthen validity can also support reliability. I used several methods to validate my findings to ensure the research was rigorous and reliable.

I strengthened the validity and reliability by using methods of triangulation, member checks, and peer examination. Triangulation was used to establish and justify themes during analysis. Merriam recommended triangulating multiple sources of data, which I did in two ways. First, I examined the different perspectives of the interviewees to find commonalities (Creswell, 2009). Because perspectives are not likely to be shared by all of the participants, I also searched for data that would disprove a theme or did not fit in a category to ensure that I was rigorous in my analysis. Presenting contradictory data provides evidence that the study is realistic, which I endeavored to do in chapters four, five, and six. Second, I requested other documents from participants and found additional documentation at interviewees' library websites and other Internet sites as appropriate to provide another layer and more points of comparison for the data. This included syllabi, instruction plans and webpages, conference presentations and articles, and other documents that were used to shore up internal validity (Merriam & Merriam, 2009).

Another strategy to increase the credibility of the findings is member checks, which involves asking participants for feedback on the transcribed interviews and preliminary analysis. I sent transcribed interviews and data analysis interpretations back to interviewees and asked for their feedback on the accuracy of the transcription and reactions to the analysis (Merriam, 2009). Three participants made minor changes to their transcripts, to correct small misspellings and to clarify the names of two scholars and the title of a specific educational program. I sent the two findings chapters (four and five) to five interviewees asking them to read the analysis and interpretations to check

for the soundness of the findings and requested their opinions on anything that looked out of place and suggestions for changes. I received feedback from four of those participants, all of which was positive. Participants who reviewed it found the findings to be sound, “right on target,” and “riveting.”

In addition to the strategies outlined above, I also reinforced reliability by checking transcripts for obvious mistakes during transcription and was constantly mindful of code drift, which can occur if the meaning of codes shift during the coding process. To eliminate the possibility of code drift, I compared data with the codes continuously and maintained clear definitions in a codebook. (Creswell, 2009).

Finally, I used strategies to respond to my role as the researcher in the data collection and analysis processes. Merriam (1995) argued that the researcher’s experiences, assumptions, and biases must be presented at the outset of the study. I was cognizant of these throughout the study and have “[responsibly reported] what actions were taken throughout the research to ensure the research was valid” (Lewis, 2009, p. 10). I was reflexive through every step of the study to ensure that the findings are credible. I have presented all data as accurately and completely as possible.

3.5 Reflexivity and Role of the Researcher

In his foundational work on the human sciences, Wilhelm Dilthey (1991) argued that individuals develop a comprehensive worldview through the accumulation of their ‘lived experiences.’ This worldview is created by the social context in which the person was socialized and provides the foundation for how that person sees, understands, and

acts in the world (Sutton, 1993). Dilthey argued that “all science is experiential; but all experience must be related back to and derives its validity from the conditions and context of consciousness in which it arises, i.e., the totality of our nature”(1991, p. 50).

Reflexivity is an important aspect of the qualitative research tradition. It encourages us to look inward at our own understandings and beliefs while looking outward at what we are researching. Reflexivity is especially important in critical research in which subjectivity is treated as a resource rather than a liability and objectivity is acknowledged as virtually impossible. King and Horrock argued that “the detached, depersonalized and ‘uncontaminated’ account of research that is often presented is arguably a very powerful and well-rehearsed illusion. All research is...undertaken by (and with) people with motivations, agendas, and needs” (2010, p. 127). Trying to ignore this only results in an incomplete picture of the research being presented.

I came to this research study with many ‘lived experiences’ that developed my understanding of the power relationships in education. I began my schooling as a young child from a low income home environment. In addition to the lack of material wealth in my home, I was the child of an alcoholic. This was well known by many of the other children in school and from my perception, by many of the teachers as well. I distinctly remember not being given the same level of attention or care as the other more affluent children who wore more attractive clothes and had involved parents. I understood that I was not considered to be as important.

In fourth grade, I moved to an inner city neighborhood on the south side of Peoria, Illinois, which was and is a predominantly Black area. To get to the neighborhood public school, we had to walk down dangerous streets littered with trash and empty beer bottles. My first day of school was the first day after the Christmas break. As a quiet and reserved White child, the teacher showed extreme favoritism to me. After my first several years of school, this was strange to me, but I understood that it was based on my race. The other children also understood this and were not surprised because they were used to feeling racist disdain from their White teachers. I was the only child in my class who the teacher would repeat spelling words to during tests so the other children would ask me to ask her to say them aloud again when they missed them. Another telling feature of my new school was the “playground,” which consisted of a large blacktop area with no trees or plants of any kind and one rusty old jungle gym for a large K-8 school. At this school, my race weighed more than my family’s income did, despite missing weeks of school at a time when we were hiding out in domestic violence shelters. My race granted me a status and privilege with my teachers that were more important than any other factor.

In 7th grade, my family moved again to a small town in Texas where I was once again more a low income kid than anything else. I mostly remember being semi-invisible in the Texas school because it was much larger and nothing about me or my family was different or remarkable enough to make anyone take much notice. However, my sister did suffer based on our income and outsider status. My mother tried to get her into the honors classes that she belonged in based on her previous academic experiences and

the school officials refused to accept her because she had not been in the honors program in that school district since the 4th grade. Interestingly enough, they did not seem to have the same policy with me and I was admitted to the honors classes.

Despite being in the honors program for many years and having good grades, no one ever spoke to me about the possibility of going to college or talked to me about how that was accomplished. I was surprised when I was a senior in high school and my classmates started talking to one another about where they were going to college. I had no idea how they knew where they were going to college, how or when they applied to college, what was necessary to get into college, or any of the other knowledge of the process that they all seemed to magically possess. I found out later that many of them worked with the guidance counselor of the school on their college applications. That was not something that was ever offered to me nor was I aware of despite our similar academic accomplishments. So I got married right out of high school and was on the path to reproducing my born status in society.

Eventually I figured out how to go to college on my own, including learning how to apply for financial aid. Of course I did not end up at one of the high ranking prestigious schools that many of my high school friends attended. But I did get through school on my own because I learned how to do my own research, solve my own problems, and deal with the many obstacles that seemed to keep popping up in my way.

All of this brings me here to this study. I have experienced firsthand how socioeconomic class and power positions in society tend to reproduce themselves and stay with people through generations. I believe the ideal of meritocracy in the United

States is a dangerous myth that keeps people in their place because it instills in people along the entire spectrum the notion that people are not deserving if they have not succeeded in education or economically. I do not believe that these power structures will change without both educators and students challenging and disturbing the status quo. This makes people nervous so they are reluctant to even try. Educators have a responsibility to their students to work towards a more democratically just society. Critical pedagogy and transformative education offer a framework in which to do that.

I became a librarian several years ago because I believe that information is the most potentially powerful force there is. Being able to find the information you need when you need it, answer your own questions, and educate yourself can be the key that opens the cage of oppression. Unfortunately, many people do not have the tools they need to find, access, or use the information that can liberate them; they lack information literacy. This is especially true in the current information landscape where there is an overabundance of both information and misinformation. And of course to be truly information literate, one must filter information through a critical lens.

Based on my background of 'lived experiences' and the theoretical lens through which I see the world, I was not a neutral observer in this study. I approached this work as a critical educator and a student of the critical theoretical traditions.

3.6 Limitations

A limitation of this study is that all of the interviews were conducted over the phone. This created the possibility that interviewees might not give it the time and

attention necessary to get quality data. I followed King and Horrocks (2010) recommendation to researchers that they strive to eliminate this threat as much as possible by setting up guidelines during the scheduling process. First, I was very clear with the interviewees about the amount of time I expected the interview to take and politely asked them to block off enough time in their schedules. Second, I asked participants to provide me with a phone number to call that would reach them at a place where they would be able to talk freely. Finally, I sent my interview protocol to the participants ahead of time so they had time to prepare and invited them to ask me any questions about the study prior to the interview so they felt ready to discuss the topic fully at the time of the interview. Two participants asked for additional information about the study. One wanted a more detailed explanation of the nature and purpose of the study and a second participant asked that we have a brief discussion on my definition of CIL prior to beginning the official interview.

Another limitation created by the use of telephone interviews is that I could not see body language or pick up on visual cues. To deal with this, I planned to use probing techniques to help clear up any ambiguities and to encourage the speaker to elaborate more verbally. During the interviews, I found that while most participants responded well with this technique, a small number seemed to find it distracting. Consequently, I tried to quickly ascertain from the verbal cues interviewees provided while answering the first two to three questions if they found follow-up probing responses such as 'yes,' 'mmhm,' 'go on,' and so on to be encouraging or distracting. Some participants

elaborated more and answered with greater depth when I allowed more silence after initial answers.

The snowball sampling method that was used also created possible limitations. The final sample could have become limited by the networks and contacts of the initial sample, possibly yielding a homogenous sample (O'Reilly, 2008). This could have resulted in the sample not including people doing great work in the CIL field on their campuses, but who are not aggressively sharing that work with the larger information literacy community. An additional concern with snowball sampling is that if the networks of the initial sample are small, it may be difficult to find enough individuals willing to be interviewed for the study. The response rate for my initial sample and to the open requests for participants emailed out on listservs was strong enough that neither of these concerns ended up being a problem for this study.

CHAPTER 4

PEDAGOGICAL FINDINGS

4.1 Findings Overview

The purpose of this study was to explore the state of critical information literacy (CIL) in higher education as it is enacted and understood by academic librarians. This qualitative exploratory study investigated the institutional support, nonsupport, and barriers to CIL programs and the effectiveness of experiential critical pedagogy for information literacy (IL) learning as taught and studied by 19 CIL specialists. Providing a picture of how academic librarians with CIL understanding and expertise perceive support and approach the problems of teaching CIL knowledge and skills contributes to in-depth understanding of the strengths, issues, barriers, and limitations of CIL, allowing librarians and educators to make more informed decisions about how to design and implement CIL programs. The participants' real names are not included anywhere in this dissertation. The findings are divided into five broad categories and presented in Chapters Four and Five, as outlined below:

Chapter 4: Pedagogical Findings	1. Contextual Findings – includes the CIL background of the participants and the institutional setting in which they practice. This information helps set the stage for understanding how practitioners make sense of their work and teaching practice in relation to CIL.
	2. Teaching Methods and Content – includes participants' instructional goals, teaching methods, and the critical content they taught. These findings illustrate methods and content that participants found to be effective and pedagogical and structural challenges they faced, including disciplinary considerations and how students responded to CIL teaching.
Chapter 5:	3. Institutional Support and Relationships – includes institutional support

Institutional and Professional Support Findings	from college or university administration and library administration and participants' relationships with librarian colleagues and faculty. These findings detail the expectations participants had for each institutional group and how they defined support and nonsupport and developed relationships.
	4. Institutional Expansion – presents the participants' thoughts on how CIL may be expanded at an institutional level, to include possible partners and strategies; and barriers and challenges that may hinder expansion.
	5. Library Profession - includes the professional identity and culture of librarians and librarianship and how it impacted participants' ability to teach CIL. These findings show that the library profession influenced how librarians learned and thought about and taught CIL and how colleagues received it.

4.2 Chapter Overview

This chapter presents findings that directly relate to participants' teaching practice. The first part provides contextual findings, which provides more details on the educational and professional characteristics of the sample and situates the participants in their instructional practice by addressing their development as a CIL practitioner and the context in which they work, to include the type of institution they work in and the nature of the instructional program of their library. The second part of this chapter presents participants' instructional goals, teaching methods, and the critical content they taught. It also addresses the challenges the challenges the participants dealt with when trying to teach CIL and discusses how students and faculty responded to CIL teachings.

I did not explicitly define CIL for the participants during the interviews. Two asked me how I defined it prior to the interviews and in those cases, the interviewee and I discussed what we each meant by CIL. I chose not to provide my own definition for participants because the concept is still being defined and clarified in the literature and the LIS profession so ideas of what it may mean could be different for different librarians. Understanding how participants thought about and defined it was one of aspect of CIL that I wanted to discover through the interview process by hearing about how the conceptualized it, taught it, and worked with it within their libraries.

4.3 Contextual Findings

The first section of the contextual findings provides information on the CIL background of practitioners, including how they learned about critical theory, critical pedagogy, and CIL in coursework and through independent study and how learning about it affected their practice and their professional identity. The second section introduces the institutional settings in which the participants worked and the variety of instructional formats for their teaching. This information provides background that sets the stage for understanding how the participants approached and made sense of their work as it related to CIL and within the context of their institutional settings.

4.3.1 CIL Background of Practitioners

When asked to describe how they became interested in and developed their understanding of CIL, participants described a range of pathways to discovering it. A little over half were exposed to critical theories in previous coursework; five participants

had knowledge of critical pedagogy from previous teaching experiences; the majority had read about critical theory and critical pedagogy in other disciplinary literature; and most participants had read extensively on CIL in library and information science (LIS) literature, but not while working on their Master's in Library Science (MLS) degrees. For several participants, the discovery of CIL came to be a defining moment in their careers and had a significant impact on their practice. Table 3 summarizes the additional graduate degrees, prior teaching experiences, and time since earning the MLS of the participants.

Table 3: Summary of Participants' Educational Backgrounds, Teaching Experiences, and Years since MLS

2 nd Master's	PhD	Prior Teaching	Time since MLS
English / Creative Writing / Composition – 7 (36.8%)	English – 3 (15.8%) ²	Grad student (semester-long courses) – 5 (26.3%)	Less than 5 years – 2
Spanish and French – 1 (5.3%)*	LIS – 3 (15.8%) ¹	Faculty member – 1 (5.3%)	5-10 years -
Cultural Studies – 1 (5.3%)		K-12 – 1 (5.3%)	10-15 years -
Latino Studies (ABT) – 1 (5.3%)			Over 20 years – 2
Philosophy – 1 (5.3%) ¹			
Total = 11 (57.9%)	Total = 6 (31.6%)	Total = 7 (36.8%)	

*no critical theory in coursework; ¹after MLS; ²before MLS

4.3.1.1 Coursework and Critical Theory

Notably, none of the participants heard anything about CIL while working on their MLS. Only one participant remembered learning about any kind of critical theory in his LIS program and that was mostly focused on the general social justice role of

libraries. Many were not even exposed to IL. This is not a surprising finding for the 42.1% of the sample who had been professional librarians for more than ten years, but it is less expected for the 57.9% who graduated in the last ten years. User education or library instruction courses were not widespread in LIS programs until the late 1990s (Mbabu, 2009). Over 50% of LIS programs offered a standalone library instruction course in 1999 (Westbrook, 1999). As of 2008, 86% offered at least one course on instruction, but of those only 15 explicitly included the term “information literacy” in the course title (Mbabu, 2009). Melissa was one of only two participants who graduated within the last four years, and she stated,

I heard next to nothing about even information literacy. And I think it's shameful honestly you know, I'm realizing now that I am in this position that so much of librarianship at every level certainly in academic librarianship is related to instruction, to these really fundamental information literacy skills, and that just wasn't the focus of my library school.

Chris took courses on IL, but he remembered there being a dearth of critical theory in his LIS graduate program in the early 2000s. He found “in the literature that I was reading in library school this kind of really mechanistic concept,...depository concept of education seem[ed] pretty predominant. A behaviorist model, I guess they would say, seemed pretty dominant in the literature I was reading about information literacy.” In contrast, critical theorists are interested in emancipating individuals from any circumstances of domination or oppression and critically oriented educators “attempt to understand processes in education in relation to their cultural, economic and political context” (Ferrare, 2009, p. 465). Chris learned about a lot of broad critical

theories and some critical pedagogy in his undergraduate studies and found that noticeably, and disappointingly, absent from his LIS program.

In addition to Chris, eleven participants were exposed to various critical theories in coursework in other disciplines. Eight of these were while they were working on graduate degrees in other disciplines prior to becoming librarians, to include cultural studies, Latin American studies, history, English, and composition studies. Two participants were exposed to the ideas of critical pedagogy while taking graduate courses in education for professional development purposes while already working as librarians. Five participants described prior teaching experiences that exposed them to the ideas of critical pedagogy.

These eleven participants detailed how their exposure to critical theories in courses spurred them to want to find ways to incorporate critical approaches and ideas in their library work. The nine that learned about it prior to beginning library careers explained that they enjoyed studying critical theories or teaching using critical pedagogy and they missed thinking about problems through a critical theoretical lens. The two that took courses after becoming librarians were intrigued by critical pedagogy and immediately began exploring how they could use it to teach IL. Critical pedagogy is a form of experiential education that seeks to “[transform] the relationship among classroom teaching, the production of knowledge, the institutional structures of the school, and the social and material relations of the wider community, school, and nation state” (McLaren as cited in Wink, 2000, p. 31) by guiding students to become critical of

their thoughts, society, education, power, and so on (Freire, 1993; Wilson & Burket, 1989).

Melissa earned an MA and taught as a teaching assistant in cultural studies prior to her MLS and she missed critical theory when she first began working as a librarian. She actively looked for ways that she could incorporate cultural studies and critical theory into her IL instruction. After doing a lot of this work on her own, she discovered that other librarians were also thinking and writing about using critical theory to inform IL instruction.

When I started this job, I didn't really reconcile those two interests of cultural studies and information literacy. I didn't really even know that this field of critical information literacy existed. But I knew that I really missed cultural studies and critical theory and the more I thought about it, found these connections between those things that I really love to study like hegemony and Marxist theory. I saw that there was a... fundamental connection between that and information literacy... So I started to teach from a perspective informed by cultural studies and then I went to conferences and did more reading. I found out that there was this thing critical information literacy.

Andrea also had previous educational and teaching experiences in which she enjoyed studying about and teaching using critical pedagogy and critical literacy. She received her PhD and MFA in creative writing and taught composition classes as a teaching assistant. She used her previous experiences with critical theories to inform her IL instruction.

[W]hen I started looking at information literacy, I was drawing an awful lot on my experiences teaching composition and I had taken pedagogy and was interested in the ideas of critical literacy as a graduate student and beyond. So it was sort of a natural fit for me to see those connections.

Daniel learned about critical pedagogy in a graduate education class he took to earn promotion credits when he was already working as a professional librarian. The class introduced him to the work of Ira Shor whose writings really resonated with Daniel. He “saw an interesting connection between critical pedagogy and a lot of the stuff that we try to do and ...was able to carry that...to some degree into information literacy.”

4.3.1.2 Independent Study and the CIL Literature

While several participants learned about a variety of critical theories, especially critical pedagogy, in other disciplinary coursework, none learned about CIL in coursework. Most of the participants discovered CIL on their own in the LIS literature or at conferences, but a small number were introduced by colleagues. Those with previous exposure to critical theories in other disciplines were receptive to discovering the work of LIS scholars who were linking critical approaches and IL when they stumbled across them. Andrea described how even though she was already using her previous experience teaching critical literacy in composition courses to inform her IL instruction, discovering James Elmborg’s seminal article “Critical Information Literacy: Implications for Instructional Practice,” brought it all together for her. In this article, Elmborg urges librarians to reexamine how they think about IL and to develop a theoretically informed critical practice of librarianship in general, and IL in particular. He makes the case for CIL by problematizing dominant IL definitions, standards, and pedagogies and presents the alternative approach of viewing academic discourses, knowledge, and information through a critical literacy lens. Andrea stated:

And then early on, I stumbled upon James Elmborg's fantastic article, which really solidified a lot of things that I'd been thinking about...it was really a lovely way for me to connect what I had known with what I was doing. So I hadn't actually heard of critical information literacy until I read his article.

William was one of the eight participants who was not exposed to critical theories in coursework. He developed an interest in critical pedagogy on his own, at least in part from reading education journals as part of his liaison duties to the education department. He had read about it extensively, but was not trying to use the ideas in his teaching when he discovered the same Elmborg article that inspired Andrea.

I happened to come across this article by James Elmborg, the 'Critical Information Literacy Implications for Instructional Practice.' And it just, I don't why. I mean, it was just like this light went off that I could apply these critical education ideas, these things that I'd been thinking about forever, but just not seeming to apply it, not even thinking to apply it, to my work as a librarian, at least not in any really coordinated or directed way.

Those that did not find the work of CIL scholars on their own were pointed toward them by colleagues. As a language librarian, Shari was interested in ways of bringing a cultural IL approach into her IL classes with the Spanish department so she asked a colleague for article recommendations, who suggested an article by Luke and Kapitzke (1999), which was also a favorite of three other participants. Shari said that she "was just blown away" by that article and "started reading as much as I could and then asking her for recommendations and working on it with her, and it's... snowballed a bit from there."

Four publications and their respective authors and one scholar in the CIL literature stood out as being the most influential to participants. The top five, their most

influential publications, and the percentage of participants that specifically mentioned each are listed in Table 4 below.

Table 4: Most Influential CIL Scholars and Publications

Scholar	Title	Journal / Book	Participants
James Elmborg	"Critical Information Literacy Implications for Instructional Practice" (2006)	Journal	50%
Troy Swanson	"A Radical Step: Implementing a Critical Information Literacy Model" (2004)	Journal	33.3%
Maria Accardi, Emily Drabinski, and Alana Kumbier	<i>Critical Library Instruction: Theories and Methods</i> (2010)	Book	27.8%
Allan Luke and Cushla Kapitzke	"Literacies and libraries: Archives and cybraries" (1999)	Journal	22.2%
Heidi Jacobs	No specific articles identified		22.2%

All of the authors in the top five list were spoken of as scholars whose influence stretched beyond one piece; for example, Michael stated "James Elmborg...was one of the first people to really popularize the concept of critical information literacy." But the first four on the list also published specific pieces that at least some of the participants who spoke about them mentioned as having the largest impact. However, none of the participants who mentioned Jacobs identified any of her specific articles as having more influence than others. Instead they all said things like Linda, who stated, "I think Heidi Jacobs' work is really smart and...really important."

4.3.1.3 The Revelation of CIL and Professional Identity

Some of the participants described their discovery of the ideas of CIL as something of a revelation that filled their desire to find more meaning in their work and had become a major source of motivation and inspiration for them. As Shari said, “it really drives me every day...[I]nformation literacy and critical information literacy by implication seem to be the only future really that libraries can have. And that’s really exciting to me.”

When Matthew was asked how he became interested in CIL, he replied “the short answer is, to maintain my sanity.” Joe explained the importance of CIL to his professional identity, “For me I think it’s the only thing really that makes things worth doing...if it matters to you, you don’t really have a choice not to do it.” Lily elaborated on this idea further:

To me it's this great match and it's also the thing that I was looking for even though I didn't know it...So it kind of is the thing that just turned everything upside down for me. It made a huge mess, but also it really allowed me to question what I was doing and to continue to question it...It's that thing that was missing before. It's that philosophy that I just never had or I didn't know to have. And I think, you know, when you're teaching, you need that. You need that thing that grounds you, but that also inspires you. So that's what it's been for me. It's just been so valuable.

Joe argued that there was a personal religion-like element to CIL and that,

In a professional sense, it’s something you believe. And it has its associated rituals and practices and a certain sort of salvation you hope for it from it. But it becomes evangelical too if you don’t watch it. It becomes a part of your belief system and you have to find a way to make it part of what you do very day. I mean when I started my last teaching high school job I had rooms full of failures. I was a young guy at that point and I could coach sports and I could handle a room full of rowdy boys so I taught all the struggling writers and you know it would have been a really easy thing to do to just give them all Ds and get them out of there, but you could see they weren’t dumb. You could see there was something in

them that if you could figure out how to get to it, you could help them have better lives. And I think that's true no matter who you're working with and I think it's true in the library. I think when the reference desk is what you get, then you do that at the reference desk. But I also think for me critical information literacy has always meant trying to find populations that need you.

Others also talked about CIL in a similar manner, as something they believed in and tried to keep present in their work, even if it was not something they could enact every day in ways they may want to. Jane asserted that "having a habit of mind" about CIL changed how she talked about information even though she did not regularly use a lot of critical pedagogical techniques because of a lack of time with students, very limited opportunities to collaborate with faculty, and other institutional constraints. I will elaborate more on these types of constraints and discuss why many participants did not use CIL in their teaching as they would have liked in the Teaching Methods and Content section of this chapter and again in the Institutional Support section of chapter five.

Chris also felt that while there was a disconnect in his "day-to-day practice between some of the more theoretical work that [he was] interested in," studying and thinking about CIL provided him with a "theoretical framework...[and] as a result, some of this work on the margin has influenced the way that I practice." So while all of the participants were not able to find ways to overtly incorporate CIL into their classes, many felt that believing in it and keeping it present in their minds still affected their practice in positive ways.

According to Kincheloe, "the recognition of [the] political complications of schooling is a first step for critical pedagogy influenced educators in developing a social

activist teacher persona. As teachers gain these insights, they understand that cultural, race, class, and gender forces have shaped all elements of the pedagogical act” (2004, p. 2). Several participants experienced this type of recognition in relation to their IL practice by seeing at some point that cultural and sociopolitical issues impacted how and what they taught and were intricately intertwined in all aspects of IL. Further, recognizing that they could make contributions towards disrupting the political complications was affirming and provided a new direction for some participants. For example, as the liaison to the education department, William had been “interested in issues of freedom and oppression,... politics and philosophy and various other things...and the role that education plays in all of that.” He read the work of education scholars and radical educators, such as Freire, Ivan Illich, Paul Goodman, Emma Goldman, and others for several years without applying those ideas to his work as a librarian. When he finally made the connection that he could teach IL using a critical theoretical approach, it renewed him.

I was actually at a point where I was getting just really frustrated with these little one-off instructional sessions and kind of really questioning what it was that I was doing and the role that I was playing. And...being able to bring in everything else that I was really interested in and apply it to the practice of librarianship just made so much sense and it kind of reinvigorated me.

Daniel made similar connections between class issues and teaching IL after learning about critical pedagogy. As he read more about it, he:

started to recognize some of the power dynamics at work behind how the information world is structured...[by] recognizing that certain voices seemed to be privileged over other voices sometimes for better sometimes for worse. And how did students make those recognitions? How were faculty members talking about information sources when they

often equated all sources either - like Google was bad, published sources were good, or open web was bad, published sources were good? And what kinds of conversations were we having [about that]?

He thought this was especially powerful in the context of the community college with its mission of educating often underprepared and economically disadvantaged students.

Daniel credited that course with “really open[ing] up my mind to what education could be and should be” and made him really reflect on two important questions that critical librarians working in academic librarians should be concerned with: first, what is the meaning behind the journals, books, websites, databases, and other materials purchased, collected, and/or pushed out to students?; and second, what is and what should be the role of librarians in the classroom?

4.3.2 Information Literacy Models and Instruction Formats

This part of the contextual findings provides information on how IL was implemented at participants’ institutions, the goals they had for their IL programs, the types of colleges and universities they worked for, and the types of instruction sessions they taught, including providing some sense of their IL workload. It is important to situate their IL work in this institutional context because it impacted how the interviewees envisioned and approached their practice, their teaching methods and content, and their perceived limitations and opportunities for their CIL work.

All but two of the participants worked in libraries that had some kind of coordinated IL program. Nine worked in institutions that had IL goals or outcomes as part of the university requirements for all students. One additional participant, Matthew, worked at an institution that was in the process of reforming the general

education requirements, to include adding an IL requirement. How IL as a university requirement was implemented was different for the various institutions. For some, it was specifically included as part of the general education requirements or a mandatory component in a first or second year class that all students had to take. In all cases, the IL program implemented by the library was closely tied with how the college or university as a whole framed IL. See Table 5 for a breakdown of each participants' organizational type, IL model, and format of courses they taught.

Table 5: Participants' Institutional Type, IL Model, and Instructional Formats Taught

Participant*	Model	Institution	One-shots	Multiple sessions	For-credit course
Hope	First Year	Comp	Y	N	Y
Shari	Liaison	RU	Y	Y	N
Matthew	First Year	Comp	Y	N	Y
Chris	First Year	Comp	Y	Y	N
Melissa	First Year	Comp	Y	Y	Y
Anna		RU	Y	N	N
Lily	First Year	RU	Y	N	N
Jane	First Year	Comp	Y	N	N
Eva	First Year	RU	Y	Y	N
Joe	First Year	Comp	Y	N	Y
Michael	Combination	Comp	Y	Y	Y
Chloe	Liaison	RU	Y	N	Y
Andrea	Liaison	RU	Y	N	N
Kate	Combination	4 year	Y	N	N
William	Liaison	4 year	Y	N	N
Henry	Combination	RU	Y	N	Y
Linda	Liaison	4 year	Y	N	Y
Jack	First Year	RU	Y	Y	N
Daniel	First Year	2 year	Y	N	N

*Participants' names are pseudonyms

Those that had IL as a university requirement expressed sentiments that showed that they believed this requirement validated IL programs as playing an important role in the university and placed a responsibility on the librarians to make sure it was implemented effectively. Hope explained that “we have a general education learning outcome to also validate what we do.” But this puts the impetus on the library to make sure that outcome is realized: “information literacy is one of the general education learning outcomes for the university and the library is basically responsible for seeing that information literacy is integrated into the curriculum.”

There were a lot of differences in each librarian’s descriptions of their IL programs and significant variation in how they met their IL goals, but all of the programs followed one of three basic models: a first year program model, the liaison model, or a combination first year and liaison model. In addition to describing how IL was implemented at an institutional level, these models also largely defined how the librarians’ daily work was distributed, how much freedom they tended to have in the classroom, and the level of students they were likely to work with the most.

4.3.2.1 First Year Program Model

Sixteen participants spoke about the centrality of first year programs in the IL strategy for their institution. These programs were typically part of first year composition courses or interdisciplinary first or second year seminars that were required core courses for all undergraduate students. Those working mostly within a first year program tended to teach more basic and general content, taught more sessions, and worked more with adjunct faculty and teaching assistants than with full-

time, permanent faculty. They often had a bit more freedom in the classroom to try new things because the instructors they were working with were often less demanding in terms of what they wanted the librarian to do with their classes.

Most of the librarians described their participation in these courses as being “embedded” or a “required component.” Most participants described teaching one session for each course; three participants described teaching two sessions; and five spoke about being invited by the course instructor to teach three or more sessions. Hope, Matthew, Lily, Jane, Melissa, and Michael coordinated first and second year IL programs as their primary job responsibility. Joe and Daniel coordinated these types of programs in past positions.

Chris described the changing nature of the program at his comprehensive university, including the workload issues these kinds of courses can place on the library.

There are two freshman composition courses at our institution. In the introductory one, students...come to a [voluntary] workshop [for extra credit]. And then in the second composition course, every class is required to come in with a research paper...We actually used to require both the English 111 and the 151, which are the designations that we use for the freshman comp courses...but we actually changed to a workshop model in English 111 because they kept finding that it wasn't effective when students didn't have a research paper designed class. And so this is more of the volition of individual students trying to get extra credit for a workshop and as a way to deal with understaffing. When we were doing all of those classes - we had an enrollment of like 12000 students... so between 8 of us doing all of those one-shot sessions, it was actually a burden.

Jane's comprehensive university followed a slightly different model that also included IL in two places in the general education curriculum. She stated, “we are embedded in the first year composition class and we are embedded in what's called the

core seminar. It's the sophomore topics seminar broadly identified as the idea of the human."

An important aspect of these sessions is that while they may have been a "required" component of the course, it was often up to the primary course instructor, not the librarian, to decide how involved the librarian could be and in many cases even make the major decisions about the content the librarian was allowed to teach, either by explicitly directing the librarian to teach certain concepts or demonstrate specific databases or indirectly through research assignments. Occasionally, librarians were invited to discuss and help design research assignments in order to improve the effectiveness of the assignment and to ensure it meshed well with library resources. This was typically done by individual faculty members on a case-by-case basis, but Eva's research university provides a rare programmatic example:

We are very integrated in the first year writing program so every faculty member in the writing program for first year students...is assigned a librarian and it's part of their template for the course to have at least two research sessions with that librarian. And there are meetings between the faculty member and the librarian before the semester starts to look at the syllabus and the research assignment.

However, even in this case, she qualified her description of the program by stating "there is quite a bit of collaboration and of course that depends on the faculty member, but most of the time faculty in that program are very collaborative." More common was the type of situation Jane described:

We don't collaborate on the development of assignments...One of the research assignments that came through the library this year was "is it okay for a girl to ask a boy out?" This was the research question that these students were asked to answer and so there are so many

problematic things in that research question that where do you even begin?

4.3.2.2 Liaison Model

The liaison model is common in academic libraries and is characterized by each public services librarian being assigned academic departments that they work directly with. Liaison duties generally include providing library instruction, reference, and collection development services tailored for an academic department. For some librarians, especially in larger institutions, their liaison work may constitute the majority of their daily work and they may be responsible for being the primary point of contact for hundreds or thousands of students and faculty in two to four departments. For librarians in smaller institutions, liaison work may be just part of their daily duties while they are also responsible for other administrative or operational functions of the library or they may be the liaison to several departments, freeing up other librarians in the institution to handle the operational tasks of the library.

This common breakdown was true for the participants in this study. Those in larger libraries tended to have fewer departments that they were responsible for, while the librarians working in smaller institutions either worked with a large number of departments or had operational duties that they had to balance with their liaison work. Twelve participants spoke about providing instruction to the academic departments that they were a liaison for, either as the primary means of providing instruction or as just one point of instructional contact. Participants that did most of their instruction as part of their liaison duties tended to teach fewer sessions, had to do more outreach to faculty to get classes in the library, worked with more full-time, permanent faculty, and

often had less freedom in the classroom to try new things because they had to do more negotiation with the faculty regarding the instructional content.

All of the participants that had liaison duties to specific departments worked with mostly arts and humanities disciplines and some professional programs, including education and business. Nine participants were liaisons for English, five worked with foreign languages, and four for history. Gender studies, philosophy, political science, economics, geography, kinesiology, religion, theater, art, counseling, and classics were the other departments that participants worked with. Interestingly, none of the participants liaised to the sciences, although some mentioned their work with those groups as part of their general, non-disciplinary IL duties.

For some participants, the liaison model drove their whole instruction program and their liaison work was more central than the first year programming. Two participants, William and Andrea, worked at libraries that provided all instruction through liaisons and had no coordinated programmatic effort. William described how the liaison model worked at his four-year college:

So we have, for all the subject areas, a liaison for that subject and they're responsible for doing the teaching in that area, so the nursing librarian is teaching information literacy in their area and I am History and English and other people teach in their areas too. There is not a core instruction group that goes out; it's really more based on the liaison model.

Andrea's experience was similar to William's:

It's really left up to the individual liaison librarian to work it out with their individual faculties as to how they want to work [IL instruction], so it really varies from librarian to librarian and discipline to discipline. There's no overall coordinated program.

4.3.3.3 Combination Model

Most of the participants described IL programs that were either centered around the library's liaison program or first year programs. But some had a fairly even balance between the two, which I have designated "combination programs." These programs had robust first year programs, but also active liaison components. The participants working at these institutions described both types of programs as being a major source of instruction activity for their library. When asked about the types of instruction sessions she taught, Kate described a combination program:

I do a mix of both. We do have a first year seminar program in which information literacy is embedded. Almost all faculty use the library for that first year seminar. We have less upper levels, but I have a number of faculty in departments that teach upper level instruction regularly. I would say probably a third is upper level. Maybe a little more.

4.3.3.4 Types of Instruction

The most common type of teaching by academic librarians is in the form of one-shot instruction sessions. One survey of librarians from a variety of institutional types found that 94% of teaching librarians teach this type of session (Phelps, Senior, & Diller, 2011). Another study found that 96.9% of academic libraries surveyed taught one-shot sessions and 36.9% offered for-credit IL courses (Davis, Lundstrom, & Martin, 2011). This was similar to the experiences of the participants of this study: 100% taught one-shot sessions and 31.6% taught for-credit IL courses.

In general, the literature refers to one-shot sessions as the "traditional" method of teaching IL (Jacobs & Jacobs, 2009) and "the norm for library research sessions on the majority of campuses" (Cahoy & Schroeder, 2012, p. 78). Every participant taught one-shot instruction sessions and for most, this was the main type of teaching that they did.

Six participants taught multiple sessions for the same class. Of the six, three taught two sessions for each class in their first-year program. In addition, these three spoke of having some faculty ask them to teach more than the two sessions. For the remaining three, all instances of their teaching multiple sessions for the same class were at the invitation of the course instructor.

In addition to the one-shot sessions, some participants taught semester-long courses. Some of these courses were provided through the library, which means that the course was created and proposed by the library to the curriculum committee for the college or university. After approval, all sections of the course were taught by librarians and the course designation was under the library. Three participants, Melissa, Matthew, and Henry, taught semester-long IL courses to undergraduates as part of their university's first-year programming. Melissa and Henry's courses were ongoing and not required for all students, while Matthew's had recently been cancelled, but was required for all students.

Five participants taught courses outside of the library. Three of these were still IL-focused, but were taught under a course designation from another academic department, including a first year seminar, adult baccalaureate, and graduate program. Two participants, Joe and Linda, were faculty members in LIS departments and had been teaching as part of those programs for the past several years. Both had previous experience teaching one-shot sessions when they were practicing librarians.

4.4 Teaching Approaches and Content

This category of the study findings details: 1) participants' instructional goals and teaching approaches; 2) the critical content they taught in their sessions; 3) disciplinary considerations that impacted what and how they taught; and 4) how students responded to CIL instruction sessions. The findings illustrate approaches, methods, and content that participants found to be effective and identifies challenges they faced when trying to teach IL using critical methods and content. Many of the participants explained specific challenges and opportunities in working with different disciplines and those considerations are also included here. The section ends with how students responded to CIL teaching.

The overwhelming majority of participants, 18 out of 19, were influenced by Paulo Freire either directly through their own study of his work, or indirectly, by being heavily influenced by CIL scholars who in turn were heavily influenced by Freire and other critical pedagogues who followed in his footsteps. Due to this heavy influence, the findings in this section are framed by critical pedagogy.

4.4.1 Teaching Goals and Approaches

All 18 of the librarians that were influenced by critical pedagogy were advocates of it in general, even though there was also healthy criticism of some aspects of critical pedagogy by a small number of the participants. Not surprisingly then, most of the critical methods employed were in the vein of critical pedagogy and when critical methods were not possible, the participants tended to explain why that was the case through a critical pedagogical lens.

4.4.1.1 Instructional Goals.

Even though asking about the broad goals for instruction sessions or for IL programs was not part of the interview protocol for this study, seven participants explicitly expounded their goals and most of the others' goals were implicit in their descriptions of their teaching approaches and content. Six specifically presented empowerment as the goal underlying what they were trying to accomplish by teaching CIL. When Melissa explained how this worked for her, it was clear that the goal of empowerment reached beyond her instruction sessions. It also helped to define how she saw her role as a librarian and was a major source of motivation in her work.

Whenever I introduce these concepts in class I always want to tell them, "This is why we're learning this. So that you are these engaged, empowered, global consumers of information, that you're a participant in this conversation." When I conceive of librarianship it's that we are stewards of information... So that's what I go back to when I'm teaching my students; this is a tool of empowerment. You're learning about this stuff so that you can live in the world. And I want to extend that outside whatever they're doing in their classes... This has bigger implications than the microorganism of your English composition class. I think that's pretty lofty. I'm going outside of being practical again. But I mean that's really what is at the heart of it for me.

As Melissa indicated, empowerment in critical discourses is about more than empowering individual students in the classroom. It is about looking at and confronting power relations in the wider world, including the political nature of power (Gore, 2003). Empowerment as a goal for CIL works well because it is concerned with "question[ing] the social, political, and economic forces involved in the creation, transmission, reception, and use of information," and "recognizes the complicity of the individual – and the individual as a community member – in information-based power structures and struggles" (Harris, 2010, p. 273).

Michael also thought that empowerment was one of the larger goals of CIL. He was interested in helping students understand how knowledge is constructed and to introduce the notion that they could have an impact on the information universe. He wanted to help students,

recognize that information is political and it's something that can be challenged and something that can be changed...that kind of basic idea of the sociocultural basis of information and knowledge and the ways in which that can be both empowering and disempowering, and making sure that our students feel empowered to be part of the discourses that shape and change knowledge.

In addition to wanting students to confront the wider world of information, many participants were especially focused on helping students become empowered in relation to the process of scholarship. Students often feel very separate from the work of scholars and have a difficult time seeing how it relates to them in any way. When Eva described how she first became interested in critical pedagogy, it was largely in response to dealing with teaching freshman composition classes for the first time and trying to figure out how to enable students to see that what they were doing in their coursework related to their lives.

I realized that the students...wouldn't understand why we were doing things in class,...and I would say 'well, thinking is important.' And then I got to the point where I realized that they didn't really understand why thinking was important. I couldn't use that as a premise for the course because they didn't necessarily buy it. And so I started using Paulo Freire's chapter from Pedagogy of the Oppressed on the banking concept of education and we would read that...and talk about what it means to have critical consciousness and what it means to learn and what the value is of thinking as a citizen. And so...later in the semester [when] we would talk about why we were doing something, we could always bring it back to why does being a critical thinker play a valuable role in your life or in the life of a community. We had some grounding then.

Eva developed these ideas within the context of teaching semester-long freshman composition courses as a graduate student, but they stayed with her when she became a librarian. Several participants spoke to this desire of wanting students to see why the work they were doing in class had personal and societal meaning beyond the classroom walls, which often played out through a dedication to helping students develop a more complete awareness of the structure of scholarly communication, including becoming cognizant of their role in it and the potential they had to make their contributions deeper and more meaningful. Lily stressed that she wanted students to “understand that they also have a contribution to make in the scholarly conversation and we...[can] encourage them and empower them to do that.”

While many participants believed their students were exactly the right population to try to help empower, a small number of participants questioned the role of empowerment in the context of the American university in general, and in two cases, their school specifically. Joe taught future librarians in an LIS program and he stated:

I’m working with these very elite graduate students. I mean, when I started here I would tell people when I applied for graduate school I couldn’t have gotten into this school. My GPA wasn’t good enough. And so the students that I’m teaching right now don’t really need critical information literacy in the sense that they just need to understand that there are people out there who do...we’re the winners you know, we’re the ones who figured this out and the system works really well for us.

Jackie was the graduate studies librarian at her institution and she also felt the population she was working with did not need to be empowered because she thought they were already “very privileged” and “pretty well empowered.” Daniel worked on the other end of the higher education spectrum with community college students and he

thought educators needed to be thoughtful about how they approach issues of empowerment because our classrooms are often filled with people from different classes and with different levels of empowerment. He argued that,

some of the things that Freire was writing really made sense for illiterate people living in Brazilian ghettos, [but] ...Paulo Freire doesn't live in the suburbs when they each drive their own car and everyone pulls out their own iPad and iPhone, talking about empowerment doesn't seem to always make sense. And sometimes you're talking to them as empowered people. The people that are empowered [are] sometimes in the classroom with people who are less empowered and that in and off itself can be a very powerful conversation in higher ed if it's handled in the right way?

4.4.1.2 Teaching Approaches

When asked what types of approaches they used to teach CIL, participants described three primary approaches, including creating a student-centered learning environment, using dialogue or discussions, and problem-posing approaches. Seven participants also talked about the need for non-critical approaches and explained when and why non-critical approaches were better for their instructional goals or institutional context or for some other reason.

Dialogue, problem-posing, and student centeredness are standard practices in classrooms structured using critical pedagogical approaches. These approaches are all closely intertwined and in many cases, depend upon one another. It was often difficult in the coding process to tease these threads apart in participants' descriptions of their classroom practice. In fact, in Freire's work, he often treats them as inseparable. But because each element is considered necessary to constitute a truly liberatory practice, it is useful to deconstruct the participant's descriptions and look at each element alone in

order to develop a fuller understanding of the possibilities and limits of critical pedagogical praxis in the context of IL practice.

4.4.1.2.1 Student-centered

Most of the participants described classroom environments that were student-centered in some way. Twelve specifically talked about making sure their classroom was student-centered as a priority for how they structured their classes. How the participants actually created this student-centered environment varied and they tended to talk about it from two major perspectives: how they identified as a teacher or in terms of what their goals were for the class.

Hope said that she sees CIL as being “a very student-centered approach where student voice is privileged and where the authority of the teacher is sort of decentralized.” Her identity as a teacher heavily influenced how she structured her classes. She believed her role was not to present herself as an “ultimate authority,” but to give students a chance to have a voice and an active role in creating their own experience. She pointed out that she does this while also having learning outcomes that students accomplished. Hope described her classes:

[I]nstead of me demonstrating databases to the class, I try to make students do the demonstrating. And I sit sort of in the back of the room so I’m deliberately positioning myself almost like a peer or they say the guide by the side or whatever. So that I’m not the ultimate authority in the classroom and the students get a chance...to have that voice and to show their skills and it really creates an interesting dynamic in the classroom... It gets people actually physically moving around the room. It creates a sort of energy that this is a different kind of classroom than maybe they’re used to, which I think sets the tone for what I hope will be a learner- centered experience. And I feel like it accomplishes my objectives...So I feel like this is a method of achieving the outcomes in a

way that I can feel comfortable with and feel like I'm doing something that actually makes a difference in a student's learning experience.

Jack also spoke to the importance of librarians removing themselves from a position of authority. He asserted that he was more effective with students when he positioned himself as someone "without expertise." He taught his classes from a place of non-authority and non-expertise and chose instead to focus on helping students see how research is done by researchers from the perspective of observer or translator. Lily removed herself from the position of authority by,

making my classroom so constructivist that I'm barely even there. So that the students are really responsible for everything that happens in terms of the direction of the lesson, the things that we focus on, what we talk about, what they need to know and what they want to know.

Removing oneself from the position of authority can often be messy as teaching and research are not linear processes and do not follow a set pattern. Despite this reality, librarians often create very contrived research demonstrations using "canned," or predetermined, search terms that bring up the results they know they want to show. While this may be useful for illustrating various features in a specific database, it presents an inaccurate picture of what the research process is like and does not create space for critical analysis or experiential learning experiences. But many librarians are fearful of losing control in the classroom and want to keep the teaching environment very neat and contained. Michael spoke about the challenge of this for some of his colleagues:

For somebody who's not that comfortable as a teacher to begin with, it's much less risky to demonstrate your expertise and competence as a librarian through a lecture or through a demonstration than it is to pose open-ended questions or group work activities that put more power in

the hands of students when you don't know what's going to happen and you're not as adept to adapting to what does arise and guiding that in a productive way. Because you a) haven't had the experience of doing that, and b) are very wary of releasing the reins in that way.

Unfortunately, as hooks (2003) pointed out, "fear of losing control shapes and informs the professorial pedagogical process to the extent that it acts as a barrier preventing constructive grappling with issues of class" (p. 149). Matthew explained how he came to understand that using a fixed approach that did not leave much room for experimentation and exploration within the class, prevented the students from learning the realities of research, and kept him from co-learning with them. He advocated for a more authentic approach in his explanation of why and how he left "canned" searches behind.

I used to walk in with canned searches to make sure that the results would come up. Now students aren't going to experience that, so why should I? Which makes for awkward moments when things don't work. I was doing a biology class earlier this semester and one of the students wanted to do something on cancer and we looked it up in Bio One. [When we] looked up cancer? Nothing. [When we] looked up oncology? Nothing. And what we eventually found was the only information that was there was about the biology of tumors, because they look at the element of the tumor, not the actual process of cancer. But I wouldn't have ever thought that. And even the professor was flabbergasted.

Another reason participants stated for using student-centered approaches was that they were a better fit for the goals of their instruction sessions. Goals were around things like wanting the class to be responsive to students, including what they already knew, how they tackled research problems, what they felt like they needed to learn, and engaging them in the process. Finding out what students already knew about research

and then structuring the session around their wants and needs was a common method among participants. Chris expressed his desire to negotiate expectations with students:

Even though it's in a compact time frame, I always like to try to negotiate with students about the kinds of things we're going to learn, even if it's just one session. One of the things I always do is have a web form in the computer lab when the students arrive so that they can type anything they want to learn about the library or research.

Anna was also interested in finding out what students knew prior to her sessions.

Since she worked at a university with a very large enrollment, she often did not know what students knew about the library or if they had prior library instruction sessions. She used a snowball activity where she had students write down one thing they already knew about research and then asked them to ball up the paper and toss it to another student. The person that caught the paper ball unfolded it and shared what the other student wrote. The goal of the activity was to give Anna a “sense at the beginning of class of the kind of concepts people already know...so that I’m not making a lot of assumptions about what people know and don’t know already.”

Rather than doing a special activity to get at students’ prior knowledge, Jackie used discussion to try to find out where the graduate students she worked with were coming from. She started all of her sessions by trying to understand what students already knew about doing research and how they used information and literature because she was “absolutely convinced that people come in, particularly at the graduate level, [with their] own form of information literacy,” and she thought getting at that was essential to being able to teach them what would be most helpful for them in their current context.

In addition to wanting to find out about what students already knew about research and how they thought about the research process, most of the participants who used student-centered approaches also wanted to engage students more in the class session and/or to help them see more clearly where they fit or might fit in the process of information production, dissemination, and use. The majority did this through dialogue, but some participants also used other techniques and activities. For example, Henry used the jigsaw method to guide students in discovering how different pieces of literature or other texts work together. To do this activity, he divided the students into small groups and then gave each group a different task or question. When the class came back together, he asked a representative from each group to report what they did or learned, with the goal that the students would connect all of these different pieces together to form a larger understanding of a concept. “Underlying it really is the principle that knowledge is constructed,” he said.

Lily provided another example of a student-centered activity that used a different technique than dialogue. She worked with a professor to design an assignment and a class session where students created their own database with a body of literature relevant to the class.

Instead of asking them to use a library database for their research, what we did was to have them create their own database that all the students in the class could use of articles and relevant readings. And so they used hash tags and labels to give people a way to do keyword searching within their database. And they had to think about the kinds of resources other people might find useful. So instead of saying this is our library resource and this is what you will use, we asked them to bring in resources from any information source and compile that.

A small number of participants, including Eva, asked students to do some work prior to the library instruction session to prepare. Eva worked in close collaboration with the teaching faculty of the first year writing program and as part of that program, she taught three or more sessions for each class. She required students to find specific resources that related to the content for each session prior to the class. She then used the resources students brought to class to structure the class as she taught.

I ask them if they already have topics and I have the professor tell them to bring a scholarly article on the topic to class with them for the library session. And half of them do and half of them bring a New York Times article or something, but it allows us all to see where they are in terms of what they understand about what scholarship is, what they understand about navigating sources to find it, and things like that. And then we talk about what did you bring, why did you bring that, what discipline is it in, and [why] you picked it, and did you think it's scholarly and why. And their answers – that's one thing I like is that their answers aren't wrong. If they found it in Google, if you find a good article in Google, you didn't do anything wrong, wherever you find it, if it's good, great. And I think that surprises them because they expect me to badmouth Google.

4.4.1.2.2 Dialogue or Discussion

For eight participants, dialogue or discussion was a central component of their classes and for many of those, it was the chief device they used to teach CIL concepts. Participants believed creating opportunities for discussion in classes served multiple purposes. First, it allowed the librarian to create a class environment that was grounded in critical pedagogical praxis and it gave her an opportunity to find out more about the students' level of knowledge, understanding, and experience with information sources and structures. It also allowed the librarian to help students form a meaningful connection with the material or to find ways that they may already be personally

invested in the ideas and concepts being discussed and gave them a voice in their own learning experience.

Chris stressed the value of creating space for discussion, even in a class with a short time span and fairly predetermined content, because “it's important, even in the limited framework of that class, to kind of open up a conversation about who I am, why we're there, [and] what I'm going to try to do for them.” Melissa believed that helping students see why the work of CIL is important for them on a personal level brought them more of a sense of urgency and improved their understanding of the concepts.

She explained how she did this:

I would introduce the concept to them before we talked about it, and then let them think about it and try to internalize it, and make connections between this concept and their real life. So again going back to what is my sort of social and political milieu, you know. Again, really really pushing that these things are personally meaningful to them.

Henry also believed that dialogue helped students understand the material and it was worth the extra time it may take to teach using dialogue because it helped students think more deeply and critically about the content and to develop stronger understandings. He described his dialogic process:

They seem to be responding well to a more open dialogue where I ask them to delve deeper into the answers or the responses that they provide. It takes time both on the front end in terms of introducing background information and to tell students the intent of what we're doing, to work through it, and answer more in depth questions. And then finally to try to summarize or reach a synthesis if that seems appropriate.

One aspect of CIL that made it a good fit for dialogue was that the types of content the librarians were trying to address in their classrooms were fairly concrete and knowable objects with an obvious social and historical existence, yet were not

isolated facts. The use of knowable objects in dialogue between teacher and student is crucial for a Freirian critical pedagogy. According to Freire (1985), “To be an act of knowing, the adult literacy process demands among teachers and students a relationship of authentic dialogue. True dialogue unites subjects together in the cognition of a knowable object, which mediates between them” (p. 49).

A common theme among participants was to use the knowable object Wikipedia to spur dialogue about the social construction of information. Using a source like Wikipedia to create dialogue can be powerful because it is something students have a lot of experience with, often have clear opinions about, and view it as a meaningful element in their lives. Andrea used Wikipedia in a lot of her classes, especially with the history department, and was very pleased with how much it seemed to resonate with students. She would start with asking students:

Let’s think about Wikipedia, what’s great about it, what’s its limitations? And then that got [them] thinking what’s great about the standard scholarly resources like Britannica Encyclopedia or something like that. And then we’d start to see what’s great and not so great about that. And what I really loved about talking about Wikipedia with students and really engaging is they had tons of things to say. And I also got the sense that for a long time they’d been conditioned to only say that Wikipedia is bad and they should never use it and real scholars don’t ever use Wikipedia and that kind of thing. But they had so much to say... And often students will come up later and say, “oh you know I was thinking about X” or they see me on campus and say “I’m still thinking about that.” And I thought “I don’t think I’d ever do one of those straight lectures and students would come up and say, ‘you know I’m thinking about that database you were showing us.’” It just didn’t quite engage them.

Other participants, including Shari, Matthew, Anna, and Jane, described how they used Wikipedia in a similar way with reasons that echoed Andrea’s sentiments.

More examples of how participants used Wikipedia are presented and expanded on in the critical content section of this chapter.

4.4.1.2.3 Problem-posing

Freire (1993) argued that critical teachers committed to liberation “must abandon the goals of deposit-making and replace it with the posing of problems of human beings in relation with their world”(p. 60). In problem-posing approaches, the student-teacher relationship is dialogic, such that each has something to contribute and receive and actual lived experiences must be integrated as part of the exploration of knowledge (Darder, Baltodano, & Torres, 2003).

Because problem-posing approaches use dialogue as part of the process, they were sometimes difficult to disentangle from the use of dialogue in the participants’ descriptions of their classes. Some of the other participants likely structured their dialogue as part of a problem-posing approach also, but five participants spoke to doing so intentionally. Due to this, I only identified a response as “problem-posing” when the participant used those terms to describe what they were doing, with the notable exceptions of Melissa and Matthew. They described very similar techniques of looking at a problem, analyzing, and reflecting on it, but described what they were doing as a “rhetorical approach.” Melissa explained that rhetoric in this sense meant “methods of using language to persuade.”

The problem-posing approaches typically took the form of structuring the entire class session around a real world problem or the construction of a problem for students to consider and base their discussions on. Anna did the former in a class she taught for

the English department in the first week of the semester, in which she was asked by the professor to prepare the students for a research paper that they would be doing later in the semester. Students had no research topics and had not yet engaged with any of the course content. Anna felt structuring the class around some sort of problem would make it more meaningful and hopefully feel less abstract to the students.

I've tried some sort of problem based learning strategies or problem posing. And those I primarily have done with upper level classes and English where I've given them some kind of scenario about...a paper that they might have to read on the American novel post 9/11 or something and not really giving them any kind of direction and just seeing where they go with it.

Matthew created an assignment based on fears created and/or encouraged by the media for his semester-long IL course. His goal was to get students thinking about and interested in the full implications of IL by engaging them in a real world problem to start the semester.

I developed an initial assignment where I wanted students...to pick a fear that the media perpetuated in some way. You know, there's bacteria on the lemons that you get in your water at restaurants. Is it going to kill you? And I wanted them to do just a small research assignment without my instruction, to sort of see, is this worth freaking out about? Is it overblown? Or is it just the right amount of fear?

This assignment is an excellent example of a problem-posing approach because it encourages students to integrate their lived experiences into their learning. Lily followed a similar approach to Matthew in that she asked students to confront and analyze their role in the information construction and dissemination process. She wanted them to think about where they entered the process and in what ways they may be influenced by or even complicit in oppressive structures.

My meeting with these students was less about like the regular stuff of 'How do you find information? How do you make sense of it?' But, it was really about 'What if your role in this space is as an information consumer and creator and what should you pay attention to when you're crashing down these voices and perspectives?' and, 'How do you want to engage in them and contribute to the conversations?'

This kind of approach worked for teaching students about information because it allowed them to become the owners of their learning and to find their own answers.

Michael found his problem-based instruction sessions allowed students to “not only...construct their understanding of how information is organized [and] how to solve a problem you’ve posed, [it] also help[ed] students recognize that knowledge itself is something that’s constructed.”

A popular misconception of critical pedagogy is that it is laissez faire or a free for all where students chart their own course and the teacher lets them go off on their own tangents or sets them free to do whatever they want. In truth, structure is a necessary component in the problem-posing classroom. “The educator’s responsibility rests precisely in his or her duty to furnish the conditions for effective (by which Freire means critical, dialogical, and praxical) learning to take place” (Roberts, 2000, p. 59). This includes providing directions, structure, curriculum content, and setting the stage for academic rigor. Andrea provided an example of this:

More and more I’m doing classes and activities and approaches that present students with a bit of a problem. So the problem might be how do you find information in your area? And we approach it as a problem, and we brainstorm on ways to do that. And I come up with activities that, I sort of know where they’re going to end up, but I think it’s really great for students to have these ideas themselves, and start to make these connections themselves. But if I approach it as a sort of communal, here’s this issue, what are we going to do about it, students become much more engaged with it, they become invested. And it’s a much more interesting

experience for me and for them, and also the prof, to be really engaged with these ideas...The more I challenge them and the more I give them real scenarios that they as historians or English majors or citizens or just general people in the world - giving them those kinds of questions really engages them, and I think makes them see that there are connections between what they are learning in class and in the library sessions and the lives that they lead and they might lead and the work they may do.

Two participants, Melissa and Matthew, used rhetorical techniques to structure their problem-posing classes. Matthew “developed a sort of a rhetorical approach to information literacy where the centerpiece was helping students understand how their disciplines, or even how more generally groups used information.” He asserted that using the ideas of rhetoric gave him a way to explain the complicated ideas behind CIL and gave the students an entry point for their discussions.

Melissa used rhetoric as a way to guide students through the process of thinking about popular media sources. She developed an exercise where students used rhetorical devices as a rubric to help them evaluate media. She showed them a clip of a television program that was full of persuasive language and ideology and a list of rhetorical devices to use as “a rubric for critical thinking.” Then the students chose the rhetorical devices that the television program used and discussed as a class their evaluations of the show, which provided students with “a more concrete way to think about something very abstract.” She explained the purpose of the exercise and the scholars that influenced it:

It was about examining media through what I call these pillars of media literacy; it's really through a lens of cultural studies. So we examined news and commercials, films, things like that, by using these concepts of hegemony, and ideology, as informed by Althusser and representation as informed by Stuart Hall's ideas of representation, that we make meaning by the way that something is represented.

4.4.1.3 Non-critical Methods and Challenges to CIL Methods

Seven participants stated that they used non-critical methods in their instruction sessions either sometimes or all of the time. The primary reasons that librarians stated for not using critical methods were problems with being able to match the structure of CIL methods with the current institutionally-defined structure of library instruction; lack of alignment of goals for CIL and the classes and/or the professor the librarian was teaching for; and a general lack of time to accomplish any meaningful goals.

Despite reading a lot about CIL and being interested in the ideas that it presents, Jane was concerned that the format for library instruction is not a good fit for critical methods. She stated:

In a lot of cases I don't do anything more innovative than standing up in front of the classroom and talking at people. I mean I think I talk a lot less than I would before I read a lot but the format - I'm more and more convinced that the format of the way we structure library instruction or information literacy instruction, it doesn't afford any opportunities really to do anything critical.

Eva had similar thoughts about the difficulties of using critical methods to teach IL. Librarians do not always have the power to control how the class is run because "we're still adjunct to a faculty member who has their own plan for what to do and their own pedagogy." She also thought the institutional context of the university got in the way of her ability to do much with critical approaches because "there's so many constraints."

How and what was taught in participants' IL sessions had to fit within the larger goals of the course the librarian was teaching for. There was often some leeway in what librarians could teach, but how this was negotiated differed, especially in relation to

whether the course was a major course taught in the disciplines or a general first-year course. Goals for IL sessions in the disciplines were usually negotiated with the professor who teaches the course. The goals for IL sessions for first year programs were usually very specific and had been negotiated with the director of the overall composition or other first-year program and may or may not also include a discussion of goals and content with the instructor actually teaching the course. Participants tended to have more freedom to try different methods in first year program courses because they were less likely to be closely monitored by a full-time professor but the goals for what students needed to leave the session knowing were often much more restrictive and basic than for upper level courses in the disciplines.

Most of the sessions Jane taught were for the first year composition program and second year core seminar and she observed that instructors often have a very narrow goal for these IL sessions. Students typically have an assignment that requires them “to find three papers,” and her job is to “get them to find those three papers.” To make sure they get what they need, she “mostly give[s] a ten or twelve minute demo and then work[s] with them one-on-one to find the three papers that they need.”

Chris asserted that when working with first and second year classes at his institution, “certain mechanistic...pieces of information are important to communicate.” Many of the students he worked with were first generation students or students without a lot of preparation prior to attending college and they needed to know basic information like how to find a book on the shelf, what their barcode was, and how to access their library accounts. So for him, “the goals that I might have that are more

engaged kinds of things that critical information literacy is interested in frequently have to take a backseat to addressing what I would say are more basic literacies.”

Professors, regardless of the discipline or level of class, often had clearly defined goals for the IL session that the librarians deferred to. These goals usually took the form of the content that the professor wanted students to learn, which had an obvious effect on teaching methods as well. Every librarian interviewed talked about aligning their instructional goals with what the professor wanted them to teach. In the cases of it preventing them from being able to use critical methods, it was usually because the professor wanted them to demonstrate a specific database or other tool, show the relevant features, answer questions about the tool, and be done. While there was some amount of frustration with this, the participants were generally accepting of and resigned to this reality. Linda provided a typical response to this situation:

I think you know that there is a time and place for doing tool-based sorts of things. If students need three articles for something, talking about bias might not be the best time to do that. Focusing on delivering the content that the faculty member needs for that particular assignment is really important.

The other big issue that participants thought got in the way of their ability to use critical methods was just a general lack of time. Most sessions that the librarians taught were fifty minutes, which did not allow a lot of time to create a student-centered environment, make space for meaningful dialogue, or explain and work through problems. Jane addressed the time issue:

I don't do a lot of think pair share in the classroom or sort of active learning stuff that ACRL talks about that I think a lot of people sort of associate with critical approaches like empowering the student learner in

the classroom. I think it never feels like there's enough time so I'll usually do one big group exercise and then one-on-one help.

4.4.2 Critical Content

While not all of the participants felt they were able to use critical pedagogical methods in their classes for various reasons, all of the participants found ways to include critical content, even if it was only minimally. Though they did not necessarily include critical content in every class they taught, all of the participants included critical ideas at least sometimes and most found ways to do so regularly. The types of critical content that participants taught in their instruction sessions were concepts related to and involving critical source evaluation and subject headings and other issues of language in finding and using information. Each of these content types is detailed in the following paragraphs.

4.4.2.1 Critical Source Evaluation

Thirteen interviewees taught critical source evaluation as part of their CIL instruction. For some, this was the core part of their instruction and everything else they did in the classroom, including methods and other content, was based around or in relation to source evaluation. After teaching his semester-long IL course for a few semesters and trying different methods and content, reflecting on how and what students were learning, where there were gaps in their understanding, and reading more about IL and CIL, Matthew's "entire course became an evaluation course." Others taught critical source evaluation as part of their one-shot sessions in freshman year programs or for classes within the disciplines. Participants taught critical source evaluation with two approaches, including teaching topics related to how knowledge is

produced and disseminated and problematizing the hard distinction librarians and scholars often make between scholarly and popular sources.

4.4.2.1.1 Knowledge Production and Dissemination

In looking at source evaluation, participants were especially interested in teaching students how knowledge is produced and disseminated, including elements such as politics, economics, class, power, and other sociocultural aspects of information. Nine participants framed their descriptions of critical source evaluation within the context of social justice, including the power and economic structures implicit in information creation and dissemination. Participants described the power relations involved in information structures to students with phrases such as “people are trying to manipulate you,” “information is for sale,” “information is a commodity,” “who are the voices that we are listening to,” and “power in research.” Encouraging students to be cognizant of the voices that were privileged and not in both academic research and in other types of information and media was a principle concern of many of the librarians.

To get students to start thinking about the voices in different sources and to begin evaluating information based at least partly on those voices, Daniel emphasized the research and information creation process and encouraged students to view it as a conversation, but was also aware of the challenge of actually accomplishing such a large goal within the context of the assignment and the one-shot instruction session.

I’m trying to emphasize to the students these kinds of core concepts of where information comes from; who are the voices that we are listening to; all sources are the voice of somebody; and all conversations have people that are included and people that are excluded. And are we recognizing how that conversation is going on? And sometimes those are big things to get into a student’s head when you’re talking about an

eight-page five-page paper with three or four sources. How much conversation are they really going to get access to when they are only reading three or four sources...Hopefully there's larger projects in the future when students transfer or they're in their subject matter coursework that are going to open them up to different kinds of stuff.

William was interested in trying to help students understand the political nature of all information, including the databases held by the library. Even when he only had a short time with students and not a lot of room to work in critical pedagogical methods, he tried to "find a way to get them to think about what's not in the database." Looking at concepts, ideas, and voices that are excluded is an excellent way to help students understand that information and knowledge are not neutral things. Rather, they are disseminated as part of an agenda and within a larger context.

Within education, I talk about ERIC and how the database was scrubbed during the Bush Administration to exclude a lot of critical and qualitative education studies and journals. And how some of the best critical education periodicals like Rethinking Schools aren't indexed anywhere other than the Alternative Press Index, which doesn't make it onto most university library databases because of money...I get them to think about how politics and economics affect the information that's presented and how it's presented and at least to get them to begin to question this and not think that just whatever is there is what there is.

Some participants described discussions of power and social justice in their IL sessions as using a critical information studies approach. Vaidhyanathan (2006) defines critical information studies as an interdisciplinary "interrogat[ion of] the structures, function, habits, norms, and practices that guide global flows of information and cultural elements...[It] asks questions about access, costs, and chilling effects on, within, and among audiences, citizens, emerging cultural creators, Indigenous cultural groups, teachers, and students" (p. 292).

Shari used critical information studies to shape the content of many of her classes, especially as she learned about and delved more deeply into CIL. As a librarian for foreign languages, she was dedicated to finding ways to help students understand the global nature of information and specifically to identify and respond to power relations that may affect the production and accessibility of information relevant to the cultures they were studying. Shari was “trying to teach students ... to think about...voices [and] social justice...and to question who is contributing to Wikipedia [and other sources. For example], why is it that there’s people in Argentina who are writing about Bolivia?”

Other participants also used Wikipedia in their discussions on critical source evaluation for several reasons. First and foremost, students use it extensively so it is a source that they are all familiar with, therefore it provides a common experience to ground a class discussion. Head and Eisenberg (2009) found that 85% of students used Wikipedia to get started on their research to help formulate a basic understanding and to create context for their topic. Secondly, it is an important source for students to understand because they are using it in a foundational way. That is, they are essentially using it to provide the basic framework for their research. Finally, it is a source that is full of political implications: it is available for free on the Internet; it is created and edited by credentialed and non-credentialed people with different goals (Carr, 2006); it is frequently manipulated with negative aims (Associated Press, 2006); and is guided by a robust set of policy guidelines that impact its quality and credibility (Sundin, 2011).

Participants addressed several of these issues when they discussed it in classes. For example, Matthew used it to talk to students about the purpose of a source and who drives that purpose. Wikipedia presents itself as a source written by and for the people, but it also has a lot of rules in place to try to improve credibility and quality, such as citing scholarly sources in its entries. In addition to other discussions they may have had around Wikipedia, all of the participants who included it in their classes used it to explore and challenge the dichotomies of bad vs. good and scholarly vs. popular sources, which is discussed in detail in the following section.

4.4.2.1.2 Scholarly v. Popular (Good v. Bad)

The scholarly versus popular dichotomy is a common one in librarianship. Librarians have discussed this topic for several years through journal articles, conferences, blogs, and listservs, mostly focusing on how this concept can be effectively explained to students. In order to convey the difference between scholarly and popular resources to students, librarians have explained it in classes and created research guides and checklists for students to use to help them make the distinction. The problem with all of this is that students have interpreted this message of privileging scholarly sources over popular ones as librarians and professors telling them that scholarly equals good and popular equals bad (Mark, 2011).

Recent discussions have started to shift, as librarians have finally started to question the assumption that scholarly sources are automatically better and to realize that they are presenting problematic black or white thinking to students rather than encouraging them to critically evaluate all of their sources (Small, 2013). Because of her

discovery of CIL, Lily changed her practice from the checklist method of presenting information as good versus bad and always privileging elite academic voices over less elite and non-academic ones.

Information literacy instruction really took hold with the advent of the world wide web and...widespread access to information, and this overwhelming sense that people have in coping with it. So of course as librarians we were like, "We will package that up for you and we will help you make sense of that and it will all be just very clear-cut."... And so in doing so we would have these really structured ways that...we would ask students and people to think about the information that they were taking in, and it was always in these dichotomies of, "well there's good information and then there's bad information. And there's scholarly information and there's popular information." And so students would get these ideas of... "It's either this or this, and there are voices that you pay attention to, and there are voices that you don't pay attention to."... So I don't do that anymore. I don't talk about evaluating information in terms of a checklist. I talk about evaluating and selecting information sources based on what you want to be able to do with them.

Peer review was another problematic concept for some participants because that, along with the designation 'scholarly journal,' often leads to this checklist kind of thinking, where students are taught that if they check the peer-reviewed box in a database when they do their searching, their evaluative work is done. They are taught that this means they now have a 'good' source that their professor will approve of and it never occurs to them that they may need to do some more digging (Mark, 2011) to find out if there is bias in the article, if the author or the journal has an agenda of some kind, if the study was funded and who funded it, and all of the other questions that students should be asking about each source they find.

Jane asserted that having "a habit of mind" of this kind of overarching critique of the production and dissemination of knowledge as it related to scholarly information

and communication “changes the way you talk to students about information in the classroom,” so even though she did not have specific techniques she used to teach this concept, she thought her classroom probably had a different feel as a result of it. She stated “I don’t talk about scholarly journals as good sources and I feel like there’s plenty of support in the field [for that].”

In order to get students to think about sources in ways other than just good or bad or scholarly or popular, some participants taught them to choose sources based on the purpose of what they were trying to do or encouraged them to develop questions and helped them think through how could they go about finding more information in the pursuit of answers. For example, Kate tried to stress developing questions with students rather than focusing only on article evaluation. She believed it was more meaningful for students to think about the big picture of scholarship creation and how that process works than to focus on single bits of information and trying to determine reliability and credibility in isolation. She tried different methods to accomplish this, including developing a process of viewing and evaluating the web as “a series of primary texts,” because she argued that “in the humanities, these are the primary texts that we are reading today.” Her goal was to encourage students to look at and think about how scholarship is created and to evaluate sources within the context of what they are trying to do, rather than tell them what sources they should use.

Matthew also focused on process and had become reluctant to push students to use specific tools without helping them to think more about the types of questions they were trying to answer and the purpose of types of sources rather than privileging

certain formats and tools over others. He wanted to help students think more critically about the whole process so instead of saying, “‘you have a research project? Here’s the catalog; [I’ll] help you use it.’...Saying ‘you have a research project? Can the catalog help you in this particular circumstance?’” He argued that librarians and professors should be encouraging students to think beyond form.

We should be looking at things in terms of what it is that they are trying to do. So looking at scholarship: it tries to do this and it takes various forms. It can be in the form of a journal article; it can take the form of a book; newspapers attempt to do this and it can be in the form of a website [or] a newspaper [or] a web app. It doesn’t matter what form it’s in, it matters what it’s attempting to do. And helping students differentiate those purposes... because if they can understand...the choices that are out there then they can adopt those choices for themselves.

4.4.2.2 Subject Headings and Language

Another type of critical content that participants taught were topics related to the language used in searching mechanisms, such as the subject headings and keywords in library catalogs and databases and the importance of language and terminology in searching the internet. Biased, racist, sexist, and generally outdated classifications have been a known problem in librarianship since at least the late 1960s when Sanford Berman argued in a letter to the editor of *Library Journal* “that the Library of Congress Subject Headings represent a white racist imperialist point of view” (Foskett, 1971, p. 121).

The main type of critical content that Jane included in her IL classes was problematizing subject headings in the library catalog. She used examples or created conversations with students that illustrated the questionable classification or outright

exclusion of different populations in the catalog. She found that focusing on subject headings was a good entry point for her to begin to help students see the political nature of information organization.

I teach a lot with subject headings. We'll look at the record and then talk about the subject headings, like what is contained in those headings? And what isn't? What are some other words you can use? And that sort of thing...We do a lot of...public health kinds of programs...so in that class, the students were researching different populations and some of them could find stuff and some of them couldn't. So talking about why they couldn't [and] why populations aren't studied and named.

Linda was similarly interested in problematizing subject headings with students by looking at how different groups were classified and defined. She advocated inserting little bits of critical content, such as leading a quick discussion of whether there is a distinct subject heading for men authors like there is for women authors or something else relevant to the course that shows some of the sociopolitical nature of information organization.

Matthew also did a lot of work with the underlying language of information sources and structures. He focused less on the library catalog and more on how keywords were constructed and functioned in subject-specific library databases and on the Internet. He framed these discussions in terms of how disciplinary languages work and how language reflects and is a function of the purpose of the source.

The way that someone describes [something] matters...[I]f you google 'estate tax,' you get stuff from the IRS,...Forbes, [and the] Wall Street Journal. If you google 'death tax,' which is the same thing, you get NoTaxes.org, LifeAndLiberty.org...[and a] series of conservative-oriented websites that are basically 'abolish the death tax.' And it also works wonderfully for Wikipedia...I used to write all the slang terms for marijuana on the board and then I'd say who uses these terms? Then [students would say] potheads and I was like so what do scientists use?

They use marijuana, they use cannabis, cannabinoid, THC and...Wikipedia uses cannabis, and I'm like why are they using cannabis? – Because they want to be taken seriously...[I]f Wikipedia is sort of the will of the people so to speak, then why are they using these more clinical terms, [which] illustrates that they want people coming to Wikipedia to take it seriously.

4.4.2.3 Critical Content v. Critical Pedagogy

Jane and Eva were two of the participants with the most robust critique of CIL.

Both were advocates of critical pedagogy and were well versed in the literature surrounding it. The two were also interested in feminist pedagogy, and Eva in particular discussed critiques of critical pedagogy by feminist theorists as being especially meaningful to her personally. Interestingly, they spoke the most of all of the participants about the impossibility of enacting critical pedagogy in university settings in general and library instruction classrooms in particular. While others identified areas where they thought it was difficult and recognized clear challenges, Jane and Eva saw it as essentially impossible. However, they thought teaching critical content was more doable if done so that the ideas were expressed as part of the general content of the class session, even if methods or techniques that would fall under the rubric of critical pedagogy were not used.

Jane felt strongly that it was important for scholars and students to critique the production, dissemination, and organization of knowledge, but was not convinced that it was possible to teach much of that to students in a library instruction class because there was prescribed content that she had to make sure students knew to complete their course assignments. She also did not think there was enough time or the proper

context to use critical pedagogical methods in her classes, but she thought that it was possible to include some CIL content and,

having a habit of mind about that changes the way you talk about information in the classroom so while it's not like a technique that I could name..., I think my classroom probably feels different from others. I don't talk about scholarly journals as good sources [for example].

Similarly Eva argued that creating a critical pedagogical class environment in the university context was not possible, but that "the one place where it is more possible is if you look at it as social justice as it relates to scholarly communications and the dissemination of research and things like that...That's theoretically possible...We can teach those things and those questions." Eva formed these opinions over many years of teaching in universities, first in composition and then in the library. She had personally tried and knew many colleagues who had tried to enact critical pedagogy without success. She described her "most experimental" IL class, which she designed for a food and social justice course with a philosophy professor. The professor was a friend of Eva's and was open to trying something new for the library portion of the course, which included three sessions. Eva pronounced the class "a total failure."

[We had] the students decide what they needed to learn about research. And so we had them come up with things they needed to learn [and] categorize it all...[Then] they broke into groups and selected which piece they wanted to be responsible for...[T]hey had the library sessions to work with me and [professor] and with their groups to figure out answers to their questions and then figure out how to teach the class and then teach the class those things, which I think sounds great. But it doesn't work because the students learn their little module or...questions they are trying to answer, but they're not teachers. And so you realize oh wait I actually know how to teach somewhat and they don't and so they end up learning only this one little thing and sitting through kind of bad presentations by the rest of the class. So it would have required a lot more intensive work with them.

4.4.3 Disciplinary Considerations

Grounding IL within a disciplinary context was important for participants. The majority thought that IL should be taught within the disciplines. According to Michael, “integrating information literacy into the disciplines would be the better approach” than continuing to follow the old model of teaching decontextualized IL skills based on general standards, such as the *ACRL Information Literacy Competency Standards for Higher Education*. Matthew argued that keeping IL separate from the disciplines pointed to librarians “having a stunted understanding of what research is.” He believed that while they know and can articulate its importance, librarians often misinterpret the significance of teaching with context to mean only the context of an assignment, rather than the broader context of disciplinary and scholarly communication.

The context of the discipline influenced CIL practice in two ways: first, the nature of the discipline contributed to how the librarian taught and how effective the participant thought the CIL instruction was; and second, it provided a disciplinary discourse through which they could introduce CIL concepts.

4.4.3.1 Nature of the Discipline

Several participants thought CIL worked better in some disciplines than others. However, there was not always agreement between participants on which disciplines presented challenges. For example, Lily thought that CIL did not work as well in the sciences, while Matthew experienced a lot of success when introducing critical source evaluation in the sciences. The disciplines that participants stated CIL worked well for included Latin American studies, nursing, biology, business, English, communication

studies, anthropology, history, psychology, women and gender studies, chemistry, education, and humanities.

Andrea taught CIL to a large number of history classes, which she believed was a good fit because “history students really do an awful lot of research in the library and in the archives.” Lily had success with communication studies and gender and women’s studies because they were open to having critical conversations about the nature and structure of information sources. Linda believed she was successful at bringing CIL into some of the humanities classes she had worked with because those disciplines “tend to have a more critical theory approach in terms of their discipline, so there was an openness to bringing in more theoretical sorts of ideas into the classes.”

The disciplines that individual participants struggled with introducing CIL concepts to included the professional disciplines, English, humanities, sciences, and divinity. Anna thought it was more difficult to teach CIL to humanities students because “there is not much of a concrete problem that [she could] ask them to solve.” William believed that some disciplines have a more obvious tie-in to CIL than others, providing “clear examples and examples that are relevant and hit home,” as opposed to disciplines that are less political in nature and are less interested in the economics of information. For example, he thought the divinity students he worked with were not interested in examining information in that way because “there’s a couple of key databases that they go to and...politics and economics doesn’t enter into it quite as much...it’s more theology and theological viewpoints.” Whereas, he saw more of an

entry point for these types of discussions in psychology and he “had the most success with education.”

It makes sense that differences among disciplines may impact librarians’ ability to introduce CIL concepts and methods. “[D]isciplinary differences have a significant influence on the ways in which academic work is organized” (Gorsky, Caspi, Antonovsky, Blau, & Mansur, 2010, p. 51), creating different goals, teaching methods, ways of interacting with students, approaches to research, and so forth. All of these elements contribute to creating wholly different academic environments that encompass more than just the different subject matter taught by each (Krishnan, 2009). Chris explained how these differences may show up for professional disciplines.

[T]he more professional disciplines are going to be motivated on...an instrumental sort of knowledge. First, you’ve really got to know your stuff. There’s key empirical questions or key empirical information that you just have to know in order to provide those professional services....I try to do a lot of outreach to the economics department, for example, and I’ve found some economists who will assign research papers, but others [are] doing exam models. There’s heavy quantitative sorts of things to what they’re teaching.

4.4.3.2 Disciplinary Discourse

Several participants thought their success with CIL was largely because it fit with the discourse of the discipline they were working with. “Disciplinary discourse includes the ways that members of a particular discourse community write, read, speak, and research, as well as the assumptions that they make and the epistemologies with which they craft their arguments” (Simmons, 2005, p. 297). Jane was a proponent of teaching CIL within the disciplines because she thought it provided the context to have critical conversations as part of the discipline’s discourse and had more meaning to students.

I don't know how you teach about information without a context that they [students] care about. And I know many people in their majors don't care about their majors but... a) I think you're more likely to get students who do care and b) I think the context is there to talk about information literacy. So I have a much easier time using a critical language and developing a critical classroom practice in a major course than I do in freshman comp because I think the context is there for talking about disciplinary knowledge creation.

Shari thought that her work with the Spanish department provided a lot of opportunities for her to introduce concepts related to CIL because the students in those courses were reading texts and information that was not about the dominant culture in which they lived. Therefore, to develop a better understanding of those cultures, their discipline required them to look at and investigate the social and cultural construction of information, including analyzing who the dominant voices were that provided their understanding of the cultures they were engaged with.

Some participants learned about critical theories or critical pedagogy because it was part of the disciplinary discourses of the academic disciplines that they were liaisons to. For example, Kate began talking about many of the theories that fit under the CIL umbrella before realizing there was such a thing as CIL because "a lot of the theories are just part of the practice of the discipline and so some of these ideas ended up getting in the information literacy class because...they became part of what I did." Lily had a similar experience; she worked with students who were studying feminist and other critical theories in the classes she interacted with in her role as liaison to gender and women's studies. She actually first learned about critical theory from a professor that she provided IL instruction for in that program so her insertion of CIL into her instruction sessions for those courses was a natural fit.

Conversely, CIL did not seem to be as natural of a fit for the discourses of other disciplines that participants dealt with. Lamont (2009) observed that “the ‘gulf of mutual incomprehension’ that Sir Charles Percy Snow famously posited as separating ‘scientists’ from ‘literary intellectuals’ also separates many social scientists from humanists, as well as many interpretative from more positivist researchers. (...) [S]cholars absorb a variety of beliefs and perceptions about disciplinary cultures, especially each field’s approach to producing and evaluating knowledge” (p. 53). While critical theory is seen as a valid theoretical tradition in the humanities and a large section of the social sciences and in many ways has become integrated into how scholars in those disciplines evaluate scholarship, it has not been accepted into scientific discourse. Lily spoke to the difficulty of working with the sciences:

I feel like there are departments and disciplines who, you know like the sciences that I don't work with very much, who have - they have ideas about how they want their students to understand and search for information, and I don't think those ideas have changed very much in the last decade. So like the scientific process really depends on this structure of... you find information,...problematize it a little bit, then you gather your own data, then you publish it in these places that are respected and you get your stamp of approval. So the people who are teaching these new scientists how to think and how to do research, they have bought into that process, so they're not teaching students you should question the very nature of the scientific process. They're not doing that.

This can also show up in some of the social sciences where the discipline values positivist types of research. For example, Chris’s description of his work with the economics department, where there was a focus on “instrumental sorts of knowledge” is an example of this. He found that in those cases professors were not interested in

discussing the more theoretical aspects of information because the disciplinary discourse they were teaching was wrapped up in empirical types of knowledge.

4.4.3.3 Beyond Disciplinary Context

There were some issues that participants spoke about as being true for the disciplines at their institutions that seemed to be more a function of specific departments at their college or university. Comparing interviewees' experiences with the same discipline at different universities illustrates that what looks like a discipline issue may not be. For example, Chris and Matthew had very different experiences when teaching CIL to nursing students.

Matthew found nursing to be a good fit for CIL because he thought the nature of the discipline created an awareness of consequences for students. He often told nursing students that they were "one of the only disciplines out there where if you use crappy research, someone will die." This created a sense of urgency for students and made them more invested in thinking deeply about the information they were finding and reading. However, Chris encountered a different issue with the nursing students he worked with because so many of the students he interacted with in the program at his university worked full-time jobs and were enrolled in night courses. He found that they often did not have the time or motivation to engage critically with information sources and would prefer to just get the information they needed to complete their assignments quickly and successfully.

Another element that goes beyond discipline is the faculty factor. Even in cases where the participant was successful at introducing CIL methods and content in specific

disciplines, a faculty member had to provide them entrée into the course and the liberty to try new things. So when some participants felt like English and science, for example, were good fits for CIL and others thought the opposite, it could have been a result of the faculty or department they were working with. Michael addressed this in his arguments about the significance of context beyond just the nature and discourse of the discipline. He described the work his university-wide committee was doing to work more closely with faculty on integrating IL within the disciplines.

[We are working to] create a set of guidelines for having conversations with faculty in the disciplines to arrive at disciplinary specific outcomes that could be articulated for graduating students. Not for the university as a whole, and not even particularly for specific disciplines for the university as a whole, but on a campus by campus, very localized basis. Because a nursing program here at my college is very different from the nursing program at one of my sister colleges.

This localized context was an issue for some participants, where it seemed as though the disciplinary breakdown had less to do with the nature of the discipline per se, and more to do with how different departments work on different campuses in terms of staffing, departmental histories, student demographics, and so on. Andrea, for example, had more difficulty in introducing general IL to the English department on her campus than she did with history. But others, such as Anna and Eva, had success with teaching CIL content to English classes. So while the participants pointed to some disciplinary differences that indicated that CIL methods and content may be harder to implement in some disciplines than others, it was not clear how much of this was because of the nature of the localized department and could be overcome by relationship-building.

4.4.4 Student Response

Most participants felt students responded positively to CIL and that it was an effective teaching method. However, some participants had experiences when CIL instruction sessions did not go well and they thought students were resistant to CIL. The following paragraphs provide examples of when things went well, when they went wrong, and the participants' thoughts on why that was the case for each.

The majority of participants felt that students were receptive to CIL methods and content. When asked how students responded to CIL sessions they had taught, they answered with phrases such as "I've had a lot of really good feedback from students," "it turned out really awesome and students loved it," "they really enjoyed it," "they seem to get it and seem interested," and "students become much more engaged."

In addition to the receptiveness from students, participants thought CIL methods and content worked well for a variety of reasons, including that it changed the dynamic in the classroom, opened up conversations about issues they were interested in, gave students more space to think and make connections, and it was empowering. Hope enjoyed that it "lifts some of the burden from [her]" and "changes things up...[and] creates a sort of energy that this is a different kind of classroom."

Several participants thought it opened up conversations and gave students the freedom and voice to talk about the issues in a way that was meaningful to them and drew on their previous experiences. For example, Kate taught a class on Google where

the students “ended up having an entire discussion...[for] ten or fifteen minutes...about these issues and how surprised they were.”

As part of these conversations, students were able to think about familiar issues in new ways. Melissa made a point of introducing concepts to students and then giving them time to think and “make connections between this concept and their real life...[and] really really pushing that these things are personally meaningful to them.”

Andrea made a similar assertion that when she challenged students to think more deeply and critically about information problems they may confront as part of their coursework or outside of school, it “makes them see that there are connections between what they are learning in class and in the library sessions and the lives that they lead and they might lead.”

Some participants thought that learning about CIL concepts and having critical conversations could be empowering for students. Andrea felt the students she taught were already somewhat aware of these issues and that formally addressing them in class gave them a gateway into talking more deeply about it.

A lot of these things that we talked about are things that students were aware of on some level. They’re not idiots, they know that they’re being manipulated. But they just couldn’t put a word to it. They didn’t have a language to talk about it. So I think giving them that language allowed them to be more empowered...[and] really think through what these things meant.

She pointed out that this can sometimes lead to this sort of existential crisis for students where they start to question how they can trust anything. But she reasoned that “that existential crisis is okay,” because,

that's the beginning of really understanding what research is about, you know. It's not so much that you are able to assert something with complete certainty; it's that you say to the best of my knowledge, using all of these resources that I've found, I'm doing the best I can to make some sort of argument, [and] to back up this argument.

Michael thought teaching CIL could lead to transformative and empowering experiences for students if educators can “get students to make the connection between their own process of knowledge construction and knowledge construction in general,” so they can potentially realize that they have the power to produce and transform knowledge. Developing curriculum where “the learning process is negotiated, requiring leadership by the teacher, and mutual teacher-student authority (Shor, 2012, p. 15)” is a hallmark of empowering education. Several participants tried to create this kind of environment and for the most part, they thought students responded well.

For example, when Lily taught students how to construct their own database for a communication class, she thought “they felt a great sense of responsibility in doing that and were quite involved in the process.” She was very pleased with how the class turned out and strongly believed that the students enjoyed the class, learned valuable IL skills and content, and were invested in the process.

Six participants described instances where students were resistant to CIL methods. Hope was very positive about her experiences with using critical pedagogical approaches overall. In some ways, she seemed the most confident about what she was doing and the most consistent in her use of CIL approaches for the majority of her classes, but even she experienced resistance when “students don't want to get up in front of the room.” Her response to this type of resistance was to “make them do it

anyway,” even though this was the only thing she left her instruction sessions not feeling great about.

Anna also described moments of feeling resistance from the students when she asked them to participate in class discussions or exercises. She worked mostly with freshman students and found that “there is kind of this reticence to respond to questions or to share something from themselves.” She attributed this to “a lot of the students...coming from a very testing heavy public school background, [so] they are not really always very comfortable admitting that they don’t know how to do something, or...answering more of an open ended question.” But she was a proponent of modeling what you want from students and she professed a great love and excitement for what she was teaching. She argued that the combination of these two things and pushing students until one or two responded usually got her through that obstacle. She asserted that “students like to be heard, they want to be able to talk, and they want to...describe their experiences...[so] if you can... get a couple people in the class doing that then I think it kind of radiates outward.”

Kate and Daniel felt that some students pushed back against critical methods because they are very practically minded and just want to know what they need for their assignment. Kate thought “they don’t want to think about how to get the answers. They just want you to tell them what is right, what should [they] do.” Like Anna, she thought it was possible to push through this and get students to the point where they saw how it related to them and excited about the ideas, but students’ initial response was often resistance.

I think students actually push back against it a lot...[T]he idea that they're supposed to do the work and they're supposed to do the thinking, that I'm actually presenting an image or a topic or an idea, and they're supposed to look at it and think about how they're searching, how their terminology works, why this database or not, how databases construct stuff. They don't actually want to do the thinking, particularly in the beginning, they want you to tell them use this database, use these terms, like shouldn't I use this one thing, I always use this thing, you're supposed to tell me. But usually if they get into it, particularly the upper level students, they get really excited.

Shari and Henry described experiences when students looked at them like they were "crazy." They both thought this stemmed from them not explaining to students what they wanted them to do well enough. Henry said "sometimes they give me feedback saying that they...initially don't understand me because my questions are too broad and then I'll go back and clarify." Shari also thought that there were times when she may not be making her "goals clear, or it doesn't seem clear to them, or it doesn't seem too obvious, or it's too complicated."

Anna talked about a similar experience she had in the context of the upper level English she taught where she asked students to do research on the post 9/11 American novel. She wanted to give them a lot of room to play around with the topic and find their own way, but she did not get the outcome she hoped for from students.

I don't know [why it didn't work] exactly. I mean I'm sure there were lots of factors at play - not giving them enough guidance was probably part of the problem, but what I basically got was...they would find their research guide, which was good, which was something I wanted them to do...But [they] would just go into something and either type in the whole sentence that I had given them or just type in the keywords and then just give me an article that they found. And that wasn't what I really wanted. So that was one that, I tried it maybe twice and both times I felt like I wasn't totally sure what was missing. Some of it I think was just not explaining it particularly well on my part but another is just, again, that

kind of discomfort with, you know what are you asking me to do, what are you talking about here?

Matthew felt a similar disconnect between what he was trying to accomplish with his fear assignment and the actual outcome of the assignment. He found that it was not that students could not find information; it was that “they weren’t finding the good stuff” that he expected from them. He asked them to investigate how the media perpetuated a fear and to find sources that proved or disproved it. He had hoped that they would find research articles discussing the research behind the fear, but that was not what he received from students. Instead, almost all of them turned in newspaper articles. He used this exercise for six years and of the “thousand or so resources that the students provided, of the hundreds of students that completed the assignment,” he estimated that only six actually turned in what he wanted to see and what he initially expected. But, he said “it gave me this idea that students had absolutely no idea or understanding of how information was organized.”

Matthew used this information to guide how he taught his semester-long IL class and one-shot sessions. He constantly learned from students in class discussions and in how they approached assignments and used it to restructure his pedagogy. Other participants responded to pedagogical failures in the same way, in that they used it to help guide how and what they taught in the future.

CHAPTER 5

INSTITUTIONAL AND PROFESSIONAL SUPPORT FINDINGS

5.1 Chapter Overview

This chapter presents findings on participants' perceived support for their IL practice from within the institutions in which they worked, their thoughts on expanding CIL within their institutions, and how supportive they believed the library profession to be for CIL efforts and ideas. The first part of this chapter discusses institutional support and relationships at all levels of their home institution, to include college or university administration, library administration, librarian colleagues, and teaching faculty. The second part presents the participants' thoughts on how CIL may be expanded at an institutional level, to include possible partners and strategies; and barriers and challenges that may hinder expansion. The third part of this chapter presents findings related to the library profession, including the professional identity and culture of librarians and librarianship and how it impacted participants' ability to teach CIL.

5.2 Institutional Support and Relationships

This study explored institutional support from college or university and library administration and relationships with librarian colleagues and faculty. Participants experienced mixed levels of institutional support for CIL efforts. They felt the least supported by college or university administrators and the most supported by their library administrators. Support from both library and college administration for general IL was usually sufficient for participants to feel supported for trying critical approaches,

although expectations for library administrators were much higher. To explore how supported participants felt in their work with CIL by librarian colleagues and faculty, I asked questions about their relationships with these two groups, including if there were other librarians at their institutions interested in CIL and how they shared ideas about teaching with other librarians they work with and how faculty responded to their classes. In addition to answering explicit questions about faculty response, participants also spoke a lot about working with faculty in the context of explaining the IL model their school used, their teaching methods and content, and in discussions of institutional expansion. This category presents the findings in four sections: 1) college or university administrative support; 2) library administrative support; 3) librarian colleagues' interaction with CIL; and 4) faculty relationships.

5.2.1 College or University Administrative Support

There was a general sense among the participants that upper level college and university administrators did not know a lot, or in some cases anything, about IL. Only one participant thought a top administrator knew about and supported CIL. Because most of the participants were so removed from the top administrators at their colleges and universities, they gauged their support based on things like if there was language that included IL in the general education requirements or if they felt the library was supported by the rhetoric coming out of the top offices and through financial support.

Due to time constraints, I only asked nine participants directly if they believed their college or university administrators supported IL and CIL. Some of the others mentioned ways they felt supported or not throughout the course of the discussions

about how IL was implemented at their institution and when talking about opportunities and barriers to institutional expansion. Table 6 details the direct and indirect support and nonsupport for IL and CIL from college or university and library administrators for each participant. The information in the table will be further elaborated on in this section and the next.

Table 6: Library and University / College Administrative Support for IL and CIL

Participant*	Institutional type	Library Support				University / College Support			
		IL	CIL (Direct)	CIL (Indirect)	None	Supported by	IL	CIL	None
Hope	Comp U	X	X			Dean	X		GE Outcome requirement
Shari	Research U	X	X		X ³	Dept head		X	None
Matthew	Comp U				X	None	X	X	GE in progress
Chris	Comp U	X		X		Admin	-- ^A		GE Goal
Melissa	Comp U	X	X ²	X		Admin	-- ^A		None
Anna	Research U	X	X ²	X		Admin	--		GE Goal
Lily	Research U	X		X		Admin	X		GE Goal
Jane	Comp U	X				Admin	--		FY Embed
Eva	Research U	X		X		Admin	--		FY Embed
Joe	Comp U	X ¹					--		
Michael	Comp U						--		None
Chloe	Research U	X	X			Director	--		None
Andrea	Research U	X				Admin	A		GE Goal
Kate	Four yr college	X		X		Director	X		GE Outcome
William	Four yr college						A		None
Henry	Research U	X		X		Dean	X		GE in progress
Linda	Four yr college	X ¹					--		
Jack	Research U	X		X		Admin	--		FY Embed
Daniel	Comm college	X	X				X		GE Outcome

* Participants' names are pseudonyms;¹Current LIS faculty, but were supported when practicing librarians;²Direct support was from department head; ³She felt supported by her department head, but did not feel like the upper administration supported IL; --not asked about university or college administrative support; ^AParticipant not asked directly about university or college administrative support, but expressed feelings of ambivalence about support when answering other questions

Abbreviations	Comp U – Comprehensive university	A - Ambivalent	FY Embed – Embedded in first year
Key	Comm college – Community college	GE – General Education	programs/courses

Of the nine directly asked, seven worked at institutions that included IL in their general education requirements as a goal or outcome. Six of these seven participants stated that their college or university administration supported IL. However, even at these institutions, most participants did not think there was always a clear idea of how libraries were approaching the work of teaching IL and had no conception of CIL. For example, Hope thought the administration of her university knew about IL as a concept and knew that the librarians taught instruction sessions and were dedicated to student success, but she didn't "think they know or frankly care about how we go about it."

Daniel pointed out that while his dean was a "big time information literacy advocate," he was "pretty sure she has no idea of what critical information literacy would mean." As the dean for several academic support areas, she was not immersed in the disciplinary discourses of all of the areas she was responsible for, and was mostly involved in making decisions about budgets, staffing, and other operational matters. However, even with that being the case, Daniel felt supported by her because she listened to the librarians and allowed them to lead the direction of the library, including IL efforts. Participants tended to feel supported by college and university administrators in their IL efforts when they were sustained financially, had adequate staff, and were given the freedom to chart their own professional course.

Two librarians were ambivalent about their university administration's support for IL. William and Andrea described times in the past when university administrators at their institutions had supported IL through statements of support, campus initiatives of some kind, or through financial means, but thought IL was no longer a priority,

especially in the face of budget cuts. The cuts at William's university were very deep and included the loss of half of the librarians and a large portion of the book budget. They also needed major improvements made to the library building so he argued that the library was "not really not being supported in the way that's it's verbally being supported."

The one participant that I asked about support from the administration that believed there was no support for IL at that level was Shari, who thought they simply did not know what IL was. She thought the lack of knowledge, and therefore support, may stem from teaching not being "valued throughout the university."

5.2.2 Library Administrative Support

Fourteen participants (73.7%) felt their library administration supported IL directly. Support was shown by providing adequate staffing and through other budgetary items like funding teaching spaces and professional development or by the administrator being actively involved in IL activities, such as planning, teaching, or promoting IL to the wider campus. Henry provided a good picture of what direct support for IL looks like.

They provide adequate staffing. They provide support for conferences. Our dean engages in planning discussions with us for our instruction program and our general outreach when she is available. She contributes quite a lot personally. And also other budgetary kinds of things. We made a proposal early in the last academic year to set up a small group instruction area in a space that was available and really wasn't being used very well and received adequate funding to set that up so we have a state of the art small area that we will use as an alternative to our larger lab classroom, which gives us more flexibility. That's significant in our organization because that support wasn't always available. We've had a new dean for a little over two years. So that wide ranging support,

including the budgetary support, staffing support,...and showing true interest at a high level is also there.

Of the fourteen with support for IL in general, eleven believed that their administration supported CIL either directly or indirectly. Direct support came in the form of conversations with the administration that made it clear that they understood what the librarian was trying to accomplish with CIL, and bolstered their efforts by encouraging the participant to continue down the CIL path or championing CIL methods or approaches to other librarians in the institution. Hope worked with a dean who directly supported her CIL efforts.

My director is really supportive of critical information literacy... He's familiar with my work and my interests and is hugely supportive of instruction in general and critical information literacy in particular and does whatever he can to really encourage the other librarians to share that point of view or to see it's significance. And he supports me in my efforts to promote it to the other teaching librarians.

Indirect support was shown when administrators directly supported IL and gave the librarian the freedom and space to pursue their own pedagogical theories, styles, and methods. Lily worked at an institution where the administration directly supported IL and indirectly supported CIL. She believed "there's a great deal of independence...in terms of our instructional approaches and we're very much encouraged to think about new ways of doing things and to bring learning theory... into our practice. They definitely are interested and supportive."

In smaller institutions, the support was usually at the dean or director level, and in larger institutions, it ranged from being at the department head level to "the administration," which could include deans, associate deans, assistant deans, university

librarians, and associate university librarians. One participant, Daniel, was one of the top administrators in his library, and as an advocate of CIL, he was included in the count of participants that felt like their administration supported CIL.

Several participants felt that while there was general support for IL from top library administration, there was some disconnect in terms of their understanding how it was actually accomplished or should be accomplished. So while they believed that their deans and directors provided broad-based support for IL programs, they were not always fully aware of what IL programs should involve, the amount of work it took to make them effective, or what a successful program may look like, and librarians on the front lines were often left out of important planning and goal-setting conversations.

Jane's library recently hired a new director who initiated a road mapping process for IL and a strategic planning process for the library as a whole. While Jane was pleased with the final roadmap and had been involved with that process, she expressed concerns about the way IL was included in the strategic plan.

We have a strategic plan and the strategic plan has six objectives for information literacy instruction, but no - not only no instruction librarians but no public service librarians - were on the team that drafted the strategic plan for the instruction program so it [has] really weird objectives that I agree with, but I would never make them central.

As the coordinator of instruction for her library, she was also understandably disappointed when the annual report came out for the library and there was nothing about library instruction in it.

It includes reports from all the department heads but there's nothing in it about instruction even though that's all I do every day. I'm like oh my god, I'm here all the time. How am I not represented in the annual report?

So while most participants believed IL was supported overall, it did not always feel like informed support. The two participants who were faculty members in LIS departments, Linda and Joe, spoke to this issue when asked if they thought library administrators supported IL and CIL. Joe talked about how it was “below the horizon” of many administrators and that they “don’t think about this kind of thing very much.” He did not think they were against it per se, but rather it was just not on their radar of issues to be concerned with.

Linda seconded Joe’s feeling that IL may not be the issue that occupies them in their daily work and also thought it depended a lot on the discipline of their academic background before going into administration. She observed that “library administrators have a lot of day-to-day stresses and things that they have to deal with like the roof is leaking.” So thinking about things like CIL may not seem as important when they have other more time-sensitive issues to contend with on a daily basis. She also felt that knowledge of critical approaches largely depends on a person’s academic background and if they did not study in a discipline that included critical theory and approaches, administrators are unlikely to have any knowledge of it.

Melissa provided an example of general support without CIL knowledge from her library administration. She found her immediate supervisor was supportive of her trying new things in her teaching, including using CIL approaches. However, while she believed the upper level administrators saw IL instruction as an important library program, she did not think they were interested in how it was implemented or the specific types of teaching that the librarians were engaged with.

I think that my boss, our head of reference and instruction, is definitely supportive of the kind of teaching that I like to do and that I want to do. I think with the administration, they really like that we teach a lot of classes and that we have a lot of reach, but I don't think they know...what we're actually doing just because they're kind of removed from the work that we do. So I think that they're very supportive of our instruction program in general but that they don't necessarily know very much about how it works. So I would be shocked if anyone ever said to me, "No, you need to teach a different way." But part of that is just because they don't know necessarily how I teach.

Two participants, Shari and Matthew, stated that they did not have support from top library administration for their IL efforts. Shari felt there was support for IL and CIL from her immediate supervisor at the department head level, but the upper level library administration of her large research university did not offer that same type of support.

I think traditionally the library hasn't really cared that much about information literacy. And there definitely hasn't been much support for programs or staffing or giving people the time to do this...And I think a lot of times that we haven't had the support from the administration either. I think that a lot of them feel - well I know for a fact that our previous two heads, they've just retired, thought information literacy was kind of a waste of time.

Matthew worked at a much smaller comprehensive university where he had a lot more direct contact with the director. The university was in the middle of transitioning to a new director and a new approach to their instruction program at the time of the interview. He worked with a small group of librarians at his library to develop a new IL plan for the institution. When he presented it to the director, she was not supportive. In addition to not supporting this specific proposal, Matthew also felt she did not support IL in general. He found the university administration was actually much more supportive than the library administration and was looking forward to working with the newly hired director that he thought would be more open to trying new things with IL.

5.2.3 Librarian Colleagues' CIL Interaction

The most obvious and overt type of support from colleagues that participants enjoyed was when other librarians they worked with were thinking about and approaching their IL instruction in the same way. Twelve participants had colleagues at their institutions that were using approaches in their teaching that they said they would classify as critical. But four of the twelve thought that while their colleagues used some critical approaches, they probably would not call it that or realize they were practicing CIL because they were not familiar with the theory. Kate posited

I don't know that anyone here thinks about it at all as critical information literacy...[But], no one in the library really wants to teach the tool...No one really wants the basic plan; they all really want to push how you're thinking about what you're searching, why you're searching this, what different aspects are going into the search, the context...I think we are all on the same page in the way we perform in the classroom. I don't know if theoretically we're all on the same page.

Of the eight participants that had colleagues at their libraries that they would characterize as teaching CIL and were informed about it, there was typically only one other person that each worked with that they thought were knowledgeable about the theory of CIL and would self-identify their practice as falling under that rubric. Two additional participants worked as part of a large university system that included several individual colleges. These two participants did not feel like they had colleagues at their local campuses that would depict their work as being under the CIL umbrella, but they had colleagues at other colleges that would identify it as such.

In his work as an LIS researcher and faculty member, Joe had thought a lot about how CIL practitioners do their work and read widely and talked to many librarians about the topic. He proposed that CIL practitioners “tend to be the one person in their library who is seeing it this way. Or maybe one other person is there with them too.” There were two exceptions to this, including Daniel, who had three colleagues that,

had really dug in and done a lot of reading and recognition of the role of it. I don’t know if you asked one of [the other two] to define critical information literacy, [if they would] do a great job of defining it, but I think they still approach some of the content in similar ways.

Hope was the second participant who worked with more than one colleague that understood CIL. Daniel and Hope also stood out in another way in the realm of colleague interaction with CIL. They were successful “evangelists,” or people that had convinced others in their library that the work with CIL they were doing was important and they should adopt it. In Daniel’s case, he introduced the ideas several years ago and it took root and he has just continued to encourage it informally since. Hope had also been working for the past several years on convincing the librarians she worked with to adopt CIL. Her hard work paid off as she felt they had followed her example.

I feel like I am the evangelist...I feel like the other librarians do get what I’m saying and try to take a critical approach based on my sort of modeling for them. I don’t think they believe in it as passionately or have the same sort of politics that I do about it. But I don’t feel necessarily that I’m alone. For other people, I feel like that may be the case where they are the lone librarian who’s trying to you know promulgate this way of doing instruction and feeling like they have no support. But I don’t necessarily feel like it’s that way for me here.

Participants shared pedagogy with colleagues in a variety of ways. Eleven participants shared IL approaches, ideas, theories, and techniques with colleagues at

their institutions in a formal way. For some, this took the form of a teaching group or committee that met regularly to discuss everything IL-related, from deliberating software for research guides and developing outreach plans to designing instruction sessions and discussing teaching theories. For others, formal communication about IL was part of the professional development or staff training that librarians at their institution participated in and may be voluntary or mandatory. For the smallest contingent, formal discussions of IL happened within larger department meetings or as part of the planning process for first year programs.

While the focus of all of the formal programs was on IL in the broadest sense, seven of the eleven had some CIL related content included in their formal discussions. However, most of these did not have CIL as an integrated concept and tended to have isolated sessions on CIL rather than it being a core component. Hope described the most inclusive CIL professional development program. She was the instruction coordinator for her library and was responsible for organizing teacher training for the other librarians at her institution. She had woven CIL concepts into the overall program and did not treat it as an add-on or special topic.

I periodically will have instruction meetings...And I talk to the other librarians about specific teaching strategies. Or we'll do a skills share where we'll each demonstrate something that we feel like we do particularly well in the classroom. And so I'm always trying to encourage and promote critical teaching methods and I think from what I've observed and from conversations we've had I feel like in the past six years now, I've sort of chipped away at the old BI model where you're the sage on the stage and you're just pointing and clicking to a more critical approach.

Most participants described situations where CIL was just a small portion of their formal discussions and it was usually limited to just one or two sessions. All of these sessions were organized and presented by the interviewees themselves, not by others in their institution, regardless of if they were responsible for IL professional development at their institution. Michael was in charge of coordinating IL training for his colleagues. He described a critical session he conducted and explained why doing this type of thing for colleagues can be challenging.

One of the workshops that I organized for my colleagues this past year was on asking questions in instruction sessions, and I did work in the kind of questioning that...can raise critical consciousness of various topics and issues that arise within your typical instruction session...to give my faculty colleagues a framework to think about creating learning opportunities that would be more student-centered and that would lead to critical conversations. That's the degree to which I've tried to expose people to critical information literacy practices. And just making that transition from lecturing and demonstrating to having more of a conversation, and constructivist approach to a classroom setting is a very large leap to make for some of my colleagues.

Anna was not in charge of IL training for her library, but she had done a training session for her fellow librarians based on a conference presentation, which led to further opportunities, including an invitation from some of her colleagues to present a session on critical pedagogy. Two participants, Eva and Jack, had created a pedagogy group for their library on their own and invited interested colleagues to join them to read articles, discuss, and practice. Eva described how the group worked:

We worked together to start a pedagogy group that just read articles on pedagogy and everyone would bring in an article and we would discuss it and we had activities that were so much fun. We had this one where the pedagogy group came up with this list of crazy things and then we put them on slips of paper and then had a workshop for potential teaching and each group had a slip of paper and they had to come up with

something with whatever prop it was, like one group got a muffin tin and it's like teach a class using this muffin tin or use a guerilla approach to teaching or teach something by breaking an actual law. So it was a way of kind of opening things up and of just kind of twisting things around and it was fun too.

The members of the pedagogy group thought it was very useful and exciting when it was small and voluntary and believed it was the incubator for new ideas, but it did not survive when the members tried to expand it to a larger group because it "lost it's exploratory possibilities."

Most participants enjoyed informal conversations with colleagues about IL in addition to the formal ones. Four participants had only informal conversations with colleagues about IL either because of a shortage of time or the lack of a coordinated IL program. Jane and William were two of the participants who did not have a formal means of sharing ideas about IL with colleagues. Both cited time as the primary issue that prevented them from discussing IL more methodically.

In addition to time, not having a coordinated IL program for the institution contributed to the absence of formal discussions about IL among librarians. William and Andrea both regretted that the librarians at their institutions did not share pedagogy in formal and planned ways, but thought the lack of such a program likely stemmed from not having an organized IL program with a shared vision or plan. Andrea "wished...we had a more cohesive vision and more of a collegial approach to teaching," but she thought some of the librarians she worked with had become territorial about their liaison areas in the absence of a formal, structured IL program. The environment that William described seemed less strained, but had a similar lack of IL coordination.

There's not nearly enough sharing of techniques in general at the library. We've tried different things to get more interaction, but we all kind of do our own thing a lot and there's not nearly enough cooperation and sharing and coordination in that way. And most of it happens very haphazardly [in informal discussions].

5.2.4 Faculty Relationships

In 1958, Knapp argued that,

Neither subject field, nor teaching method, nor kind of assignment, nor quality of student in a class is of crucial importance in determining whether or not a given course will be dependent on the library. The only decisive factor seemed to be—and this is a subjective judgment—the instructor's attitude. Where the instructor expected and planned for student use, it occurred. Where he did not, it did not occur (as cited by Manuel, Beck, & Molloy, 2005, p. 140).

Over fifty years later, the experiences of the librarians in this study mirrored Knapp's take on the importance of the teaching faculty member in determining the role the library plays in terms of student use for a course. Numerous studies have shown that the majority of professors think *libraries* are important in the education of students, but they do not value the role of *librarians* in the educational process. In keeping with this view, the overwhelming majority of faculty members do not invite librarians into their classes to provide instruction (Manuel et al., 2005). Therefore, it is not surprising that building relationships with the teaching faculty was of the utmost importance to the participants and that they were very careful with the relationships they developed.

All of the participants spoke to some degree about the importance of librarian and faculty relationships in terms of teaching CIL. As Lily said, "our educational role hinges...on our ability to partner with people who are carrying out the act of teaching

within the curriculum.” All of the participants described at least some positive relationships they had with faculty members. But the majority also tended to tread lightly when it came to introducing new ideas or using methods or content that may be perceived as pushing the boundaries of their traditional roles.

Numerous studies have found that members of the teaching faculty often have a limited understanding of librarians’ roles and responsibilities. “[R]elatively few faculty members were aware of the range of instructional responsibilities held by many academic librarians, and many did not consider teaching to be a significant responsibility for librarians when compared with other responsibilities that they associated with the profession” (Walter, 2008, p. 60). Most participants did not try to introduce CIL-heavy concepts or methods unless they had worked with the professor before and felt like they had a good relationship already in place. Chris explained how he might go about trying to integrate CIL into one of his classes:

I've been more successful using different concepts that I'm interested in when I had built relationships with teaching faculty. We can discuss pedagogy and information literacy and we're able to craft kind of specific projects or specific classes with those concepts. ...And that just frequently has to do with the work I've done with the different faculty members in my institution. You know, people that I've known from college committees and discussions of pedagogy...from around campus or people I've worked with before... I might do a class with them once and if they ask to do it again next time. The second time around maybe I would say we could try this. ...it just really depends on campus relationships that are idiosyncratic.

Participants spoke about cultivating relationships over the long term. Patience and trust were two common themes that emerged in relation to building relationships

with faculty to the point of being able to try new things and to be able to grow an IL instruction program that includes CIL. Linda observed that,

it's a long process...[to]build relationships where the faculty members have some trust in the librarian and respect the librarian's knowledge, and the librarian [has to do] it in a graceful way....I think that [CIL] can become a widespread program, but it takes a lot of patience and hard work and a lot of relationship building and being strategic about those relationships, being strategic about figuring out who are the people that if I work with them they will be able to spread the word that things went well and I might be able to work with one their colleagues maybe next year, or something like that.

Andrea also took a long view, saying that what she was “doing has sort of evolved over the years.” Like several other participants, she often worked with people for many years and made gradual changes each semester, building on what she had done in the past. She also believed she may have a special advantage because she thought that “sometimes people in my department trusts me, because...I taught in the English department that I do library sessions for so they know me and they know that I know their curriculum.” She thought they often gave her more “free reign” because of that, which contrasted with her experience with her other liaison area, the history department. It took more time for her to gain the trust of that department’s faculty so that she could exercise more freedom in the classroom.

5.3 Institutional Expansion

This section of findings presents the participants’ thoughts on 1) opportunities for CIL expansion at an institutional level, to include possible partners and strategies and 2) possible barriers and challenges that participants felt could hinder expansion.

5.3.1 Opportunities

Most of the participants' ideas for expanding CIL at the institutional level depended heavily on faculty relationships. Some mentioned taking advantage of other initiatives that were being introduced at their universities, by finding ways to insert IL or the library in the planning and implementation of those efforts. Others thought the best approach would be to integrate CIL into already existing IL plans and frameworks so that it was part of general efforts to expand IL programming.

Henry provided an example of taking advantage of new university initiatives. His university had just begun a new general education program that included IL, which he saw as an opportunity for the library to become more involved:

As that is articulated and put into practice, we librarians have to become part of that process and listen and contribute to the planning for how the general education program is going to include information literacy.

Melissa provided another example of a university-level initiative that she thought provided opportunities for IL and CIL expansion. Her university was involved in Complete College America, which is a program to improve retention and graduation rates. Her library had just received funding to hire new librarians because they were able to make a case that the librarians would support retention efforts. She thought it was important for libraries to find similar opportunities to be involved at the university level because "if we can tie information literacy to these political things, it will become more of a priority campus-wide."

Kate thought it was important to get upper level college administrators, such as the dean of faculty, involved because they hold sway over the faculty. Her college has a

senior capstone requirement and she thought this program presented a good opportunity for CIL, and if administration pushed to make IL instruction a mandatory component for their capstone, it would be much easier to get faculty support for IL. She stated, “faculty complain about their research skills at the stage when they’re doing their capstone, which is a year-long research project, but they don’t connect it to better information literacy skills [that are] more advanced than [what they learn] in their first year seminar.”

William offered an example of how crucial it is to have both faculty and administrative support and buy-in when moving on institutional opportunities. He had successfully organized “an alternative first year program for students entering the university that...[was] based on critical pedagogical theories and was transdisciplinary [and] co-taught.” He had approached several faculty members from different departments in the university, with whom he shared common pedagogical interests. The goal for the program was to engage students in “looking at how everything interconnects.” He successfully developed the program with the group of professors that he organized and the university approved it for a trial run. Unfortunately the trial happened while he was on sabbatical in another country and though the feedback was good and the faculty who taught it enjoyed it, in his absence the administrative support waned. As this case illustrates, administrative support and continuously championing new programs is essential for success.

Some participants thought that the opportunities may lie more at the department level because they had some departments in which IL was more integrated

than others and seeing how much more effective IL instruction was in departments that valued the role of IL in students' learning made them believe that getting departmental buy-in was key to expansion. So they were on the lookout for opportunities to expand within certain departments. For example, Shari spoke about a new journalism school that was under consideration for her university that she thought may present new opportunities. However, she thought getting involved when a new department was formed may require a more top-down approach than what she had used to get IL integrated in the departments she liaised to, which was "a bit more stealthy."

5.3.2 Obstacles

When asked what obstacles he thought there were to expanding CIL at the institutional level, Henry nicely summarized them as being of two major types: practical issues and turf issues. Most of the obstacles that other participants addressed tended to fall into one of these categories. Practical issues were those things on campus that make doing anything new or different challenging, including staffing, resources, time, and organizational matters. Turf issues largely revolved around working with faculty and had to do with librarians reluctance to be seen as intruding on faculty territory, while still managing to do important and meaningful pedagogical work.

5.3.2.1 Practical Issues

Inadequate staffing was an issue for some participants. Shari felt lack of staff was one of the big obstacles to doing anything with IL at her institution: "I think we're one of the most understaffed libraries in the country so that probably doesn't help. And that we're all trying to be liaisons to a number of different departments." Andrea was facing

similar issues related to understaffing. Her library had not replaced librarians and other library staff as they retired or left the institution, which led to those left getting “a lot more focused on what we need to do...[and] so busy in doing our own little jobs, we don't have enough time to sort of think about the overarching thing.”

William’s description of the practical issues he and the other librarians at his institution were dealing with due to inadequate staff spread far beyond difficulties with expanding CIL. At the time of the interview, his library had half the librarians they were supposed to have. They had not been granted permission to hire a permanent librarian since 2007 and had gone from having eight full-time librarians on staff to only four. This had impacted their ability to do anything beyond the basics of keeping the doors open and the library operational.

In the past there would have been opportunity...in one of my departments or in an interdisciplinary program to put forward a proposal and possibly teach a full class. Right now there just isn't time. It would affect the unit too much for me to go out and do something extra. The school of education is actually quite open to me doing a class in critical information and media literacy, but the unit won't allow for that to happen right now, just because there's not enough people.

Lack of time was a major issue for most of the participants. Several said the lack of time made it difficult to develop new teaching methods and plans and that they often did not have time for reflection. Those teaching primarily first year programs were more likely to state that their overwhelming instructional load made it hard for them to try new approaches in the classroom or even to have time to reflect very much on what they were already doing. Jane said of the first year instructional program she organized, that “it’s such a high volume operation that we very rarely step back to talk, to reflect.”

Another practical issue that arose for some participants was the scalability of initiatives. Henry asserted that it was important to investigate the feasibility of scaling effective IL instruction efforts provided by individual librarians to undergraduate education in general, which could be challenging in two respects. First, as Henry contended, it would require librarians to do a lot of background work to find out “how critical analysis and...information literacy is taught throughout the undergraduate curriculum.” The majority of participants felt they were limited by the amount of time available to them already so taking on a large task, such as researching how IL is taught throughout the institution would be challenging for some and impossible for many.

The second obstacle to scalability is that critical pedagogical approaches necessarily depend upon specific contexts and individuals, so they rely on and are shaped by the teacher, the students, the class, the institutional environment and culture, and so forth. Jane argued that,

What’s radical and what’s critical totally depends on the context...[which] is not universal, but [depends] on hyperlocal kinds of negotiations. [When] I think about power using Foucault, the context is everything, like power is happening on these really micro levels so it’s sort of antithetical to the idea of critical information literacy to come up with a critical information literacy program.

A final practical issue is the context of the university itself. A small number of participants thought this context did not lend itself to being able to enact true critical pedagogy of any kind, including CIL. Eva thought that there are too many institutional limitations in the modern corporate university model that made critical pedagogy impossible.

[I]n terms of how the classroom is run and what the classroom is for students and the issue of power and who is deciding what we learn and that kind of thing – I find that to be kind of impossible in the context of the university because there's so many constraints...And there's a lot of lip service paid to critical pedagogy, I think, in the university and even people who I greatly admire – I admire their politics, I admire their research, I admire them as teachers to a point – their classroom looks just like any other classroom and I'm not going to change that going in three times. That's not possible. That can't happen.

5.3.2.2 Turf Issues

A common theme that over half of the participants mentioned as being an obstacle to institutional expansion were turf issues. Henry felt that librarians tend to struggle with finding a balance between being a relevant educational partner with professors and not overstepping the boundaries of what they believe to be their role.

Librarians who provide instruction don't want to be seen as encroaching on...the prerogative and expertise of the disciplinary faculty. We want to be seen as knowledgeable and helpful partners and there's no real cookbook method for that...you just have to build these relationships and build trust and be aware that there may be some sensitivity to encroachment, or perceived encroachment, on their knowledge.

The roles librarians have traditionally occupied felt limiting to some participants. Matthew argued that librarians often "don't have the opportunity to stretch our wings and do things that might not be expected of us." He was concerned that IL is often "not seen as anything that important," because it is not a standalone discipline, which further contributes to the difficulties librarians may face if they try to expand their role or push their teaching in different directions.

It's not reading, writing, or arithmetic. It's sort of this extra thing on top of it...So, you have this weird position where what we do is absolutely important and necessary for students to learn and understand for success. [But] we don't have a venue or a platform to actually drive that point home.

Some participants thought that librarians needed to expand these traditional roles if they hope to expand CIL. Lily was one of the participants who argued for this and she thought being able to do so was the biggest obstacle librarians face concerning CIL expansion. She maintained that “the job of librarians is to help and support faculty and students in their research and learning [and]...for a long time that meant providing a service.” But she thought librarians’ roles are and should be changing.

I feel like the obstacles...are really in the educational role that we take on. ...[Some] librarians are fulfilling their educational role in kind of the status quo, and teaching the library as databases and helping students make sense of the physical space of the library by providing tours. To me that's the lowest threshold of our instructional capacity. And because our educational role ...[relies] on our ability to partner with people who are carrying out the act of teaching within the curriculum, going beyond that role is, in some cases, challenging to our partners. And so I think we constantly have to have that awareness of how can we do our work to contribute to student learning while also pushing these boundaries. And when you bring critical information literacy into play, you're talking about pushing boundaries in ways that could be perceived as inappropriate. It can be perceived as beyond the scope of what we should be doing.

But several participants felt a substantial contributor to librarians’ difficulties in expanding their roles came from the way librarians view themselves. Eva said that librarians at her institution often say they don’t feel respected even though many of the librarians she works with have second masters’ degrees and PhDs. She thought a lot of this came from the librarians, not from faculty and administrators. She argued that “there’s this kind of experience of being lesser than that librarians often have.” Anna talked about an experience she had at an ACRL Information Literacy Immersion Program, which is an intensive multi-day workshop for academic librarians to develop

and build skills with teaching IL. She was surprised to hear from so many librarians attending the program that they did not identify as teachers.

I went to intentional teaching immersion last year, and one thing that I thought was interesting was that a lot of my colleagues there said that they really didn't identify themselves as teachers for the most part... Half said, 'Yes, I am a teacher' and half said 'I'm a trainer' or 'I show people how to do things' and didn't necessarily have that type of teaching identity. I think that that might be an issue...that might keep some people away from critical information literacy, is just not feeling like you have the agency or the authority to be engaged in this kind of stuff if you don't even really feel like you are a teacher.

Shari asserted that “one of the biggest obstacles is just getting librarians to think that that's their role [and] to think that it's not overstepping their reach, to start becoming more involved with faculty.” She strongly felt that when librarians present themselves as neutral actors, they remove a lot of their own power and discount their role as educators. “[I]f we were neutral, then we might as well be Google. We've got our own perspectives; we've got to acknowledge that. And that's our job as educators to facilitate this in a way that machines can't,” she said. Shari felt that part of the value professional librarians add to education is understanding the political and socioeconomic nature of information and helping students be more critical of that is an important contribution librarians can make. Further, she maintained that when she has held that position with faculty, while it may have sometimes started with awkward conversations, it usually ended with faculty being supportive.

It took them [faculty] awhile to understand what I wanted to do. I think they were quite surprised actually that a librarian would be interested in this and would want to and could do something about it. I don't think that they ever thought about critical information literacy or studies before. So I think that was kind of eye opening to them.

Chris also thought that if librarians put themselves out there more and were more upfront about their ideas concerning IL when they were negotiating classes with faculty, they would take it seriously. He said, “sometimes I think that librarians are so hesitant because they think they are lesser faculty.” But recognizing that there are faculty who may be open to new ideas can be powerful. He argued that librarians can influence change if they assert themselves and share their ideas, but he reasoned that this often relies on very specific relationships: “I guess unfortunately as unsatisfying as it sounds, it relies on specific relationships. [What] that means on an institutional level can be very challenging.”

5.4 Library Profession

The initial interview protocol for this study did not include any questions about the library profession, but after doing pilot interviews with the first four participants, it became clear that the professional identity and culture of librarians and librarianship played a large role in whether and how librarians were drawn to CIL and in their ability to practice it. How they learned and thought about CIL and how it was received by colleagues at their home institutions and in the profession impacted some participants’ ability to implement CIL.

Librarianship is a profession that highly values collaboration both in practice and scholarship so librarians tend to have a vested interest in working closely with colleagues. When they cannot find other librarians at their institution or in the profession to collaborate with on a project – even if that collaboration is simply in the

form of discussing certain issues with a likeminded person or presenting their individual work on a joint panel at a conference – it is hard to sustain it. So the place and function of the library profession is important to understanding the state of the field of CIL. This category of the findings details participants' thoughts on the impact of 1) theory in librarianship and IL discourse; 2) the practical nature of librarianship; and 3) the role of the *ACRL Standards* in how IL is conceived and practiced.

5.4.1 Theory in Librarianship and IL Discourse

More than half of the participants were concerned about the lack of theory in librarianship. They argued that librarians do not engage in difficult conversations or allow for robust critiques in the literature or at conferences. When asked about what she thought about the amount of theory in the library profession, Shari responded, “a lot more theory would be amazing. It would be great. I don't know how it would happen, but I think our profession needs a big injection of that somehow.”

In addition to believing the profession in general was short on theory, participants felt that the IL discourse did not draw enough on theoretical works and ideas. Chris observed that “a behaviorist model seemed pretty dominant in the literature...about information literacy” when he was reading about it in library school. Since he's been a librarian, he has continued to be troubled by the lack of critical discourse in librarianship:

one of the things that is frustrating about LIS as a discipline and the information literacy discourse is the degree to which people kind of speak past each other in the literature...This happens to a larger degree than in other academic disciplines, where someone comes out with a new writing about critical information literacy in the literature, and nobody responds...So there isn't that sort of productive dialogue where there are

people, I don't know whether there's some kind of high degree of contestation that I think we have in other disciplines. But I think in the information literacy literature...people don't respond to each other. I don't know what that means. And that could just be an aspect of this sort of professional culture, you know, I don't know.

Other participants spoke about the lack of critical conversations at library conferences, which are heavy on practice and light on theory. Melissa shared a story of how her boss – who she believed was supportive of her interest in CIL – responded to her explanation of a conference proposal that she wanted to submit. After explaining that she was interested in presenting a session on “using cultural studies to improve on information literacy instruction.” Her supervisor told her that she did not know how that would fit in at a library conference, which are typically focused on sessions that include content such as: “this is an exercise that I did, this is how I taught students how to use the library catalog, or this is how I arranged the settings in our discovery service.”

In addition to the lack of theory, some participants also noted that challenging conversations are missing from the disciplinary discourse. It is a commonly understood professional expectation for librarians to present a positive face to patrons and colleagues, regardless of their actual emotions (Matteson & Miller, 2013). Positive feedback and interactions are how academic librarians tend to measure support from those they work with, is a part of the culture of librarianship, and seems to extend into all aspects of the profession. Lily described how the library conference culture is very pleasant and accepting and does not include space for critical discourse or for people to challenge one another's ideas.

I'm reminded all the time when I'm on committees or when I'm at conferences that we don't ask these hard questions about our world and

we rarely take ourselves into the place of challenge where we're really uncomfortable. And so I think we just are not as critical in the critical theory sense as we could be and as I've seen other disciplines be. I mean, when you go to a library conference and present something, it's a big love fest.

But she countered that it is hard to see how it could really be any other way because "we're a profession of practitioners...[and] when I do [research], I'm hard pressed to know what questions to ask and what to expect and so I think we're just a little bit ill-prepared to have that level of discourse." Still, for academic librarians with additional advanced degrees, it is understandably frustrating to feel like you are part of a "discipline without a discipline," as Eva put it. Andrea's feelings on this are representative of the three participants who earned PhDs and several of those with master's degrees in other subjects prior to entering the library profession:

Because I went to library school after doing my PhD I was just sort of stunned that we didn't talk about theory, so that was sort of alarming to me. I think I mentioned stumbling upon James Elmborg's article in the first month of...my job as an information literacy librarian and I actually sent him an email saying thank god, thank you for writing this, I really needed to read this because it was really exciting to see someone taking a theoretical approach to librarianship. And a critical literacy approach to boot. So that's actually been something that I've been struggling with.

It is important to note that the scholarly contributions of practitioners in all fields is typically different from that of academics as "practitioners tend to focus on practical, problem-based topics, while academics tend to focus on the theoretical" (Finlay, Ni, Tsou, & Sugimoto, 2013, p. 404). So it is not surprising that this would hold true for librarians as well. The practical focus of librarians and the literature does not just pertain to the types of articles they write, but also to what they prefer to read. When librarians seek out articles in their field, they are usually looking for articles that can inform their

practice and are relevant to their daily work and they are more likely to write about what they would like to read (Finlay et al., 2013).

Further, while publishing is a requirement for virtually all LIS professors, a 2010 study found that only 19% of academic librarians “felt they were expected and encouraged to research and publish” (Finlay et al., 2013). This stems from a variety of reasons, with the largest one seeming to be time, in that librarians work 40-hour weeks for twelve months of the year. They do not typically get time off to research and write so the pieces they publish tend to be shorter and less likely to be based on robust research. As with conference presentations, they tend to be very practical.

A few participants were also concerned that LIS literature in general, and writings on IL in particular, were behind the times in terms of how scholars and practitioners are looking at, thinking about, and theorizing their work. Chris argued that the literature “seemed to sort of ignore, or perhaps not engage with a lot of the things that had been written about education in theory or critical social theory and [it did not seem to] be engaged in the key debates in those disciplines that occurred in the past 30 or so years.” Eva also found it problematic that the IL literature seemed so behind other disciplines. She stated that “stuff about pedagogy and library instruction, they’re like 25, 30 years behind and maybe more.”

5.4.2 Practical Nature of Librarianship

Most of the participants addressed the practical nature of librarianship as the primary reason for the dearth of theory. Eva observed that “the library community is very pragmatic” and “they might put up with something theoretical” if you present it

and tie it in with something practical that they can do with it. She talked about a colleague she had that would say that readings they were discussing in their pedagogy group were “too philosophical” when they were dense or complex, but certainly not what Eva considered philosophical. This experience, combined with many others like it, led Eva to conclude that there is not “a whole lot of patience...in librarianship” for anything that does not have a clearly practical application.

But Eva, along with several other participants, looked at this practical focus with a certain level of ambivalence. While they thought it would be desirable for more librarians in the profession to be interested in theory and would welcome more theoretically-focused articles and conference papers and presentations, they believed the reality of librarians’ daily work *is* very practical in nature, leaves little time for non-practical activities, and does not typically reward people who focus on non-practical issues. Additionally, they expressed personal tensions between the practical demands of their jobs and their interest in CIL.

William provided an example of the ambivalence of the participants. He thought librarians have to be practical “in some ways [because]...we’re either speaking with students doing reference work or we’re doing instruction or we’re ordering...[and] a lot of our work is practical, practically based.” But he also thought,

that it's important that people are beginning to struggle with the theory and actually think about these things. I think that's a really important first step, that people start to think about our practices in the library...why we do them and how we do them and how it [fits] in a larger political and economic environment and that we're not neutral operators. So I think it's important that people start to struggle with those ideas. And I think it does start to affect your practice, you know, in subtle ways even if not in major ways.

Daniel also described tensions between his interest in CIL and his daily work and the practical expectations librarians have to meet. He has been studying and writing about CIL for around fifteen years and in that time, his career has evolved. He spoke to the practicalities he has had to respond to as an academic librarian and library manager.

Since I've written some of the things [in] terms of critical pedagogy, I've had to deal with the practicalities...of not having enough staffing, of the shifting information world, of pleasing faculty members even though pleasing may not be the best word. But I mean faculty members have a goal and we need to connect with faculty members to be successful. ...And I've had to learn that we have to fight certain battles and other times we have to recognize that we need to move things forward. Sometimes moving things forward is that just clicking lecture information literacy session and other times it's a more robust conversation about where information comes from. And so sometimes the success is just being there with students and not freaking out about a fully realized critical pedagogy model in information literacy.

5.4.3 ACRL Standards

Another professional issue that impacted participants' ability to implement CIL at their institutions or to fully adopt a CIL approach was the current quantitative assessment and standards-based culture of librarianship. The *ACRL Information Literacy Competency Standards for Higher Education*, or what librarians commonly refer to as "the ACRL Standards" or just "the standards" have guided how academic librarians have conceptualized and operationalized IL instruction since their publication in 2000. The assessment culture has also really taken hold in librarianship since then. Eight participants offered some sort of critique of the ACRL Standards of varying levels of harshness.

The first issue for participants in terms of the ACRL Standards was simply that they were too general, simplistic, and focused on mechanistic skills. Matthew argued

that “the ACRL Standards kind of limit our thinking because they treat the whole process as sort of generic.” He thought a more effective approach would look at information as contextual with a lot of different elements involved, including disciplinary, professor, and assignment expectations. He contended that “really none of that is detailed. It treats every process as if it were identical.”

Some argued that the ACRL Standards were out of date and reify a problematic culture of assessment. Michael was respectful of the people who dedicated their professional lives to creating them and thought that “we are better for them having done that.” But he still questioned if they are good. He reasoned, “I don’t even think standards are good. I think that whole paradigm is, now as we’re thinking about it from our current perspective, somewhat problematic - maybe more than somewhat – it’s problematic.” Shari was “of two minds about the standards in themselves, whether we need standards or that’s just setting up this weird sort of very linear system.” But she did not use them at all in her teaching because she found them to be outdated and not at all useful for her instructional goals.

But the idea that all teaching endeavors should be assessed and that it is not only an expectation, but a necessity for educators of all stripes, including librarians, has taken hold in academic libraries. Some of the participants mentioned the “Value of Academic Libraries” initiative by ACRL as emblematic of this culture, which is “a multiyear project designed to assist academic librarians in demonstrating library value” (Free, 2012). This project was initiated by a 2010 report and in the three years since its publication has spurred summits, white papers, grants, toolkits, and numerous articles

and major conference presentations. Joe described this work as being “all business models” and that,

within librarianship I think there’s a tremendous anxiety around proving our value or proving our worth...When I try to talk with people about [the Value of Academic Libraries], there’s this big we’ve got to assess our instruction so that we can prove that we’re having an impact...[I]f you go to the English department and you say prove to us that freshman composition is having an impact, what would they say? You can’t prove that. We just know intuitively that there is a real need for students to write well and they don’t write well but they don’t really write well when they are done with the class either. But we still think we need to keep teaching it.

Jane observed that the way initiatives like this are set up, whether you perceive them as good or bad, makes it “very hard not to go professionally where the resources are.” She described an experience at the 2013 ACRL conference where she attended a meeting for one of the Value of Academic Libraries’ initiatives. During the session, she thought “we need to get in on the cash cow that is assessment in action. We need to develop a plan and put a bunch of stuff in it so we can go on a trip and someone will pay us for it.” So while she feels “pretty critical” of it, she finds it “really hard institutionally to not go where the money is and it’s certainly things that encourage a mechanistic approach to [IL].”

But as Matthew pointed out, even though a robust criticism of assessment culture has emerged that encourages educators to use assessment as a tool in learning and not in such a high stakes way, “administrators like it and unfortunately so do a lot of students and parents and other people involved. And they like things to be neat and tidy and have an easy way to measure success.” Chloe asserted that one of the primary reasons that CIL had not taken root in the profession was because it is not possible to

demonstrate learning outcomes with CIL and “we are high-bound to demonstrate learning outcomes, so I don't think its time has come yet.”

CHAPTER SIX

SUMMARY, DISCUSSION, IMPLICATIONS, AND FUTURE RESEARCH

6.1 Summary

This qualitative study explored the state of critical information literacy (CIL) in higher education as it is enacted and understood by academic librarians. It investigated the institutional support, nonsupport, and barriers to CIL programs and the effectiveness of experiential critical pedagogy for information literacy (IL) learning as taught and studied by 19 CIL specialists. The following research questions guided this study:

- What is the state of the field of critical information literacy in postsecondary institutions?
- What approaches are effective in teaching critical information literacy?
- What type and amount of institutional support is given to critical information literacy programs?
- What are the obstacles to creating and/or expanding critical information literacy programs in higher education?
- What methods have librarians found to be successful in efforts to embed critical information literacy into the college curriculum?
- What type and amount of professional support is given to the ideas and practice of critical information literacy?

Experiential education served as the broad theoretical framework for this study, which stems from the tradition of critical theory. In the broadest sense, theories that

seek to emancipate individuals from any circumstances of domination or oppression are critical. The two major experiential theories of experiential education that I used to build the theoretical framework for this study are critical pedagogy as understood by Paulo Freire and transformative learning as understood by Mezirow. Meaningful learning is an essential component to critical pedagogy and transformative learning and infused the theoretical framework.

Purposeful and snowball sampling were used to gather a sample of 19 CIL specialists, including 17 currently practicing librarians and two professors in schools of library and information science who had previously worked as academic librarians. Data for this study was collected via 40-60 minute interviews. The interviews were semi-structured and included a series of open-ended questions.

Participants worked at a variety of institutional types, including research universities, comprehensive universities, four year colleges, and one community college. All of those interviewed taught one-shot library instruction sessions and eight taught for-credit IL courses. The overwhelming majority were liaisons to at least one academic department and all taught library instruction sessions as a major part of their job. For some, teaching was their primary duty and for others, it was just one of many duties.

The findings showed that participants were highly influenced by critical pedagogy, which they tended to learn about in graduate programs outside of their library science studies. Only one participant learned about critical theory of any kind in his LIS program. Despite being highly dedicated and interested in the ideas of CIL, many of the participants struggled with finding ways to consistently teach using critical

methods in their one-shot sessions. Most of the interviewees cited specific examples of classes they had used critical methods with and spoke of exercises that contained critical elements, including creating student-centered learning environments, facilitating dialogue and discussion, or using problem-posing teaching approaches. But the majority were limited by the necessity of relaying specific mechanical pieces of information, at the mercy of what teaching faculty wanted them to do, and limited by a general lack of time with students.

All of the participants included critical content in their classes. In some cases, opportunities to do so were minimal, but the librarians expressed a general dedication to finding ways to work critical content into their sessions even if it was in small ways. Most taught critical source evaluation – including teaching students how knowledge is produced and disseminated and deconstructing the scholarly versus popular dichotomy of academic research – and problematized subject headings and other language used in library catalogs, databases, and the internet in order to encourage students to think more holistically about information, such that they understand that it is part of the larger sociopolitical world that produces it.

The majority of participants thought that all of IL instruction was more effective when taught within academic disciplines and believed this held true for CIL as well. They thought the nature and disciplinary discourses of some academic disciplines were a better fit for CIL than others. Some disciplines, including the humanities and some social sciences, include critical theory as one of the basic foundational theories that all students are taught. For those disciplines, participants thought CIL was a natural fit,

while they tended to see the hard sciences as more challenging because the structure of scholarship is more fixed and follows a set empirical pattern. Participants did not always agree on which disciplines were a good fit for CIL, which seemed at least in part to be related to how the discipline was translated for the local context. Some of the issues with teaching CIL that participants included in their discussions of disciplinary considerations seemed to have more to do with their local context than with the discipline per se, including student demographics, departmental structure, and historical relationships between the library or librarian and the academic department or faculty members. Regardless of discipline, relationship building with academic departments and individual professors was highly important for successfully teaching with CIL concepts or methods.

The majority of participants thought students were receptive to CIL because they enjoyed that it was student-centered and it gave them opportunities to think about familiar issues in new and empowering ways. A little less than one-third also described experiences where students were resistant to CIL methods, especially at the beginning of the class session when they were first asking students to respond and be involved. Interviewees thought this stemmed from them wanting to just be told what they needed to do, being uncomfortable with open-ended questions, or from the librarian not being clear enough with the students about what they wanted from them. All of the participants said when this happened, they just pushed through and that usually worked to get students more involved. None of those interviewed expressed any sense that

students were resistant to the content of CIL; resistance was only in response to methods.

Most participants felt supported in their CIL efforts at least minimally by college or university and library administration. All but two of the participants felt that their general IL efforts were supported by library administrators and most felt supported either directly or indirectly for their CIL efforts. Most of those asked about support from college or university administrators stated that they felt like IL was supported through means such as funding and staffing and often by including an IL requirement in the general education requirements or a similar type of institutional requirement. However, they thought the support tended to be uninformed in that administrators don't really know what IL is or particularly care about how it is taught.

Participants had mixed experiences regarding how much colleagues knew about or taught with CIL methods or content. More than half thought they had colleagues that taught using critical teaching methods and concepts, but a subsection of those thought those same colleagues did not know what CIL was. Only two had more than one colleague that knew about the theory of CIL and practiced it and in both cases, the interviewee had taught their colleagues about it in professional development sessions that they led.

Participants talked extensively about their relationships with faculty and its impact on their ability to teach CIL. Most participants did not try to introduce CIL-heavy concepts or methods unless they had worked with the professor before and felt like they already had a good relationship in place. They tended to take a long view regarding

their relationships and were willing to be patient and build trust with a faculty member often over years before trying to push new ideas on them. Everything to do with one-shot library instruction sessions hinges on the faculty member that the class is for, starting with whether the librarian will be allowed to teach the class to what is taught, how it is taught, and when it is taught. This dynamic has had exhaustive coverage in LIS literature (Manuel et al., 2005) and was reflected in the concerns of the participants of this study. However, a small number of those interviewed thought that at least some of that dynamic is brought on and encouraged by librarians themselves because they often feel and act like they are not as important or valued as the teaching faculty they work with.

Most of the participants' ideas for expanding CIL at the institutional level included working heavily with faculty. Other ideas included taking advantage of other university-wide initiatives and finding a way to embed CIL or to better integrate CIL into existing IL plans and frameworks. Obstacles to expansion included practical issues, which included limited staffing, financial and other resources, and time; and turf issues, which included issues with working with faculty and librarians' roles and vision for themselves in the education process.

The final group of findings for this study focused on the library profession and where and how CIL fit within it. More than half of the participants were concerned that there is not enough theory in librarianship. They believed that librarians do not critique their work enough or have the types of critical and reflective conversations that other academic disciplines have. They thought the practical nature of library work contributed

to the lack of theory, but were ambivalent about whether the focus on practice was good or bad. For the most part, they would like to see library work more infused and grounded with theory, but felt that the daily work of librarians is so practical and the expectations of librarians is also so practically focused, that it would be difficult to make the argument that all librarians should be more concerned with theory. Several participants also spoke to the difficulty of meshing CIL with the assessment culture that is currently a top priority in IL. They argued that the *ACRL Information Literacy Competency Standards for Higher Education* were too simplistic, general, mechanistic, and outdated.

The remainder of this chapter will focus on unexpected findings, a discussion of some of the major findings and what they may mean for the practice and theory of CIL, implications for practice, and recommendations for further research.

6.2 Unexpected Findings

One of the most surprising findings from this study was that there were some participants who believed that teaching CIL was impossible. Most of the participants for this study were selected for inclusion based on a record of writing and presenting on CIL so it was surprising that there was a small contingent of this group who found it impossible to teach using CIL methods. One reason I embarked on this study was from a desire to find out more about how other librarians who teach using CIL methods and content approached their work with the hope that I could encourage others to do so, fold what I learned into my own practice as a librarian, and build awareness of potential

opportunities and challenges so that other librarians could do what it appeared that the librarians who were writing on this topic had already figured out. To find that some of these librarians struggled with the practical realities that tend to get in the way of so many librarians trying new approaches or being intellectually engaged with their teaching was both disheartening and strangely reassuring because it reinforced the notion that the work of CIL is hard, there are no easy or one-size-fits-all answers, and that there is still a lot of theorizing and practice left to do.

Another surprising finding was the rich understanding the participants had of a variety of critical theories. Having worked in libraries for almost ten years, I have often felt adrift in a sea of practice without the enrichment of strong theories to undergird it. I was pleased and surprised by the deep theoretical knowledge of the participants. While they all drew on a few of the same or similar works, such as critical pedagogy, they also often had their own favorite theories or theorists. A substantial portion of the literature used in the findings section of this dissertation was based on theorist or article recommendations from the participants.

6.3 Discussion

The findings in this study provide insight into how academic librarians with an interest in or expertise in CIL theorize and think about it, including the ways in which it differs from and is the same as IL. The findings show that librarians who feel supported in their IL efforts also tend to feel supported in their CIL efforts, despite believing that administrators are unlikely to know what CIL is. This study provides details on how CIL

practitioners teach with CIL content and methods and how they talk about it with faculty. Putting it into practice was not easy for most of the participants because of institutional constraints, including the prevalence of the one-shot instruction session and the librarian's role in the education process. However, they benefited from being able to focus on concrete topics, which may make it easier to use critical pedagogical methods in CIL sessions. The institutional findings showed that while most participants felt supported by library administrators to some degree, the support was often not fully informed support; there was a strong perception that administrators often did not know a lot about IL and almost nothing about CIL and did not necessarily advocate for it at the institutional level. The following sections further elaborate on and discuss these findings.

6.3.1 CIL and IL: A Note on the Distinction and the Theory Base of CIL

While this study explored the state of CIL (as opposed to IL) in higher education as understood and enacted by academic librarians, there were many points in the findings where it was clear that what was good for IL was good for CIL, including support from library and college and university administrators, how it was implemented and possibilities for expansion at the institutional level, and working with faculty to embed IL. But there were also places where the two diverged, including teaching methods and content taught, how the two concepts are understood in the profession, and the types of conversations librarians may have with faculty about IL or CIL classes.

In order to clarify the distinction between CIL and IL and make clear the instances when the two concepts serve the same purpose, it is helpful to revisit the

definitions of each. Librarians have been working on defining and describing research competencies and library research competencies for students since the 1980s and the meaning of IL since the 1990s (Farrell, 2012). The debate over the meaning of IL is a central topic in librarianship at this point in history. Elmborg (2006) argued that “disagreements about what information literacy means are not merely a matter of semantics or technicalities: the lack of clarity has confused the development of a practice that might give shape to librarianship in the academy.” Further, “the lack of precision about what information literacy means has prevented critical judgment about its importance” (p. 192). Likewise, there is no clearly agreed upon definition of CIL. Despite the lack of clarity in the LIS literature, Elmborg’s point was well taken in that in order to critically examine IL and CIL, including their importance, I needed clearly articulated definitions to guide this study, which were:

Information literacy is an intellectual framework for recognizing the need for, understanding, finding, evaluating, and using information. These are activities which may be supported in part by fluency with information technology, in part by sound investigative methods, but most importantly through critical discernment and reasoning. Information literacy initiates, sustains, and extends lifelong learning through abilities that may use technologies but are ultimately independent of them. (Bundy, 2004, p. 4)

Critical information literacy is “a library instruction praxis that promotes critical engagement with information sources, considers students collaborators in knowledge production practices (and creators in their own right), recognizes the affective dimensions of research, and (in some cases) has liberatory aims” (Accardi et al., 2010, p. xiii). It looks beyond the strictly functional, competency-based role of information discovery and use and the traditional conceptions of information literacy that focus almost wholly on mainstream sources and views and takes into account the complex power relationships that undergird all of information, including its creation, presentation, storage, retrieval, and accessibility.

In sum, CIL is in a sense an expanded version of IL that puts the learner at the center in a more empowered role and puts more of a focus on the sociopolitical, economic, and cultural aspects of all types and stages of information and the research process. CIL is very concerned with the power relationships that impact information production and dissemination and tries to move IL beyond the purely mechanical and technical. It pulls from critical theories, including critical pedagogy, critical literacy, and others.

Further complications in defining and distinguishing between IL and CIL emerge when practice is taken into account. Several participants in this study said that they had librarian colleagues at their institutions that were teaching what the participants would consider CIL, but their colleagues were not likely to realize or call it that. CIL as it has been conceived in the literature and in the practice of the participants is steeped in theory. A major reason that many of the participants were drawn to the ideas of CIL was because it is theory-based and they yearned for something more in their library practice than they had found with the traditional practice-heavy and theory-light discussions of IL. This then begs the question, if librarians are practicing it without knowledge of the theory base behind it, is it still CIL?

CIL is praxis based, which means that theory and practice are connected and inform one another. As a critical theory, it should include “self conscious critiques” and a “school of thought” (Giroux, 2003) so that it is malleable and flexible in response to reflexive critiques and research on practice. Jacobs (2008) argued that IL practitioners and scholars need to build a theory base that includes critical reflection in order for the

work to have meaning for students:

In terms of information literacy, if we do not use theory as a means toward critical self-reflection and contextualization, our daily practices will come to naught. Similarly, all of our cogent, inspirational theories regarding information literacy will remain “airy nothings” unless we find “a local habitation and a name” in theoretically informed pedagogical practices” (p. 15).

Based on all of this, it would be easy to become dogmatic and declare that all of IL should become CIL and all instruction librarians should become theorists. However, a number of the participants of this study thought there was a place for both CIL and IL in their work and that it was perfectly acceptable for librarians to not know the theory if they were not interested. In fact, they thought many of those librarians were very good at their jobs and were good teachers despite their lack of interest in or knowledge of theory. So while they were frustrated with the lack of theory in the profession and in some cases, with colleagues at their home institutions, as a whole they seemed to think there was a place for both theory-driven and practice-driven librarians.

However, in terms of their personal professional satisfaction, they wished they had more opportunities to bring CIL into the classroom so they could find better ways to connect the theory with the practice and that there were more opportunities to talk about and engage with others in the profession about CIL. Most of the participants believed the nature of teaching people how to do research necessarily includes some mechanical, technical components and that many students attending college may have little to no experience with using libraries and so starting with the basics is often both necessary and ethically right.

Even though IL and CIL differ in terms of theory, praxis, self-reflection, and depth, the way they are each implemented at an institutional level is very similar and support for one likely means there will be support for the other. The majority of participants who thought they had support from their library administrators for IL also thought they had either direct or indirect support for CIL.

6.3.2 Putting CIL into Practice in the Classroom and the Institution

The question of how to practice CIL is a challenge that will not be easily overcome and perhaps should not be, as it is rooted in critical pedagogy and “no formula or homogenous representation exists for the universal implementation of any form of critical pedagogy. In fact, it is precisely this distinguishing factor that constitutes its critical nature, and therefore its most emancipatory and democratic function” (Darder, Baltodano, & Torres, 2003, p. 10). As all but one of the participants in this study spoke of critical pedagogy in terms that clearly reflected a Freirian critical pedagogy, I used a Freirian lens to analyze the participants’ teaching methods and content, to include his “distinctions of monological vs. dialogical pedagogies, his critique of “banking” forms of education as the mere “depositing” of information in the minds of students, [and] his conception of *conscientization*” (Burbules, 2000, p. 255). I will use this same lens to frame the discussion below.

6.3.2.1 Teaching Approaches: Dialogue and One-shots

When participants were asked about how they bring CIL into the classroom, one of the most common teaching methods described was the use of critical dialogue. This type of technique is the most common teaching approach employed by critical

pedagogues and, along with praxis, is central to the conscientization process. Dialogue can provide a relatively easy entrance point for librarians who are looking to integrate different teaching methods in their classrooms because it can feel fairly low risk and be less intimidating than more complex approaches. Adding space for dialogue is also one of the primary methods for incorporating active learning in teaching, which is a prominent theme in IL literature. Most librarians are familiar with the ideas behind active learning and techniques for including it in instruction from reading the library literature and attending conferences. One participant stated that framing the use of dialogue in terms of adding active learning techniques to their instruction could serve as a way to help librarians who are trying to get other librarians they work with to consider trying critical approaches.

While providing relatively easy entrance points for librarians interested in improving their teaching with the use of CIL is important and dialogue is certainly a good method for doing so, librarians need to be mindful of the purpose of dialogue for critical pedagogy. A challenge that educators face when they attempt to create and facilitate meaningful critical dialogue is having a true understanding of what dialogue means in the context of critical pedagogy and then being able to actually put that into practice. Pepi Leistyana interviewed Paulo Freire about the meaning of dialogue, its role in the conscientization process, and how teachers should approach dialogues with students. Freire stated that “in an attempt to understand the meaning of the dialogical process we have to put aside any possibility of understanding it as pure tactics or strategy...[It] is

a way of knowing and not a tactic to involve...[and] requires approaching and examining a certain knowable object” (Leistyna, 1999).

This means that the dialogue should not be a mere conversation or a device used to involve students at a basic, descriptive level or provide space for them to address the object of study from personal experience alone. While these elements may be part of the dialogue, it should have the larger goal of developing a mutual understanding of something, which includes theorizing it and addressing its larger sociocultural, historical, or political aspects. According to Burbules (2000), “it is widely assumed that the aim of teaching with and through dialogue serves democracy, promotes communication across difference, and enables the active co-construction of new knowledge and understandings” (p. 251). However, using theory to ground the “co-construction of new knowledge and understanding” can be challenging for educators. Leistyna (1999) was concerned that progressive educators often neglect theory because they focus too much on the descriptive voice, in which “the authority to speak emanates from the personal - “authentic” – experience in which theoretical explanations of the ideological and sociohistorical formations of such incidents and identities are ignored or simply dismissed” (p. 47).

Neglecting the theoretical and the relational turns the dialogue into nothing more than an inclusionary device or a simple discussion session that only skims the surface of a topic. Some of the participants who used dialogue were aware of the importance of theory in the dialogical process and specifically addressed how they tried to facilitate dialogue that encouraged students to theorize concepts. Further, the

concrete nature of the information that librarians typically present may serve as an opportunity in this regard because while it is easy to fall into a simple descriptive discussion about students' experiences and feelings about less concrete topics such as interactions in social situations, their personal reactions to a poem, and the like, it is more difficult to do so in a discussion about something concrete like subject headings and the structure of information. These topics are concrete and knowable, while still open to theoretical and philosophical interpretation.

Having the advantage of being able to focus on this type of concrete topic is especially fortunate in light of the structure of most IL sessions because,

while teaching has become central to academic librarianship, the general model remains the "one-shot" session, in which the librarian, ensconced behind a keyboard or in the aura of an LCD projector, expounds to bored students about web pages and databases – an exercise that fails to make an impression, for good or bad, on the research habits of the students. And considering the way many students (and faculty) treat librarians – as service providers of last resort – one has a hard time imagining what pedagogy could apply to this model, unless it were a pedagogy of the drive-in. Inside the aura of the projector, which describes the complete circle of your skill, your aims at least are clear (if their utility is not). Point, click, expound, repeat. Any questions? No? All right, then; goodbye (Eisenhower & Smith, 2010, p. 127).

Facilitating a meaningful critical dialogue tends to require some level of trust between students and teacher because it requires examinations of personal experiences and the honest sharing of thoughts and opinions. In short, it makes the students and the teacher vulnerable. The single one-shot session is likely to be the only time the librarian and the students in the class interact with each other. There is no time to develop trust or establish a politically and socially equal classroom. In addition, the dynamic for the class has already been established by the professor of the course and if it is one where

students are not normally engaged, do not feel comfortable sharing with the other students or the professor, or even has a level of hostility, the librarian will not know that going in, and that can have a debilitating effect on any efforts she may make to engage students in a critical dialogue.

Already, teachers in longer term teaching situations who attempt to enact critical pedagogy are likely to have “unsuccessful moments in their efforts to find a ‘culture of democratic authority’ because so often the negotiation and change that are typically a part of critical pedagogy produce results that are hard to predict, plan for, and respond successfully to” (Belzer, 2004, p. 6). Not surprisingly, adding in the problems presented by teaching within the confines of the one-shot model compounds these issues. Participants in this study described at length the problems that came from trying to teach with critical methods, including dialogue, in a one-shot environment. A small number of participants found these problems insurmountable and gave up efforts to try to use critical methods. For others, they were constantly striving with the result of feeling like they experienced some successes and some failures. All of the interviewees were fully aware of the challenges one-shots presented. While they chose to deal with it differently, none of the responses were wrong, but rather reflected how teaching in any form is both complicated and a personal endeavor.

6.3.2.2 Conscientization, Empowerment, and Teaching Goals and Roles

When participants explained their teaching approaches and content, their instructional goals quickly emerged as a theme. For most of the participants, student empowerment was one of their primary goals and the ideal that formed the foundation

for their dedication to CIL. This goal has been reflected in other studies of critical educators' identification of critical pedagogy's primary aims and purposes (Breuing, 2011). Liberation and empowerment are central to all of the theories and practices of critical pedagogy and critical theory as a whole, which served as the umbrella theory for the theoretical framework of this study. Critical theory's purpose and aims are "not merely descriptive; it is a way to instigate social change by providing knowledge of the forces of social inequality that can, in turn, inform political action aimed at emancipation (or at least at diminishing domination and inequality)" (Rush, 2004, p. 9).

While discussing their goals for students, participants often talked about the importance of helping them understand that they should not just mindlessly receive information; but should be empowered to take part in the scholarly conversation by understanding flows of information so they can see the power relations that undergird all of information (both scholarly and popular) and make decisions about how they want to be involved in the conversation. This matches Freire's 'conscientization,' which is "the process by which students, as empowered subjects, achieve a deepening awareness of the social realities that shape their lives and discover their own capacities to re-create them" (Darder et al., 2003, p. 15).

But when talking about their own roles in the education process, many of the participants spoke about feeling disempowered. They did not usually use the words "empowerment" or "disempowered" to describe their personal feelings about their role in the process, but they spoke to practical concerns like not having any input into assignments that they were supposed to then prepare students to complete, being

unable to get teaching faculty to respond to requests for feedback about instruction sessions, being left out of the curriculum planning process at all levels, and the necessity of prioritizing relationships with faculty over their personal pedagogical goals. Is it possible for librarians to try to help empower students when they are working from such a disempowered place?

Gore and others have challenged the emancipatory and empowerment potential of critical pedagogy and the teacher's role in the process in numerous publications (Gore, 1993, 2003; C. Luke & Gore, 1992). She (2003) argues that "to empower denotes to give authority, to enable, to license," and that

strong senses of human agency and optimism pervade claims about the teacher as empower-er in ways which portray the teacher's role as crucial and sometimes even omnipotent...The teacher, as the agent of empowerment, is accorded great importance in these discourses. My major concerns are that these claims to empowerment attribute extraordinary abilities to the teacher, and hold a view of agency which risks ignoring the context(s) of teachers' work (p.57).

I share Gore's concerns, especially as they relate to the work of academic librarians. While goals of empowerment are admirable and even attainable in some cases, librarians who do not feel a sense of agency may struggle with how to help students feel empowered. hooks (1994) offers hope in her description of engaged pedagogy, which she argued "does not seek simply to empower students, ...[but] will also be a place where teachers grow and are empowered by the process." However, she made it clear that in order for that to happen, teachers have to be fully engaged as well because "that empowerment cannot happen if we refuse to be vulnerable while empowering students to take risks" (p.21). It is challenging for librarians to let down

their guard enough to be fully engaged for a variety of reasons. First and foremost, as was discussed in the previous section, the students they are teaching are not often “their” class, which can severely limit the possibilities for what they can accomplish while teaching. Second, it is standard practice for the course instructor to be in the room with them, often at the librarians’ urging. It is difficult to reveal vulnerabilities with students, but it is even more difficult to do so in front of the very person you are trying to impress with your teaching prowess so they will bring their students to you in future semesters. In addition, librarians are currently stuck in an assessment culture, in which they are supposed to constantly prove their worth (Free, 2012) by making sure they are teaching enough to please their supervisors and doing some sort of classroom assessment of their instruction sessions that shows their efforts have been worthwhile. This limits many librarians’ willingness to take risks with their IL sessions.

In addition to sometimes feeling disempowered personally, some participants questioned whether college students, especially those that they served in some cases, were oppressed and debated if they were in fact the opposite and were poised to become oppressors. A major question that began to emerge for me during data analysis was who gets to decide who is the oppressed and who is the oppressor? And further, where should CIL diverge from the goals and methods of critical pedagogy? Some theorists argue that anyone who has gone through formal schooling has been oppressed and teachers can never be separated from their position of authority and power in any meaningful way (Cooks, 2003).

I (and the majority of the study participants) tend to take a less severe view and find instead that traditional schooling practices, which includes the way higher education is structured and practiced today, serves to reproduce asymmetrical power relations and class structures. As Dead Prez rapped:

Man that school shit is a joke
The same people who control the school system control
The prison system, and the whole social system...
the schools ain't teachin' us nothing
They ain't teachin' us nothin' but how to be slaves and
hardworkers
For white people...
Make they businesses successful while it's exploitin' us
Knowwhatimsayin? and they ain't teachin' us nothin' related to
Solvinn' our own problems (Dead Prez, n.d.)

Some students are oppressed by educational institutions and some are not. This is evident in studies that examine the role of schooling in the reproduction of the class system. For example, Seider (2008) interviewed lower income and affluent students at an elite private college and lower income students at a state university during their first, second, and final years in college to develop an understanding of how class was viewed by students and how it impacted their college experiences and future ambitions. The lower income students had lower aspirations for their futures than the affluent students, even when they attended the same elite college. Those at the state school had the lowest ambitions of all. And none of the students thought class impacted their aspirations or their potential for future success (Seider, 2008).

Studies like this show that schooling reproduces social class and definitely oppresses some groups, but part of how it reproduces class is by helping to launch those who are already privileged into successful careers, make important connections, and to

reinforce the notion that they will have earned their success through hard work and because they were gifted with superior intelligence. Therefore, privileged students attending elite colleges can hardly be considered to be oppressed by higher education. But they can be challenged to confront the institutional inequality that they are a part of and CIL can play a role in that process. CIL can be a tool used to challenge these structures by providing opportunities for students to see how deeply embedded power relationships are within scholarly enterprises, which encompass the voices they have been told are the ultimate authorities and where they should look for the truth.

It is also important for librarians who are engaging with CIL to be mindful of their own politics and the door that they may be opening when they enter conversations about analyzing power in library instruction sessions. The whole enterprise is full of politics and personal belief. When we discuss CIL ideas with students and try to empower them to understand and engage with information structures more fully, we also introduce the possibility that they may come to conclusions that we do not like. In a fascinating letter to the editor of the *Journal of the American Society for Information Science and Technology* (ASIST), Buckland (2008) disputed claims by Buschman (2007) that the purpose of libraries is to forward democracy. Buckland (2008) argued for the contextual by saying that “when library systems and resources (or any other technologies) are deployed a socio-technical system is created. The ‘socio’ component is shaped by the cultural context in which the technology is deployed, so library service would be democratic only accidentally through the happenstance of deployment within a democratic situation” (p.1). He pointed out that “effective library services are also

important for non-democratic political regimes. Lenin and his wife, N. K. Krupskaya, herself a librarian, thought so. Mussolini's Minister of Education was enthusiastic about the role of public libraries in evolving a new Fascist culture, and the Nazis had a vigorous and well-known interest in collection development" (p.1).

CIL proponents need to stay mindful of these points when talking about empowerment and when considering their project to be a liberal one because, as Daniel observed, "there is a flavor in critical pedagogy that underlies all of it – politicized very radical liberal feel – that I think would rightly turn off some people that may not agree with that political philosophy [...] I think if you really believe in what some of what critical pedagogy says, you have to recognize that you might be wrong and that there could be a radical conservative critical pedagogy model that could take hold that some of us may not like."

6.3.2.3 Avoiding the Banking Concept and Theories for Teaching CIL Content

When participants discussed how they approached CIL content in their classes, there was a clear tendency towards wanting students to understand the process of research and information flows. Some of the major things they wanted students to learn included: developing understandings about research not being linear; that research is part of the sociopolitical world; and the research process is complex and more important than the basic reductionist teaching of technical skills they may have experienced in the past implies. Most participants were aware of Freire's banking concept of education and were eager to avoid it when they could. Again, their efforts were sometimes stymied by institutional constraints, but there was a common language

that most participants shared involving wanting students to learn more than just basic mechanics; instead they wanted students to ask meaningful questions and challenge the information they found.

In order to teach these things, many participants put critical evaluation front and center in their IL sessions. They urged students to pose questions of the sources they found in order to help them understand that the production of information of all kinds is done within a sociopolitical system and that the creation and dissemination of information has to be considered within that system. Franks advised librarians to,

challenge students to ask themselves: as information is situated through the publication hierarchy, discussed initially, perhaps on the web, placed within academic journals, and then introductory works like encyclopedias, how are decisions made about what should be represented and as information is carefully filtered out for the more selective publications and sliced up for recombination and redefinition, what is deemed important enough to include and why? Who is supported by such decisions in terms of both disciplinary boundaries and the larger hierarchy of social power? (p. 46).

Most participants had goals around doing what Franks suggests. Some were able to do this sometimes, but a smaller number had found ways to make this type of content prominent in the majority of their instruction sessions. Those participants who found a way to make CIL content prominent tended to ground their instruction sessions in the theories of critical information studies, cultural studies, or critical literacy, including rhetoric. Many of the participants that drew from these theories had advanced degrees in disciplines that consider these theories foundational to the study of the discipline. They are an easy fit for CIL because they are critical theories that look at how

the social, political, and economic nature and presentation of information creates and/or reinforces cultures (Inokuchi & Nozaki, 2010; Vaidhyanathan, 2006).

These theories seem promising for librarians seeking concrete ways to incorporate CIL into their teaching because, while the literature around CIL has been growing, it was still evident from the participants and in reading articles about CIL that practitioners are struggling with the practical aspect of actually making CIL work in the classroom. Librarians are not alone in this regard as adherents to critical pedagogy have been struggling with how to make the ideals of it happen in classrooms for four decades (Darder et al., 2003). Focusing on the content first and then developing appropriate teaching methods for that content (while ensuring they are participatory and inclusive) may be the best way for those interested in teaching CIL to begin.

Drawing from critical information studies works well for teaching CIL because it is cross-disciplinary and offers concrete structures as points for analysis that are relevant to all disciplines of study. According to Vaidhyanatha (2006), critical information studies “interrogates the structures, functions, habits, norms, and practices that guide global flows of information...[and] asks questions about access, costs, and chilling effects on, within, and among audiences, citizens, emerging cultural creators, indigenous cultural groups, teachers, and students” (p.1). This includes looking at things like copyright, digital access issues, and the importance of sharing scholarship across disciplinary lines and taking down the walls that separate academic scholarship and the public.

Cultural studies is another useful approach for CIL practitioners to consider. “Contemporary cultural theories suggest that selective representation of a culture, expressed in school textbooks, in history and literature instruction, and/or on film, reflects the power relations of a given society” (Inokuchi & Nozaki, 2010, p. 237). Cultural studies has a long tradition of scholarship behind it and powerfully critiques traditional modes of scholarship, knowledge, and education (Morton, 2004).

Critical literacy theory has played a large role in the development of CIL theory and was a major influence on some of CIL’s most prominent thinkers (Elmborg, 2006; Jacobs & Jacobs, 2009). It also had a significant impact on the practice of many of the participants of this study, to include those with advanced degrees in English, creative writing, and composition, but also including some without those degrees. Critical literacy “question[s] power relations, discourses, and identities in a world not yet finished, just, or humane [and] challenges the status quo in an effort to discover alternative paths for self and social development” (Shor, 1999, para. 1–2). Composition programs draw extensively from critical literacy theory and have spent decades developing curriculum and pedagogy around it, which makes it an especially rich area for librarians to turn to when trying to find ways to incorporate CIL into the classroom.

6.3.3 The Role of the Teaching Librarian in the Institution

Most of the CIL scholars and practitioners interviewed for this study were positive about their CIL experiences. Following in the spirit of critical pedagogy, they were a highly reflexive group. They used all of the information they had, including reading and studying about pedagogy, IL, CIL, and critical theory; experiences in the

classroom; conversations with colleagues and teaching faculty; and ideas they gathered at conferences to inform their work. They were interested in trying new things when they taught and accepted that they would sometimes have failures; they were constantly learning and adjusting their practice.

Despite these efforts, academic librarians often struggle with finding their place in an institution, which many of the participants felt to some degree. This dynamic seems especially true for reference and instruction librarians who are tasked with teaching students how to use, find, and evaluate information, but are given very little guidance or institutional space in order to do that. Many participants spoke to this lack of space, calling the work they do in IL an “add-on” or “adjunct” to the work of the academic disciplines. Some believed this status and feeling unable to expand beyond traditional hierarchies in academia in order to grow as a teacher was the biggest challenge of academic librarians. It is easy to feel discouraged by working in an environment where your role feels devalued and so completely at the mercy of individual faculty members in the disciplines. Being relegated to this role means that librarians often feel that they are required to hold a place of neutrality and are meant to simply provide the information they are asked to without offering additional context or thoughts about the information or where it comes from.

As educators in their own right, librarians should not pretend to be neutral and they should also not hold to the false notion that libraries are neutral. “A library is inherently selective, as it cannot house all of the documents (or books) available in the world” (Inokuchi & Nozaki, 2010, p. 237). As selectors for these collections, librarians

make choices about what to purchase based on the curriculum and research the library supports and various recommendation sources. Obviously, larger publishers with better marketing and brand name appeal tend to hold more space on library shelves and smaller, niche publishers and alternative presses are less represented. The same holds true for databases, both in terms of which databases are purchased and what the database publishers choose for inclusion in terms of journals, books, and other sources. “Through these processes, librarians tend to select and promote certain kinds of texts, cultural artifacts, and information...[These] selective traditions function as value systems, or sorting and organizing principles, for librarians in various cultures” (Inokuchi & Nozaki, 2010, p. 237). Librarians, whether they are aware of it or not, are by the very nature of their jobs deeply immersed in packaging and presenting, and therefore valuing, certain sociopolitical and cultural norms.

In turn, librarians hold an understanding of information power structures that many faculty members do not have because it is not necessarily part of their disciplinary knowledge. Keeping this knowledge from students is not maintaining neutrality; it is helping to reinforce the status quo. In arguing for using critical literacy theory to teach ESL students, Lesityana (1999) states,

it is not as though we need to agree with any particular position, but rather, working from a privileged institutional space, we need to engage the plurality of discourses not effortlessly but struggling as responsible readers to make sense of and subsequently dispute or reinvent them. This is not an argument for a particular ideology. It is rather a depiction of what is fundamental for generating those conditions in which language provides a vehicle for opening up different spaces to allow people to speak to, and be aware of, multiple voices and audiences (p. 132).

Librarians should approach discussions about information sources in this same way. They do not need to assert their personal opinions on topics; but rather they can just acknowledge that there is bias in all sources of information and most authors should hold a stance on the topic on which they are writing. By asserting this, librarians can teach students that there are conversations about politics, economics, power, and culture happening in the content, context, and structure of scholarly and popular literature, websites, films, and so on, and part of their job as students is to understand the various points of view in those conversations.

In addition to finding ways to be more comfortable with their role and expertise, and allowing themselves to assert their knowledge, librarians should find practical ways to make their work with IL more integral to the educational experiences of students. One way participants found to try to move IL from the position of “add-on” to being more a “part of,” is by strategizing ways to embed it into specific disciplinary curriculums, including working on institutional-wide committees focused on developing IL student competencies, developing strategies for talking with faculty members and academic departments, methodically getting involved at the academic department level to push the IL agenda, and working with faculty members one-on-one slowly and patiently to build relationships.

Understanding the structure of academic disciplines is important for librarians because the academic activity at colleges and universities is typically organized around and by the disciplines. Reaching a full comprehension of this system can be challenging and takes time, especially because “disciplines are not what philosophers call natural

kinds” (Menand, 2010, p. 97). They emerged with the modern research university between 1870 and 1915, along with almost every aspect of higher education that we are familiar with today, including undergraduate electives, graduate schools to educate the professoriate, the expectation that faculty will have a doctorate and publish in scholarly publications, the principle of academic freedom, the establishment of professional organizations, and the creation of modern academic departments. By 1900, a departmental system of administration was in place for most of the leading schools and that system has held fast ever since (Cohen, 1998).

Modern academic disciplines are “self-governing and largely closed communit[ies] of practitioners who have an almost absolute power to determine the standards for entry, promotion, and dismissal in their fields” (Menand, 2010, p. 105). Some important features of academic disciplines that impact the professional lives of faculty include largely non-transferable credentials, meaning that their training and education has prepared them for academic work in their specific discipline only; a high degree of specialization is encouraged and often required; and their work is internally regulated so that no one outside the community of experts of a discipline is qualified to rate the value of the work produced within it (Menand, 2010).

A similarity between librarians and faculty that librarians may be able to use to their advantage is that professors often feel like they are better understood and appreciated by their disciplinary colleagues outside of their institution than by colleagues from other disciplines at their home institutions. So when librarians take the time to understand the disciplines they support and can talk knowledgeably and

comfortably about the discipline, it can go a long way towards helping them gain support for IL efforts from the departments they work with. Participants that spoke about being able to have knowledgeable discipline-specific conversations with faculty felt they often had more freedom in what they did with their IL sessions because the faculty trusted them and felt they knew what they were doing. Sometimes the disciplinary knowledge that participants had came from earning advanced degrees in the discipline they worked with, but other times it was simply from keeping up with and reading the literature of the discipline.

Another element of the organization of academic work that librarians should be mindful of is that “the frequency of interaction across disciplines typically is low, owing to the strong departmental structure of academia, the growing demands on faculty time, and the exigencies of keeping up in one’s own field (Lamont, 2009, p.55)”. Most interaction across disciplines happens within committees so finding ways to be involved on committees can be very helpful for individual librarians to build relationships.

In all cases, developing a strong rapport with faculty members in an academic department and then initiating conversations with them about how they could more fully integrate IL into their courses or the entire curriculum of the program was the most common approach. The hope is that through relationship building and conversations, the librarian will be allowed to have more freedom to try new things in her classes and be able to develop CIL components.

6.3.4 Higher Education Organizational Theory and IL Institutional Expansion

It should be clear at this point that academic librarians spend an enormous amount of time focusing on building relationships with faculty. While this time seems to be well spent in many ways, it points to two major issues. First, too much of the burden of making IL a priority at the institutional level falls to individual librarians, which means that it is likely being accomplished in a hit or miss fashion or, in some cases, IL is added to university-wide requirements due to accreditation standards without the input of the library or front-line librarians. Second, it often reinforces the power imbalance between librarians and faculty, in which the librarian needs the faculty to use their services for them to be considered successful at their job. Consequently, librarians often feel indebted to any professor who allows them to teach IL sessions to their classes and are overly careful to make sure they do not upset them in any way by treading too heavily in their territory, making too many suggestions for content, or making suggestions too strongly. Library administrators should lay the groundwork and strive to make IL more of a priority at the institutional level, especially if librarians are evaluated based on the number of sessions they teach.

Administrators can draw from higher education organizational theory to develop strategies for IL institutional buy-in and expansion. Two major theorists that provide a good starting place and could be especially helpful to library administrators are Birnbaum (1988) and Weick (1976). Birnbaum and Weick argued that education organizations are loosely coupled systems, which means that there are many systems (departments, programs, groups) operating within the larger college or university system that are more and less connected and influenced by one another. Weick (1976)

observed that while organizational theory often asserts that decisions are made rationally and “that an organization does what it does because of plans, intentional selection of means that get the organization to agree upon goals, and all of this is accomplished by such rationalized procedures as cost-benefit analyses, division of labor, specified areas of discretion, authority invested in the office, job descriptions, and a consistent evaluation and reward system” (p.1), this often does not hold true in practice. In fact, there are many parts of the institution that do not follow rational approaches to organization or decision-making and these parts can be better comprehended through the lens of loosely coupled systems because they can only be fully understood if they are viewed both independently and as a part of the larger system. For example, the provost’s office has certain functions and ways of being that are separate from the rest of the university, but it is also attached in varying ways to a multitude of departments and offices on campus. Interactions with those groups help to define the provost’s office and determine how it functions as much as its independent operations and functions.

Systems can be loosely or tightly coupled, depending on how much they interact with and are influenced by other groups or systems in their environment. Most colleges and universities are loosely coupled systems because they are usually heavily influenced by their environments, which includes the influence of the public, students, government, local and state politics, alumni, and so on. Tightly coupled systems have more interaction with others in their environment and loosely coupled systems have less interaction (Weick, 1976). To successfully maneuver within the system,

administrators and librarians should think in circles rather than linearly and consider how different groups and subgroups interact with one another and how those interactions change and define the work of each.

Different types of institutions have variations in their systems and follow distinctive models of organizational functioning. According to Birnbaum (1988), colleges and universities follow one of the following models: collegial, bureaucratic, political, organized anarchical, or cybernetic. Collegial institutions seek consensus in decision making, share power and have common values and commitments among faculty and administration, and leadership that emphasizes relationships and collective responsibilities between faculty and administrators. Collegial institutions tend to be small because they rely on face-to-face interactions and heavy community participation. Leaders are usually promoted from the faculty (Birnbaum, 1988) so in these types of institutions, long-term relationship building with the faculty can also result in strong bonds with the administration as faculty members move into administrative position.

Notably, the two participants who said they had no coordinated IL program worked at colleges that were collegial. They had both been very successful in relationship building and advocating for IL and CIL instruction among faculty colleagues despite the lack of a coordinated IL program for the institution as a whole. This points to the possibility that large coordinated programs may not be necessary for IL success at smaller, collegial institutions because very little decision making is handed down from top administrators anyway. So success for these institutions may need to be defined differently than it is for other types of colleges and universities. One point of caution for

librarians working at collegial institutions is that the input of staff is often “given only token attention” (Ponton, 1996, p. 2). Librarians are often professional staff at smaller colleges so their influence is almost wholly dependent on relationships. The ability of the library director or college librarian to advocate for IL is important, but every librarian who teaches library instruction sessions is also important for growing IL programs because faculty are likely to know their subject librarian personally and decide whether to incorporate IL in their classes based on what they know of the librarian’s abilities.

Bureaucratic institutions are characterized by a clear, hierarchical organizational structure with a clear chain of command and plenty of rules and regulations. Effective, efficient, and timely management is emphasized and decisions are made from the top and filtered down to various departments and groups. Leaders rely on position and charisma to make change (Birnbaum, 1988). Bureaucratic institutions require library administrators to sell IL to other administrators. In these institutions, decisions are made at the top so librarians are less likely to be able to successfully implement a strong IL program on their own. In these cases, when the participants stated that they felt supported by their library administrators when they provided adequate funding, teaching spaces, and freedom to do their work; their expectations for their leaders was not high enough because that level of support is simply not enough to develop or sustain an institution-wide IL program. Librarians need more from their administrators in bureaucratic institutions because relationship building with faculty will not develop into a comprehensive program. Faculty are not powerful enough in these institutions to make IL an institution-wide priority without substantial administrative support.

Political institutions are comprised of small systems with diverse interests, values, and goals. Each small group has its own power structure that often include special interest groups who have constantly changing interests in response to emerging issues. Decision-making is political, diffuse, and decentralized and competition for resources is used as a key governance tool. Leadership requires informally learning about the concerns and attitudes of stakeholders. Leaders use persuasion, diplomacy, and mediation as their primary tools and they view conflict and disagreement as normal. Processes may appear to be inclusive and collegial, but typically a lot of political maneuvering takes place before a formal decision process is started (Birnbaum, 1988).

Like in bureaucratic institutions, librarians in political institutions need their leaders to advocate for them. Many of the decisions in political institutions are made behind closed doors and at tables that front-line instruction librarians will never sit at. Therefore, the role of library leaders is absolutely essential in IL expansion efforts. They need to find ways to get IL embedded in larger programs, such as first year programs or general education requirements because if it is not a part of larger institutional goals or plans, the librarians will always be swimming upstream in efforts to keep it relevant in the institution.

Organized anarchical institutions are characterized by loose connections between participants with little coordination or control. Goals for these institutions are ambiguous and decisions are rarely clearly defined. They normally have an established organizational structure through which routine decisions are made that follows a prescribed process. Leadership is routinely seen as more symbolic than real and leaders

must exude competence, integrity and a dedication to many diverse groups. Perceived chaos often appears at large universities where there may appear to be little if any alignment between the goals and functions of the various departments. Very large state schools often fit the organized anarchical model because the systems are so many and varied that it is essentially impossible for top administrators to keep tight control of anything (Birnbaum, 1988).

In these institutions, librarians and library administrators should have a plan in place to integrate and advocate for IL at both the top levels and the school and department level. Librarians are likely to have more luck if they work with faculty, department chairs, and college deans to create departmental specific plans for IL. But at the same time, the top administrators for the library should publicly speak about the importance of IL and work to impart the significance of it to other top administrators of the university. Trying to embed IL within first year programs and the general requirements for the university is also important for organized anarchical organizations.

Cybernetic institutions are Birnbaum's last major organizational model. In this model, administrators do not see the university as a single organization, but as several subgroups that create the organizational whole. This is Birnbaum's "ideal" model; it integrates aspects of the four previous models and he argued that is what all colleges should aspire to. They operate similarly to the organized anarchical model and appear chaotic to outside observers. However, unlike anarchical organizations, cybernetic organizations view chaos as a positive characteristic. Leaders rely on distributed rational decision-making processes and know that other models exist in parts of the

organization: a bureaucratic model in most or all areas of administration; a collegial model for consensus building among faculty; and a political model when working with outside groups. Interactions between the various groups provide the greatest influence on the overall system. Top leaders in cybernetic institutions assign responsibility and authority to leaders of the smaller units (Birnbaum, 1988).

Library administrators and librarians should approach embedding IL in the institution in the same way for cybernetic institutions as they would for organized anarchical. The key difference is that top leaders in these institutions are less likely to make curricular decisions for the whole university. This means that top-level advocacy may be less likely to result in institution-wide responses. Rather, library administrators should focus more on the leaders of academic departments, schools, and colleges. Their work to advocate for IL may need to be more dispersed in these institutions because everything about cybernetic institutions is fairly dispersed.

6.4 Implications for Practice

The findings of this study have important implications for librarians, LIS educators, and library administrators.

6.4.1 Continue Efforts to Embed IL (including CIL) in Disciplines

Numerous publications have detailed the importance of embedding IL in the disciplines because it makes it richer, more aligned with students' needs and interests, and provides context and content for the study of IL. The findings of this study support all of those arguments and add an additional one. Most of the participants found it

easier to teach CIL within the context of an academic discipline. Even though participants that taught in freshman level, general courses such as writing or communications courses often had more freedom with what they could try in the classroom, they had more constraints in terms of mechanical and technical information that they had to introduce and less of a context to embed the CIL content in. Therefore, librarians should continue to make efforts to embed IL and CIL in the academic disciplines.

6.4.2 Develop CIL Curriculum

Participants struggled with the “how” of teaching CIL. Most developed a strong interest in the topic from personal reading or by bringing ideas they learned from coursework in disciplines outside of librarianship into their library practice. But several participants found that even though they were interested in CIL and would like to find ways to integrate it more fully into their teaching, they ran into too many obstacles to be able to make it happen, including a lack of time in the classroom and for class preparation, having to convince faculty that it was a good idea, and simply not figuring out a way to make it work successfully. Developing a CIL example curriculum could help with all of these. Because it is rooted in critical pedagogy, there is not a “right” way to do CIL, but CIL practitioners could help one another tremendously and especially help those who have just discovered the ideas of CIL by developing an example curriculum with teaching plans for general courses and disciplinary-based courses.

6.4.3 Library Administrators Expand IL Understanding on Campus

The level of expectation that the participants had for the involvement of the administrators of their libraries in the project of teaching IL was disheartening. While most felt supported, their notions of what constituted support was just the provision of basic funding for their positions, classroom space, and time to do their jobs. IL is one of the most important aspects of academic librarianship in this century (Rockman, 2004). Administrators should be more involved and invested in the process, including understanding what it is, the major theories behind it, and the importance of their role in making it a foundational requirement for all students. Librarians on the front lines should not be the only ones on campus advocating for IL. Library administrators should be having those important conversations with other campus administrators to make sure that the significance of IL is understood at the highest levels. Administrators know what writing centers and tutoring centers are; they should also know about the same types of support that are offered by the library.

6.4.4 Develop Stronger CIL Networks in LIS Profession

Academic librarianship is both a highly collaborative profession and a largely misunderstood one. Librarians have a professional ethos that includes providing good service, teaching students how to find and use information rather than just providing answers, and “advocate[ing] the ideals that are crucial to the stability of a democratic society and an informed citizenry: freedom of speech, free flow of and access to information, awareness and protection of intellectual property rights, and equitable treatment of those seeking information” (Kendrick & Leaver, 2011, p. 86).

In addition to these ethics, there is an understanding within the profession that librarians will collaborate and be collegial with one another. Participation in professional organizations is a professional expectation that LIS students learn very quickly when they begin their graduate programs. For many academic librarians, involvement in the profession is a necessary requirement for promotion and tenure (Kamm, 1997). Therefore, librarians are often highly affected by the hot topics that they encounter at conferences and in the library literature both while participating in professional activities and at their home institutions.

While IL and some subtopics within it have been considered a hot topic in the library profession for many years, the focus in those arenas tends to be on mechanistic and surface approaches and lacks the critical element that many participants of this study would prefer. Several participants recounted experiences of submitting presentation proposals to national and regional conferences on CIL that were not accepted. Often, they got the sense that they were not accepted because the program planners did not know what they were talking about.

CIL adds a much-needed extra layer to what librarians are doing with IL. It allows for richer and more meaningful conversations with students and faculty about both scholarly and popular information and sources. Librarians who teach with CIL methods and content deserve a place at the IL table so they can share these important understandings with other librarians. As some participants in this study observed, just knowing and thinking about the issues that CIL brings up helps to create a habit of mind around information production, structures, and dissemination that ultimately affects

how you talk about and teach IL even if you are limited in opportunities to teach fully realized CIL classes.

6.4.5 Rewrite the ACRL Information Literacy Competency Standards

As of this writing, the ACRL Standards are already in the process of being revised (ACRL, n.d.). As several participants argued, the time for this has definitely come. The ACRL Standards are highly important in the academic library profession. They guide what many academic librarians do every day and play a significant role in how many instruction librarians are evaluated. The reach of the standards ultimately stretches further than those outside of the library profession may realize, but they have been customized and adapted for many disciplines and for the local context of specific colleges and universities. This means that a large portion of American college students learn about information through the lens of the standards.

Hopefully the revision of the standards will be an improvement over their current iteration and there is reason for optimism based on what the task force has released so far. They seem to be taking a much more holistic and nuanced view of information and research than the previous standards. But there is still cause for concern because they will still be standards, which can be problematic because they tend to reinforce the banking concept of education and strip IL concepts of their potential for critical thought. Another problem with the ACRL Standards that Harris (2010) found was that “in some ways, the standards have taken the place of pedagogy in library instruction”(p. 279) so that librarians look to the standards for teaching

guidance, which can greatly diminish their capacity for developing quality, critical, and reflexive curriculum.

6.4.6 Integrate Theory (including CIL) in LIS Education

Eisenhower and Smith (2010) argue that pedagogy is “a concept undercultivated in the discourse of librarianship” (p. 127). But “librarians in the academy increasingly see themselves as educators” (Elmborg, 2006, p. 192), which means it is time for librarians and LIS educators to begin to take serious strides towards cultivating both pedagogy and theory in general. Theory is a necessary component of any academic discipline and rigorous critical theory should be a part of the LIS education, especially for aspiring academic librarians, who will work every day with faculty members and students who are studying various theories. If academic librarians do not have an understanding of at least some major theoretical traditions, it will interfere with their ability to work with and relate to the faculty they are meant to support. Even more importantly, it will limit their ability to critique and fully reflect on the educational process of which they are a part. Eisenhower and Smith (2010) sum this up nicely:

[O]ur library school educations, which feed us techno-managerial speak and quash questions beyond practitioner level, raise broods of liberal faux social-scientists with strident opinions about what users need and how we should serve them, but few thoughts on larger cultural trends that are dismantling our educational systems, such as they are. To be honest, I’m not sure what to do about this (p. 134).

6.4 Recommendations for Future Research

CIL is full of possibilities for future research. So little research has been done in this area that the possibilities are essentially limitless. Further research should be done

on academic librarians' relationship to CIL and other critical theories, including investigating how librarians developed their interest and how it impacts their careers. A systematic review of what theoretical traditions are taught in LIS programs, including theories and approaches to IL, would also be useful. The participants' experiences and perceptions were that IL courses are mechanistic in nature. Reviewing these programs would provide insight into whether this is true or perhaps show that LIS programs have evolved since they completed their coursework.

Class observation studies of librarians teaching CIL are the obvious next step after this type of study. While hearing about librarians' experiences and methods was informative, it would provide an important additional layer to observe how CIL practitioners perform in the classroom with students and faculty. In addition, more studies like this one asking librarians to talk about their teaching methods and content and the theory that drives it are sorely needed. A particularly promising approach would be to do a CIL-based study following the methods of Julien and Genuis (2009) who interviewed 56 instruction librarians about affective dimensions of teaching library instruction sessions and collected diary entries from 14 librarians with instruction responsibilities over three months to gather details on how they felt about their teaching. Research connecting theory to practice, or praxis-based pedagogies, in librarianship would help librarians further cultivate their teaching practices.

Further research should also be done on librarian and faculty relationships around CIL. Faculty often express sentiments that library instruction sessions are a waste of time; investigating whether those perceptions might be changed if the content

taught was richer and more critical in nature could provide CIL practitioners with better insight into what faculty want from IL sessions. If the findings were positive, it may help librarians feel more confident about approaching faculty with ideas about teaching CIL. Additionally, as librarians continue to develop strategies and frameworks for talking to faculty about integrating IL into the disciplines, it would be helpful to do research into the role CIL could play in those conversations.

More research should be done regarding the role of various institutional types in teaching CIL. The findings of this study were inconclusive on possible correlations between institutional type and support for IL and CIL because there were not enough people in the sample to make sound comparisons. Investigating support for IL and CIL programs in relation to institutional type could provide librarians with information to help them prepare for and respond to possible obstacles and opportunities.

Finally, studies taking a broad look at the library profession's receptivity to CIL would help librarians with an interest in CIL know if they are as alone as they often feel or if there are more opportunities to connect on these topics than the participants realized. A quantitative study to capture data about how many academic librarians have heard of CIL and know about or are interested in critical theory or are open to learning more about it would provide CIL practitioners with a clearer picture of where the profession actually stands on this issue.

6.5 Conclusion

As I was writing the final recommendations and conclusion for this dissertation, an email arrived in my inbox announcing the release of a new Pew Research Center report titled “The Web at 25 in the U.S.” (Fox & Rainie, 2014). Among the findings of this report: “87% of American adults now use the internet, with near-saturation usage among those living in households earning \$75,000 or more (99%), young adults ages 18-29 (97%), and those with college degrees (97%). Fully 68% of adults connect to the internet with mobile devices like smartphones or tablet computers” (p. 2). In 1983, only 10% of American adults had a home computer and only 14% of those used the Internet, meaning that only 1.4 % of adults were online. In 1995, when I was an undergraduate, that number had grown to 14% of adults with home Internet access, but 42% had never even heard of the Internet (Fox & Rainie, 2014).

Information is flowing to people in unprecedented amounts and there is no indication that the flow is going to slow down. IL advocates have argued that students need to learn how to find, access, analyze, evaluate, and use information for longer than the Internet’s ubiquity in American life, but the need for people to be information literate has grown more urgent. At the same time, IL has grown more complicated. As information continues to explode, it is harder and harder to tell where it is coming from and the structure, production, and dissemination of information has become simultaneously and paradoxically more simple and complex, making it necessary for librarians and other educators to rethink how and what we teach students about IL.

CIL offers a promising approach because it looks at the cultural, social, and economic structures that underlie all of information production and dissemination.

Understanding how information is produced and where it comes from is increasingly necessary as traditional gatekeepers and filters, such as editors, trained journalists, and academic publishing processes that helped students evaluate information have been dismantled or had their roles reduced. CIL scholars and practitioners urge students to approach all information, regardless of the type or source, with a critical eye and to be reflective of their role as information consumers and producers. CIL also provides an avenue for students to expand their vision past that of passive consumers so that they will be empowered to disrupt dominant modes of communication and challenge oppressive power structures.

This study explored the state of the field of CIL. As a new and growing sub-discipline of IL, the time was ripe for a study of this nature to take stock of what CIL means to those practicing and theorizing it and to gain an understanding of how it has been received within colleges and universities. Hopefully, this study will be followed by many more that will further investigate the various aspects and issues of CIL.

APPENDICES

Appendix A: Major IL Models and Standards

Table 7: Major IL Models and Standards

Model	Author / Publication Date	Major Elements	Stages / Competencies
ACRL Information Literacy Competency Standards for Higher Education	Association of College and Research Libraries / 1999	Five, linear standards with associated performance indicators and outcomes; focused on college students	5 standards: <ol style="list-style-type: none"> 1. Determines the nature and extent of the information needed. 2. Accesses needed information effectively and efficiently. 3. Evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system. 4. Uses information effectively to accomplish a specific purpose. 5. Understands many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally.
Kuhlthau's Information Search Process	Carol Kuhlthau / (1988)	Process shaped by 3 realms of behavior – affective, cognitive, and physical	6 stages: <ol style="list-style-type: none"> 1. Task Initiation 2. Topic Selection 3. Pre-focus Exploration 4. Focus Formulation 5. Information Collection 6. Search Closure
Marchionini's Information Problem Solving Approach	Gary Marchionini / (1995)	Non-linear; iterative	5 functions: <ol style="list-style-type: none"> 1. Definition of Problem 2. Selection of Source 3. Articulation of Problem 4. Examination of Results

			5. Extraction of Information
Big 6 Information and Technology Literacy Process Model	Berkowitz and Eisenberg / 1998	May or may not be linear; may or may not be iterative	6 stages with 2 sub stages: 1. Task Definition (a. Define information problem; b. Identify information needed) 2. Information Search Strategy (a. Determine all possible sources; b. Select best sources) 3. Location and Access (a. Locate sources; b. Find information within sources) 4. Use of Information (a. Engage; b. Extract relevant information) 5. Synthesis (a. Organize from multiple sources; b. Present information) 6. Evaluation (a. Judge product (effectiveness); b. Judge process (efficiency))
Singapore's 6+3 Model	Mokhtar, Foo, Majid, Theng, Luyt, and Chang / 2009	Largely based on Big 6; Model organized into a set of techniques and tools along the dimensions of tasks associated with information seeking	6 competencies: 1. Task Definition 2. Information Search Strategy 3. Location and Access 4. Use of Information 5. Synthesis 6. Evaluation 3 mindsets: 1. Collaborative information seeking behavior 2. Attitudes and perceptions 3. Ethics and social responsibility
Colvin-Keene Model	Keene, Colvin, and Sissons / 2010	Holistic; centered on cognitive skills; focuses on problem-solving for assignment	4 stages: 1. Information Needs Identification 2. Information Location and Evaluation Stage 3. Information Review Stage 4. Problem Solution Stage

		completion; iterative	
SCONUL 7 Pillars of Information Literacy	SCONUL Working Group on Information Literacy / 1999 / 2011	Defines core skills and competencies and attitudes and behaviors; “lenses” developed for user populations	7 pillars: <ol style="list-style-type: none"> 1. Identify 2. Scope 3. Plan 4. Gather 5. Evaluate 6. Manage 7. Present
NHS Scotland Information Literacy Process Model	NHS Education of Scotland’s Knowledge Services Group	Process is a continuous cycle that may be entered at any phase	7 phases: <ol style="list-style-type: none"> 1. Question 2. Source 3. Find 4. Evaluate 5. Combine 6. Share 7. Apply

Appendix B: Interview Protocol

Introduction

Thank you for taking the time to participate in this research study exploring the state of critical information literacy in higher education. This interview will take no more than 60 minutes. You may end the interview at any time.

Individual

1. What is your current position?
2. How much information literacy instruction are you involved with in your current position? Have you done more or less than in previous positions?
 - a. What does the library instruction program look like at your institution?
LIS Faculty: Did you have an opportunity to do IL instruction in the past?
3. How did you become interested in critical information literacy?
 - a. Were you inspired by someone?
 - b. Did you learn about it in library school?
 - c. Did you develop your ideas based on your own reading or because of other interests? Are there any books or articles that you were most influenced by?
4. What critical teaching approach or approaches do you use in your information literacy instruction?
LIS Faculty: Do you use any critical teaching approaches in the courses you teach? Do you teach about critical approaches in your courses?
 - a. What works well about using this approach or approaches?
 - b. What does not work well with this approach or approaches?
5. In your experience, how have students responded to information literacy instruction that includes critical elements?
6. How have faculty responded when you have used critical teaching approaches in your information literacy instruction?
LIS Faculty: From the faculty perspective, how do you think faculty would respond to librarians using critical approaches in the classroom?
7. Where do you get the ideas for approaches or techniques you try?
8. Do you share your techniques with other colleagues at your institution? How do they respond? Do you share ideas with colleagues at other institutions that you know are interested in CIL?

Institution

9. Are there other librarians at your library that are interested in critical information literacy and / or are using critical approaches in their instruction?

LIS Faculty: Do you know if other professors are teaching about critical approaches to librarianship?

10. Do you feel your library administration supports you teaching critical information literacy?

a. Why or why not?

b. How do they show support or lack of support?

LIS Faculty: Do you get the sense that library administrators support critical information literacy within the profession or at your institution?

11. Do you feel your college or university administration supports information literacy or critical information literacy?

a. Why or why not?

b. How do they show support or lack of support?

12. What do you believe are the obstacles to expanding critical information literacy programs at the institutional level?

13. Do you have any ideas of how librarians can expand critical information literacy programs or ideas at the institutional level?

14. Do you think having faculty status makes a difference one way or another?

Library Profession

15. Do you feel the library profession supports critical information literacy?

a. Why or why not?

b. How do they show support or lack of support?

16. What do you believe are the obstacles to expanding critical information literacy ideas within the profession?

17. Do you have any ideas of how librarians can expand critical information literacy programs or ideas within the profession?

18. Do you have any other thoughts about critical information literacy that you would like to share?

19. Is there anyone else that you think I should try to interview about this?

Conclusion

Thank you for participating in this interview. If you have any questions or concerns after we conclude this call, please contact me. I will send the transcript of the interview to

you. If there is anything you would like to change in the transcript or that you think I got wrong, please feel free to change it.

Appendix C: Pre-interview Survey

1. What is your gender?

- Male
- Female

2. What is your age?

- 18-29 years old
- 30-49 years old
- 50-64 years old
- 65 years and over

3. Would you describe yourself as:

- American Indian / Native American
- Asian
- Black / African American
- Hispanic / Latino
- White / Caucasian
- Pacific Islander
- Other

4. What is the highest level of education you have completed?

- Bachelors
- Masters
- Doctoral

5. How many years have you worked in academic libraries?

- Library school student
- Less than one year
- 1 to 4 years
- 5 to 10 years
- 11 to 15 years
- 16 to 20 years
- 21 or more years

6. What is the level of your position?

- Front line librarian/library staff member (no one reports to me)
- Supervisor/team leader (with staff reporting to me)
- Department/Branch/Unit head
- Assistant/Associate director/dean
- Director / Dean
- Other (please specify)

7. What is your organizational type?

- Two-year/technical
- Four-year/baccalaureate
- Comprehensive (undergraduate/graduate)
- University (large research/doctoral granting)
- Graduate school of library/information science
- Other

Appendix D: Protocol Question Matrices (Tables 8 and 9)

Table 8: Research Question and Protocol Question Matrix

Research Question	Protocol Questions
1. What approaches are effective in teaching critical information literacy?	<p>4. What critical teaching approach or approaches do you use in your information literacy instruction?</p> <p>5. What works well about using this approach or approaches?</p> <p>6. What does not work well with this approach or approaches?</p> <p>7. In your experience, how have students responded to information literacy instruction that includes critical elements?</p> <p>8. How have faculty responded when you have used critical teaching approaches in your information literacy instruction?</p>
2. What type and amount of institutional support is given to critical information literacy programs?	<p>8. How have faculty responded when you have used critical teaching approaches in your information literacy instruction?</p> <p>9. Do you feel your library administration supports you teaching critical information literacy?</p> <p>10. Do you feel your college or university administration supports critical information literacy?</p> <p>12. What do you believe are the obstacles to expanding critical information literacy programs at your institution?</p> <p>13. Do you have any ideas of how librarians can expand critical information literacy programs at an institutional level?</p>
3. What are the obstacles to creating and/or expanding critical information literacy programs in higher education?	<p>7. In your experience, how have students responded to information literacy instruction that includes critical elements? (student obstacles)</p> <p>8. How have faculty responded when you have used critical teaching approaches in your information literacy instruction? (faculty obstacles)</p> <p>9. Do you feel your library administration supports you teaching critical information literacy? (library administration obstacles)</p> <p>10. Do you feel your college or university administration supports critical information literacy? (college administration obstacles)</p>

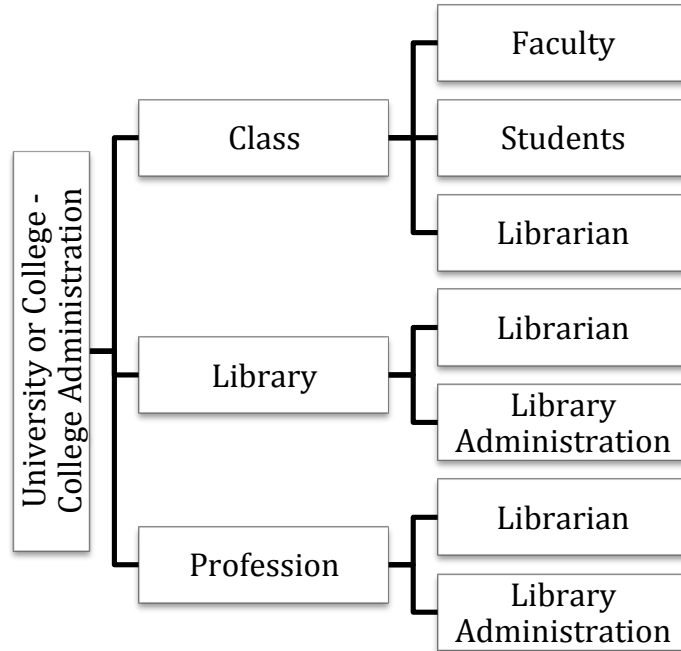
	<p>11. Do you feel the library profession supports critical information literacy? (professional obstacles)</p> <p>12. What do you believe are the obstacles to expanding critical information literacy programs at your institution? (general)</p> <p>13. Do you have any ideas of how librarians can expand critical information literacy programs at an institutional level? (general)</p> <p>16. What obstacles have you confronted when you have tried to embed information literacy in the curriculum? (general)</p>
<p>4. What methods have librarians found to be successful in efforts to embed critical information literacy into the college curriculum?</p>	<p>4. What critical teaching approach or approaches do you use in your information literacy instruction?</p> <p>5. What works well about using this approach or approaches?</p> <p>6. What does not work well with this approach or approaches?</p> <p>12. What do you believe are the obstacles to expanding critical information literacy programs at your institution?</p> <p>13. Do you have any ideas of how librarians can expand critical information literacy programs at an institutional level?</p> <p>14. What efforts have you and your library made to embed information literacy in the curriculum?</p> <p>15. Where have you found opportunities to embed information literacy in the curriculum?</p> <p>16. What obstacles have you confronted when you have tried to embed information literacy in the curriculum? (general)</p>

Table 9: Protocol Question, Purpose, Audience and Research Question

Protocol Question	Purpose	Audience / Level	Research Question
1. What is your current position?	Lead-in; context	Librarian (personal) / Library	
2. How much information literacy instruction are you involved with in your current position? Have you done more or less in previous positions?	Context	Librarian (personal); Library administration / Library	2
3. How did you become interested in critical information literacy?	Context	Librarian / Profession	
4. What critical teaching approach or approaches do you use in your information literacy instruction?	Pedagogy	Student; Faculty / Class	1,4
5. What works well about using this approach or approaches?	Pedagogy	Student; Faculty / Class	1,4
6. What does not work well with this approach or approaches?	Pedagogy	Student; Faculty / Class	1,4
7. In your experience, how have students responded to information literacy instruction that includes critical elements?	Pedagogy	Student / Class	1, 3
8. How have faculty responded when you have used critical teaching approaches in your information literacy instruction?	Pedagogy	Faculty / Class	1, 2, 3
9. Do you feel your library administration supports you teaching critical information literacy?	Institutional Support	Library administration / Library	2,3
10. Do you feel your college or university supports critical information literacy?	Institutional Support	College administration / College or University	2,3
11. Do you feel the library profession supports critical information literacy?	Professional Support	Librarian; Library administration / Profession	3
12. What do you believe are the obstacles to expanding critical information literacy programs at an institutional level?	Institutional Support	Faculty; Library Administration; College Administration / Library; College or University	2,3,4

	<p>11. Do you feel the library profession supports critical information literacy? (professional obstacles)</p> <p>12. What do you believe are the obstacles to expanding critical information literacy programs at your institution? (general)</p> <p>13. Do you have any ideas of how librarians can expand critical information literacy programs at an institutional level? (general)</p> <p>16. What obstacles have you confronted when you have tried to embed information literacy in the curriculum? (general)</p>
<p>4. What methods have librarians found to be successful in efforts to embed critical information literacy into the college curriculum?</p>	<p>4. What critical teaching approach or approaches do you use in your information literacy instruction?</p> <p>5. What works well about using this approach or approaches?</p> <p>6. What does not work well with this approach or approaches?</p> <p>12. What do you believe are the obstacles to expanding critical information literacy programs at your institution?</p> <p>13. Do you have any ideas of how librarians can expand critical information literacy programs at an institutional level?</p> <p>14. What efforts have you and your library made to embed information literacy in the curriculum?</p> <p>15. Where have you found opportunities to embed information literacy in the curriculum?</p> <p>16. What obstacles have you confronted when you have tried to embed information literacy in the curriculum? (general)</p>

Figure 3: Organizational Level and Primary Audience of Interview Questions



Appendix E: Participant Invitations

Email Invitation to Listservs

Dear [] Listserv Subscribers,

I am a doctoral candidate in the Department of Counseling and Higher Education at the University of North Texas. I am conducting a research study for my dissertation exploring the state of critical information literacy in higher education. The study will explore the institutional support, nonsupport, and barriers to critical information literacy programs in higher education and the effectiveness of experiential critical pedagogy for information literacy learning.

I am seeking people who have worked and/or studied in the field of critical information literacy to interview. If you agree to participate, you will be asked to complete a short demographic survey that will take about 5 minutes of your time and an interview that will take no more than 60 minutes of your time for a total time commitment of 65 minutes or less. The interview will be done over the phone at your convenience and session interview will be audio taped so that I can accurately reflect on what is discussed. The tapes will only be reviewed by members of the research team who will transcribe and analyze them. Participation is confidential. Study information will be kept in a secure location. The results of the study may be published or presented at professional meetings, but your identity will not be revealed.

We will be happy to answer any questions you have about the study. If you have any questions about the study, you may contact me at anniendowney@gmail.com or 503-517-5587 or my faculty adviser, Dr. Amy Fann at amy.fann@unt.edu or 940-369-8287. This research study has been reviewed and approved by the UNT Institutional Review Board (IRB). The UNT IRB can be contacted at (940) 565-3940 with any questions regarding the rights of research subjects.

Thank you for your consideration. If you would like to participate, please email or call me using the contact information below.

Kind regards,
Annie Downey

Email Invitation to Specific Individuals

Dear _____,

I am contacting you based on your work in the area of critical information literacy. I am a doctoral candidate in the Department of Counseling and Higher Education at the University of North Texas conducting a research study for my dissertation exploring the state of critical information literacy in higher education. I am seeking critical information literacy specialists to interview and I am especially interested in interviewing high profile people in the field with a strong record of publishing and / or teaching in this area.

If you agree to participate, you will be asked to complete a short demographic survey that that will take about 5 minutes of your time and an interview that will take no more than 60 minutes of your time for a total time commitment of 65 minutes or less. The interview will be done over the phone at your convenience and session interview will be audio taped so that I can accurately reflect on what is discussed. The tapes will only be reviewed by members of the research team who will transcribe and analyze them. Participation is confidential. Study information will be kept in a secure location. The results of the study may be published or presented at professional meetings, but your identity will not be revealed.

We will be happy to answer any questions you have about the study. If you have any questions about the study, you may contact me at anniendowney@gmail.com or 503-517-5587 or my faculty adviser, Dr. Amy Fann at amy.fann@unt.edu or 940-369-8287. This research study has been reviewed and approved by the UNT Institutional Review Board (IRB). The UNT IRB can be contacted at (940) 565-3940 with any questions regarding the rights of research subjects.

Thank you for your consideration. If you would like to participate, please email or call me using the contact information below.

Kind regards,
Annie Downey

Appendix F: Informed Consent Notice

University of North Texas Institutional Review Board

Informed Consent Notice

Before agreeing to participate in this research study, it is important that you read and understand the following explanation of the purpose, benefits and risks of the study and how it will be conducted.

Purpose of the Study: You are being asked to participate in a research study exploring the state of critical information literacy in higher education. The study will explore the institutional support, nonsupport, and barriers to critical information literacy programs in higher education and the effectiveness of experiential critical pedagogy for information literacy learning.

Study Procedures: You will be asked to complete a short demographic survey that that will take about 5 minutes of your time and an interview that will take no more than 60 minutes of your time for a total time commitment of 65 minutes or less.

Foreseeable Risks: No foreseeable risks are involved in this study.

Benefits to the Subjects or Others: This study is not expected to be of any direct benefit to you, but we hope to learn more about the state of the field of critical information literacy. Because it is a relatively new field of study in which little research has been done, an in-depth understanding of the strengths, issues, barriers, and limitations of critical information literacy programs is needed. The results of this study are expected to provide librarians and educators with better information to use in the design and implementation of information literacy programs.

Compensation for Participants: None.

Procedures for Maintaining Confidentiality of Research Records: The confidentiality of your individual information will be maintained in any publications or presentations regarding this study.

Questions about the Study: If you have any questions about the study, you may contact Annie Downey (Student Investigator) at anniendowney@gmail.com or 503-517-5587 or Dr. Amy Fann (Supervising Investigator) at amy.fann@unt.edu or 940-369-8287.

Review for the Protection of Participants: This research study has been reviewed and approved by the UNT Institutional Review Board (IRB). The UNT IRB can be contacted at (940) 565-3940 with any questions regarding the rights of research subjects.

Research Participants' Rights:

By clicking "I Accept" below you indicate that you have read all of the above and that you confirm all of the following:

- Annie Downey has explained the study to you and answered all of your questions. You understand told the possible benefits and the potential risks and/or discomforts of the study.
- You understand that you do not have to take part in this study, and your refusal to participate or your decision to withdraw will involve no penalty or loss of rights or benefits. The study personnel may choose to stop your participation at any time.
- You understand why the study is being conducted and how it will be performed.
- You understand your rights as a research participant and you voluntarily consent to participate in this study.

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