Librarians in Community Colleges: Strategies For Promoting information Literacy

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ABSTRACT

LIBRARIANS IN COMMUNITY COLLEGES: STRATEGIES FOR PROMOTING INFORMATION LITERACY

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Northern Illinois University, 2020
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This qualitative case study analyzed the pedagogical approaches of librarians at inner-city colleges as they facilitate information literacy and the embedded librarian-faculty collaboration. Librarians traditionally provided library instruction in a brick-and-mortar classroom, but classrooms have changed over the past few decades to include the latest technology. This change makes librarians leaders in implementing the latest technology in classrooms. Embedding entails taking the librarian from a traditional classroom environment and supplementing class appointments with the librarian in the library with visits to the classroom by the librarian, which may involve more than one class session, the librarian even co-teaching the class in some cases. The resources provide the reader with supporting evidence on how librarians contribute to information literacy, how embedded librarian collaborations impact and aid students, and how librarians apply pedagogy to support academic success.
LIBRARIANS IN COMMUNITY COLLEGES: STRATEGIES FOR PROMOTING INFORMATION LITERACY

BY

SHARON T. SILVERMAN
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A DISSERTATION SUBMITTED TO THE GRADUATE SCHOOL IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE DOCTOR OF EDUCATION

DEPARTMENT OF COUNSELING AND HIGHER EDUCATION

Doctoral Director:
Kathryn Jaekel
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CHAPTER 1
INTRODUCTION TO THE STUDY

Introduction

In a multimodal world, it has become increasingly important that individuals, and in particular college students, learn to engage in information literacy. Information literacy, a term first coined in 1974, is a set of abilities requiring individuals to recognize when information is needed as well as the ability to locate, evaluate, and effectively use the needed information (Tunney, Wilson, & Calabro, 2018). In addition to these skills, information literacy involves the ability to clearly communicate in various formats or sources like the Internet, podcasts, blogs, and social media (Tunney et al., 2018). Increasingly, community colleges are tasked with providing students opportunities to engage in and hone their information literacy skills. Many students from low-income or impoverished communities enter community colleges with an academic deficit, as their feeder school or high school surrounding the community college may not receive financial resources comparable to communities in more lucrative (higher income) communities.

Community colleges are typically regionally accredited, two-year institutions offering associate degrees, although about a dozen states now allow public community colleges to offer bachelor’s degrees. Formally referred to as “junior colleges,” the primary intent is often to develop a curriculum suited for the changing social, civic, vocational and religious needs of the community (Cohen, Brower, & Kisker, 2014). Central to the community college mission is to
serve the local and immediate surrounding community and identify the needs of those local communities. Further, these institutions work to cultivate partnerships with other institutions in the surrounding institutions’ communities. Despite increasing enrollment in these institutions, community colleges continue to face challenges. Common challenges include low retention and transfer rates, conflict and divisiveness due to multiple missions, and a lack of deep political and community support needed for adequate funding (Warren, 2006).

Libraries at community college institutions serve several vital functions. These libraries are unique because they can identify specific feeder high schools and work to bridge the transition between high school and college information literacy instruction (Warren, 2006). To better serve students, libraries serve five curricular purposes: academic transfer preparation, vocational-technical education, developmental education, continuing education, and community service (Warren, 2006). Community college librarians must create programs with resources to support the institution’s mission and curriculum. Librarians at these institutions must provide services and resources to address the needs of both students and guests who utilize these community or two-year colleges. Community college librarians, like librarians at four-year colleges, work in various roles or specialties when providing student services. For the purpose of this research, three types of specialty librarians are identified: instructional, academic, and embedded librarians.

User services or instructional librarians help patrons or students conduct research using both electronic and print resources and teach them how to use library resources to find information on their own. This may include becoming familiar with catalogs of print materials,
accessing and searching digital libraries, or applying Internet search techniques. These specific librarians work with a particular audience, such as children or young adults (Bureau of Labor Statistics, 2018). Academic librarians assist students, faculty, and staff in postsecondary institutions. Their roles include aiding students with researching topics related to coursework and teaching students how to access information. In addition, they assist faculty and staff in locating resources related to their research projects or studies. Some institutions may have multiple libraries, where librarians may specialize in a particular subject (Bureau of Labor Statistics, 2018).

The term “embedded librarian” was adopted to describe librarians who are physically located within a discipline or faculty rather than physically in the library (Horn, Maddox, Hagel, Currie, & Owen, 2013). An embedded librarian is focused on the needs of one or more specific groups, building relationships with these groups, developing a deep understanding of their work, and providing information services that are highly customized and targeted to students’ needs. As Nolan (2013) describes it, “Embedding requires more direct and purposeful interaction than acting in parallel with another person or group” (pp. 13-14). The goal is to have librarians move outside the library and tailor services to specific groups and needs and collaborate with non-librarians (Carncross, 2013). This research will focus more on the methods, practices, barriers, and resources as they apply to the embedded librarian.

Librarians who work in community colleges must be prepared to do it all. Like their counterparts at four-year institutions, many have faculty status and follow the tenure-track process (Silverman & Williams, 2014). This means they are expected to participate in service
activities, research and publish scholarship, and teach information literacy sessions and/or credit courses. In addition to their job duties as librarians in reference, technical services, electronic services, emerging technologies, or other areas of the library, many community college librarians serve in many of these roles simultaneously, often lacking the luxury of specialization that their four-year peers enjoy. These multiple roles are more difficult, considering they are completed with fewer librarians than those at four-year institutions (Silverman & Williams, 2014).

**Librarian Responsibility**

Instruction librarians face many challenges in developing and delivering effective information literacy instruction for college students. One of the biggest challenges is motivating students so they are receptive to learning new skills. For instruction librarians, ensuring students meet the Association of College and Research Libraries (ACRL) Information Literacy Competency Standards for Higher Education, which focus on students’ needs in higher education as well as a range of outcomes for assessing progress regarding information literacy, is not an easily achieved feat; many students enter college without these skills and do not gain them during their college experience. Faster technology, access to online information, and exponential growth of knowledge trigger the need to explore new pedagogical approaches for helping students navigate and select sources of reliable information. Information literacy is becoming one of the most needed in the contemporary environment (Latham & Gross, 2013). The role of librarians continues to evolve as library users rely more heavily on online and electronic resources. Therefore, librarians must teach users how to evaluate the resources they find online along with several other important information literacy skills, such as copyright and plagiarism.
Teaching research competencies and information literacy is an integral part of the academic librarian’s role. There has long been debate among librarians over the most effective methods of instruction for college students (Yearwood, Foasberg, & Rosenberg, 2015). Research has shown how academic librarians teach in many different contexts; For example, a national survey of Canadian librarians found that librarians were involved in numerous kinds of instructional activities, including multiple sessions in the same class, credit courses, and one-on-one instruction (Yearwood et al., 2015). For librarians teaching instructional literacy, the goal is to provide students with skills to achieve success in courses with research requirements.

Statement of the Problem

The librarian’s role is essential in assisting students with research skills through information literacy or (IL) Sessions. There is a growing emphasis on teaching and learning as a component of the mission of 21st-century libraries. Concurrently, there is a growth in collaborative endeavors involving librarians and teaching faculty in efforts to reach larger numbers of students. Instead of relying on reference encounters and formal library instruction, librarians are promoting collaboration with faculty and campus departments to integrate information literacy into the curriculum (Lindstrom & Shonrock, 2006).

Collaboration is described as a working relationship developed over a relatively long period of time. As the relationship evolves, participants define roles, negotiate shared goals, and work on planning. Collaborations depend on positive human interactions that influence a willingness to work together and a complex process requiring participants to change perceptions, attitudes, and expectations (Harada & Yoshina, 2004). According to Bury (2011), “Despite this
widely-held perception of the importance of faculty-librarian collaboration teaching IL competencies, an overwhelming amount of published material about IL is written by librarians for librarians and contained predominantly in library literature, not higher education journals” (p. 45). Thus, there is often a disconnect between literature in library sciences and higher education. This often creates difficulties in creating and coordinating IL opportunities for learners.

During monthly meetings of the librarian at Inner-City Colleges (a pseudonym), one topic of concern often expressed is lack of support from faculty colleagues regarding utilizing information literacy/library orientation services and support from administration in the form of advocating and budget. This is an impediment that stagnates or eliminates efforts to advertise and execute library instruction sessions through information literacy education. Librarians also share concerns regarding scant support from administration officials. More specifically, they cite not replacing positions vacated by retiring librarians and library clerks, or resignations related to both positions, as a primary issue. Funding is dispersed unequally throughout the colleges, often with the excuse that these decisions are based on enrollment from the highest to the lowest registered. To this end, the colleges most affected are located within communities with high poverty rates or concentrated in areas outside of middle-class communities.

Although Information Literacy–Library Orientation sessions are available by request to all instructors at Inner-City Colleges (INCC), librarians voiced their frustrations with faculty colleagues attempting to provide library instruction during course lectures. Collectively, the librarian group agreed that by connecting with students early, information literacy skills would aid in developing research skills, enrich students’ learning experience, and improve confidence
in their ability to access and evaluate resources. Unfortunately, campuses experience limited collaborative relationships with both part-time and full-time faculty instructors. These partnerships are crucial to connecting with students early toward the goal of developing research skills.

To summarize the concerns expressed by INCC librarians:

1. An increase has been observed in the need to provide information literacy services/training.
2. Instead of using traditional methods of teaching information literacy, other methods can be employed such as embedded librarians.
3. A lack of collaboration between INCC faculty and librarians to meet the perceived need noted in #1 must be addressed.
4. Additional impediments include, but are not limited to, lack of funding from college and district administrators, resulting in lean or limited staffing an inability to provide resources to students.

**Purpose Statement**

Given these challenges, the purpose of this qualitative multisite case study (Merriam, 1998) was to examine how embedded librarians within college-level courses, especially those requiring research, promote information literacy in the community college classroom. The research utilized semi-structured interviews and review of documents from several INCC librarians. This project was guided by the following research questions:
1. What benefits do embedded librarians and faculty identify regarding the role of the embedded librarian?

2. What barriers do embedded librarians identify when teaching about information literacy in the classroom?

3. What resources do embedded librarians identify as necessary for effective instruction related to information literacy?

Overall, the aim of this project was to gain insight from embedded librarians regarding their pedagogical strategies, as well as strategies for collaborating with faculty to promote and foster information literacy for community college students, faculty, and staff.

Findings from this study suggest that while both embedded librarians and faculty who work alongside these individuals cite the critical importance of the librarian role in promoting information literacy, librarians cite that institutional barriers prevent them from executing their job responsibilities. Moreover, librarians noted inconsistent faculty collaborations as a barrier. Recommendations from this study include that INCC librarians 1) collaborate to develop best practices for managing embedded librarian programs; 2) request increased communication, which will ensure librarian contribution in any policy changes impacting the libraries; and 3) each INCC college develop capital improvement and maintenance strategic plans for the libraries and allocate resources to support this plan.

**Significance of the Study**

Higher education is rapidly changing. Students have a greater role and responsibility in creating new knowledge, and teaching faculty have a greater responsibility in designing curricula
and assignments. Librarians have a greater responsibility to identify those core ideas within their own knowledge domains that can extend learning for students, create a new cohesive curriculum for information literacy, and in collaborate more extensively with faculty (ACRL, 2015).

Without advanced knowledge and skills, students and professionals alike are at a significant disadvantage. Problems that face individuals lacking information skills may include asking the wrong questions and subsequently getting the wrong answers, using limited or inappropriate sources of information, using inaccurate or misleading information, accessing outdated information, finding incomplete information, using biased or one-sided resources, being inefficient in research and wasting time, and being disorganized and communicating the information ineffectively (Tunney et al., 2018). Importantly, according to the American Library Association (ALA, 2000):

Developing lifelong learners is central to the mission of higher education institutions. By ensuring that individuals have the intellectual abilities of reasoning and critical thinking, and by helping them construct a framework for learning how to learn, colleges and universities provide the foundation for continued growth throughout their careers, as well as in their roles as informed citizens and members of communities. (p. 4)

Librarians contribute to an institution’s mission through information literacy sessions and librarian-faculty collaborations. Through their instruction and facilitation of student-learning, they provide important tools that aid students’ development of lifelong learning. As such, it is the aim of this project to provide information to librarians, faculty, and administrators about strategies that will support students’ lifelong learning and information literacy skills.
Librarians are constantly challenged to present information literacy in dynamic ways. Students are introduced to new databases, taught the importance of keyword searching, and encouraged to use technology, all of which are valuable learning tools. Even so, librarians often have difficulty convincing students that what they are being shown is not only valuable but applicable to their education and their careers (Reale, 2012). Given the multifaceted and complex functions of librarians in higher education and their role in educating students about information literacy, this review of literature begins by operationalizing information literacy and providing the information literacy standards set forth by the Association of College and Research Libraries (ACRL). Next, the literature review discusses benefits and barriers related to teaching for and about information literacy, as well as common models and pedagogical approaches used to educate students. Finally, this review of literature provides a brief overview of best practices for teaching information literacy to students.

**Defining Information Literacy**

The concept of information literacy was used frequently in the United States from the late 1980s through the 1990s and is used regularly today in the literature. Behrens (1994) explains that “Paul Zurkowski described the information service environment within which people who were searching for information operated in the United States” (p. 309). First to introduce this term, Zurkowski defined information literacy as “resources ... applied in a work situation; techniques and skills needed for using information tools and primary sources ... and used in problem solving” (Behrens, 1994, p. 310). According to Mackey and Jacobson (2011), “Librarian professional and educational organizations, like the American Library Association
(ALA) and the Association of College and Research Libraries (ACRL), have developed definitions of information literacy and outlined characteristics of information-literate individuals” (p. 63). These definitions serve to outline how librarians understand and educate about information literacy.

Information literacy (IL) is one of the defining concepts of academic librarianship. It influences core functions including references, collection development and especially library instruction (Stadler & McDermott, 2018). The ACRL Framework defines IL as the set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in creating new knowledge and participating ethically in communities of learning (Stadler & McDermott, 2018). The great benefit of ACRL’s Framework is its six core concepts, which allow librarians flexibility when teaching information literacy: (a) authority as constructed and contextual, (b) information creation as a process, (c) information has value, (d) research as inquiry, (e) scholarship as conversation, and (f) searching as strategic exploration.

The teaching of information literacy is critical for students at the community college level. Small, Zakaria, and El-Figuigui (2004) observe that teaching information literacy skills includes research and critical thinking skills and has been described as a primary role of the librarian in community colleges:

Students must learn to locate, evaluate, and use information in all forms and, typically in education contexts, these skills are taught and/or reinforced by librarians…Student-centered teaching methods such as problem-based learning and inquiry learning are most effective for teaching IL skills in a way that is integrated with curriculum content, structure, and sequence. (Small et al., 2004, pp. 97-98)
Information literacy is important not only for success in formal education but also as a life skill, as it supports the independent, self-directed learning that people engage in throughout their lives and careers (Bond, 2016).

According to Twork (2013), “[S]tudents who are involved in active learning must engage in such higher-order thinking tasks as analysis, synthesis, and evaluation. Examples of these higher-order thinking skills include cooperative learning, experiential learning, and problem-based learning” (p. 70). Active learning techniques have long been embraced as a means to engage students with developing information literacy skills; these techniques can include almost anything students do beyond passive listening. Examples include brainstorming, hands-on technology, cooperative learning, and inquiry-based learning. Inquiry-based learning is a process driven by student questions and facilitated through instructor guidance and associated with the development of skills in communication, collaboration, and lifelong learning (Bond, 2016).

Importantly, a promising practice of information literacy is the embedded nature of it in the classroom. Specifically, literature points to the need for classroom faculty to collaborate with librarians to ensure that research, information literacy, and the skills to engage in this literacy be actively and consistently integrated within the classroom. According to Dubicki (2013):

Although faculty believe that information literacy skills are important, many do not utilize library instruction sessions to improve those skills. Faculty require students to conduct research for their courses, are aware that their students are not as information literate as they could be and understand that library instruction improves research skills, and yet faculty do not consistently integrate instruction into their courses. (p. 99)

As such, it is key that students receive consistent engagement from both faculty and librarians regarding information literacy.
The Information Literacy Standards

The Association of College and Research Libraries (2005), a division of the American Library Association, is the higher education association for academic libraries and library workers. The ACRL develops programs, products, and services to help those working in academic and research libraries learn, innovate, and lead within the academic community and is the source this community looks to for standards, guidelines, and frameworks on academic libraries (ALA, 2000).

The Information Literacy Competency Standards for Higher Education provide a framework for assessing the information-literate individual. These competencies are useful to students because they provide a framework for gaining control over how they interact with information in their environment and sensitize them to develop a metacognitive approach to learning, making them conscious of the explicit actions required for gathering, analyzing, and using information (Use of the ACRL Standards, para. 1 & 2).

Some disciplines may place greater emphasis on mastering competencies at certain points in the process; therefore, certain competencies would receive greater weight than others in any rubric for measurement (Use of the ACRL Standards, para. 3). To facilitate acceptance of this concept, faculty and staff development is crucial and an institution should first review its mission and educational goals to determine how information literacy would improve learning and enhance the institution’s effectiveness (ALA, 2000). The following summary of the American Library Association’s five competencies outline the process librarians and faculty can utilize as a guide to classify students as being information literate. According to the ALA, an
information-literate individual is able to determine the extent of information needed; access the
needed information effectively and efficiently; evaluate information and its sources critically;
Incorporate selected information into one’s knowledge base; use information effectively to
accomplish a specific purpose; understand the economic, legal, and social issues surrounding the
use of information, and access and use information ethically and legally (ALA Information
Literacy Defined, para. 2).

Initiatives for getting librarians out of libraries and creating new modes of librarianship
are taking various forms. Some academic institutions designate personal librarians who help
students with information problems just as academic advisors provide advice on courses and
programs. Some authors advocate that librarians become “‘consultants’: on-call experts who can
apply their expertise on demand to meet the information needs of all clients” (Shumaker, 2012,
p. 4). Embedded librarianship “emphasizes”:

the importance of forming a strong working relationship between the librarian and a
group or team of people who request the librarian’s expertise. The embedded librarian
needs to be fully “read into” the nature of the work being performed. Whether it’s the
learning outcomes of an academic course or the commercial objectives of a market
research study, embedded librarians need a full understanding of the nature of the task
and the goals of the effort. (Shumaker, 2012, pp. 4-5)

As the relationship develops, the librarian’s knowledge and understanding of the group’s work
and objectives grow, which in turn leads to greater alertness to information and the knowledge
needs of the group (Shumaker, 2012).
Benefits of Information Literacy

Research has well documented the importance and benefits of IL. According to Moniz (2014):

how the United States deals with [the] Information Age will have an enormous impact on the country’s democratic way of life and the nation’s ability to internationally compete. To reap such benefits, individuals and the nation must be information literate; a person must be able to recognize when information is needed and have the ability to locate, evaluate, and effectively use the information. (p. 4)

The American Library Association’s Information Literacy Competency Standards for Higher Education stated:

Because of the complexity [of] our multimodal environment, individuals are faced with diverse information choices in their academic studies, workplace, and personal lives. Information is available through libraries, community resources, special interest organizations, media, and the Internet. Increasingly, information comes to individuals in unfiltered formats, raising questions about its authenticity, validity, and reliability. Information literacy forms the basis for lifelong learning and [is] common to all disciplines, learning environments, [and] levels of education, [enabling] learners to master content [of] their investigations, become more self-directed, and assume greater control over their own learning. (Information Literacy Defined, para. 1)

Information literacy is a pertinent part of research, and resource aids which assist librarians with processes and guides to follow are obtained from library-specific organizations, mainly the American Library Association (ALA) and several subsidiaries under it. ALA is the “go to” expert organization librarians utilize for professional development.

Information literacy endorsement from accrediting agencies has been an important tool in developing and expanding information literacy instruction programs. These outside forces encouraged acceptance internally and created opportunities in new ways to incorporate information literacy. Significant changes have brought growth in community college
populations. These demographic changes have created the need to shift instructional methods and objectives to best serve learners. Everyone who is part of the institution’s community is a target audience for information literacy instruction. Using more creative ways to engage students, colleges often offer learning communities. The process begins with co-registration or block scheduling, which enables students to take courses together and, in some cases, aids them with connections of linked courses (tying two courses together). This type of learning may also mean sharing the entire first-semester curriculum so that students in these learning communities study the same material throughout the semester (Tinto & Engstrom, 2002). Learning communities provide librarians and instructors with opportunities to share teaching strategies and curriculum (Warren, 2006).

Professors often expect librarians to cover a lot of material in an unreasonably short amount of time but can transform their teaching by choosing one subject to revolutionize their approach. According to Reale (2012):

Suggested best practices to aid with the transformation involve: recognizing professors may have difficulty allowing a [power shift] in the classroom if they, themselves, have not [experienced] this process. Schedule a visit beforehand to [get to] know the professor and explain your teaching model and emphasize you both are partners in the session. Surprise students by doing something they won’t expect and allow them to take the lead with idea generation and in-class discussion. Reflect on the process and jot down while the session is happening, making a small note to record breakthrough moments. Take the lead in advocating for yourself, students, and the librarian. The librarian can properly communicate the importance of their role to students and instructors, if librarians are not right in front of them, they may not think about the library at all. (Reale, 2012, pp. 86-87)

According to the American Library Association (2000), an information-literate individual can determine the extent of information needed; access the needed information effectively and efficiently; evaluate information and its sources critically, incorporate selected information into
one’s knowledge base; use information effectively to accomplish a specific purpose and understand the economic, legal, and social issues surrounding the use of information; and access and use information ethically and legally (2000). Information literacy is essential in the creation of lifelong learners. As academic librarians struggle continually to ensure that students successfully navigate the plethora of information available and are able to think critically about this information, it is logical to consider information literacy skills instruction as a method of helping meet this goal (Magusin, 2005).

Our nation’s educators and institutions of learning must be aware of—and adjust to—these new realities. In addition to the basic skills of reading, writing, and arithmetic, it is equally important that our students are given the tools required to take advantage of the information available to them. The ability to seek, find, and decipher information can be applied to countless life decisions, whether financial, medical, educational, or technical (The White House, 2009). Producing information-literate persons will require schools and colleges to appreciate and integrate the information literacy concept into their learning programs. Information-literate people are ones who have learned how to learn. They are life-learners because they can always find information needed for any task or decision at hand (Moniz, 2014). Students must be able to access information beyond textbooks. and their instructors and professionals must keep current to expand their knowledge to advance in their careers (Tunney et al., 2018). Another description of information literacy involves self-efficacy as an important factor that influences information literacy and library skills; it is defined as an individual’s confidence in their ability to perform
specific tasks (Edwards, 2011). Due to the amount of changing information, students and professionals must be able to locate reliable and relevant information to use effectively.

**Barriers to Information Literacy**

Librarians face many barriers and challenges in teaching critical information literacy (IL). One challenge is time: it can be hard to delve deeply into an issue in class periods that are often only fifty minutes long. Another challenge is the method of instruction. The “one-shot” method means librarians often only have a one-time meeting and must deliver all the information at once, not allowing sustained engagement with learners. The most sophisticated pedagogy is limited in this format and it is not always possible to see the long-term impact of your work if you do not personally witness conscientização [critical consciousness] in a student (McDonough, 2015). A third challenge is student expectations. This approach to instruction is wildly different from what students encounter in other classes, and often, there is little chance to build rapport and reframe student expectations while expecting them to be experts by the end of the session, which is often not the case. Faculty expectations is another challenge, as course instructors and faculty have their own set of expectations regarding library instruction; if library practice is to flourish, changing expectations and collaboration with faculty are required (Dubicki, 2013).

Teaching the basics is a challenge which consists of assisting students in meeting specific needs of their academic work and course assignments while also more broadly teaching information literacy. The challenge of institutional roadblocks means that those in powerful positions may be uninterested in or opposed to library services (Tewell, 2018). In summary,
librarian and faculty communication and collaboration are imperative methods that will ensure stronger relationships to assist students with academic success in their courses.

Based on findings in the Project Information Literacy 2018 Report, students must engage in fulfilling both academic and everyday tasks. Big picture: students must find out the background for defining and selecting a topic; Language: figure out what words and terms associated with a topic mean; Situational: gauge how far to go with their research; and Information gathering: find, access, and secure relevant research resources (Artman, Pawlowski, & Monge, 2010). Success with achieving these tasks is contingent upon library information literacy programs. Each academic and everyday task is attainable through collaborative efforts of librarians, faculty, and students.

Models of Academic Librarianship

There are two primary models of academic librarianship, the “one-shot” model and the embedded librarian model. The one-shot model or class is when

a librarian is asked to teach one session of an instructor’s class. In these sessions, librarians introduce students to library resources and/or help with a specific research project the professor has assigned. In some cases, librarians also teach semester-long information literacy courses, often without formal training. (Blackburn & Hays, 2014, p. 23)

Embedded librarianship, or the embedded model,

is a distinctive innovation that moves the librarians out of libraries and creates a new model of library and information work. It emphasizes the importance of forming a strong working relationship between the librarian and a group or team of people who need the librarian’s information expertise. As the relationship develops, the librarian’s knowledge and understanding of the group’s work and objectives grow. (Shumaker, 2012, p. 4)
Both models of librarianship allow librarians the opportunity to exhibit essential resources students need for research. One-shot models often present librarians with limited time, forcing a “quick” overview of resources and services available for use, whereas embedded models allow librarians to foster and build relationships with both students and the instructor of the course.

**One-Time/One-Shot Model**

One-time visits (also known as “one-shots”) by the librarian present unique classroom management requirements. For these sessions or classes, the librarian may have as little as 15 minutes or as much as 90 minutes to present material, engage students, and assess learning, often without ever setting foot in the classroom before or after this singular lecture. Librarians may have or received a defined checklist of items to be covered from the library or be invited to give “the library speech” as an open-ended lecture with no further defined goals than “introducing students to the library by the instructor of the course” (Blackburn & Hays, 2014).

Librarians do more one-time instruction than any other type of information literacy instruction. Librarians see these short sessions as familiarization exercises which come from hands-on experience rather than talking-head instruction. One-time instruction sessions have been studied for their impact upon student work, with various outcomes. Generally, the increased integration of content into the curriculum leads to more positive student outcomes. The integration of information literacy into the curriculum presents the most opportunity for successful knowledge transfer of information literacy (Epps & Nelson, 2013). Constraints within a one-shot session present difficulty for librarians seeking to delve deeply into information structures as well as work more intensively with students (Tewell, 2018).
One-time instruction sessions provide just enough basic skills training for the students to find sources required for their assignments but are primarily used for introducing students to research (Artman et al., 2010, p. 94). “Time limitations also fail to provide an adequate means of presenting the information in different contexts or allow for the multiple presentations of contexts that allow for long-term memory retrieval” (Artman et al., 2010, p. 98). One option to aid in resolving these concerns is for librarians to create alliances with faculty to improve students’ research options and behaviors. Although difficult to assess student learning, the one-time model is often utilized as an introduction to the library and provides students with services available to aid with their research needs.

**Embedded Model**

Almeida and Pollack (2017) state:

Barbara Dewey describes [an] embedded librarian [as] a “pervasive campus librarian” who is by virtue of their role as an academic generalist and through [their] investment in all sectors of the academic user community, in a unique position to become involved in core activities and initiatives at a university. (p. 127)

Du and Evans (2011) add:

Shumaker and Talley referred to the embedded librarianship model where information professionals need to enhance their ability to understand users’ research issues and needs. Haglund and Olsson discussed the role of a university library in contributing to the competitiveness of its university’s research and suggested that librarians need to leave the library building to work in the research environment and be engaged by the researchers. (p. 106)

Librarians who have worked for years with students in specific courses or programs are often aware of common problems that students encounter completing assignments and research. Usually, librarians must wait for students to contact the reference desk before they can provide
assistance, which is difficult because many students do not feel comfortable asking questions of a librarian. Having a librarian embedded in the classroom allows librarians to provide course-specific reference assistance and instruction at the point of need, or even before the need, and tie reference services to the curriculum (Farkas, 2008). Drewes and Hoffman (2010) note that “embedding suggests that the group seeking to integrate is experiencing and observing, as near as possible, the daily life of the primary group” (p. 76). Embedded librarian programs often place the librarian involved in “the spaces of their users and colleagues, either physically or through technology...to become a part of their users’ culture. A librarian’s physical and metaphorical location is often what defines them as embedded” (Drewes & Hoffman, 2010, p. 76). Therefore, whether in the library, classroom, or online, the librarian has the opportunity to collaborate with the instructor for the purpose of being inserted or “embedded” in their course.

In higher education environments, librarians embed in different modes depending on the needs of user groups. Some librarians embed in traditional classroom environments, supplementing class trips to the library with librarian visits to the classroom. These librarian engagements can be over two or more class sessions, with the librarian possibly even co-teaching the class. This model provides in-depth knowledge of student research projects during the research and revision process. It is a popular choice for first-year experience and first-year writing courses, in which students might not gain sufficient expertise in just one visit to the library (Kvenild, 2012, para. 1).

According to Burke and Tumbleson (2016):

Barbara Dewey recommended that librarians become embedded in various forms and facets of university life. Being embedded might entail serving a university or academic
department committee, located in faculty office areas or academic program buildings, or offering library services to university functions. (p. 5)

“Close physical proximity is not required for embedded services to exist but gives the librarian an advantage in better understanding their students’ needs. This proximity helps students consider their librarian as an insider in their community and creates expectations for the librarian’s assistance to be available for projects, research, and assignments” (Drewes & Hoffman, 2010, p. 76). To further discuss this term, the next section discusses the history of the embedded librarian model.

Embedded journalists were first introduced during the Iraq War in the 1990s, and by the early 21st century the term found usage in the library and information science field. In 2005, the distance education librarian at Southern Connecticut State University’s Buley Library suggested the following:

The Iraq war brought us the concept of “embedded journalists,” now we have the concept of “embedded librarians.” An embedded journalist is supposed to have better access to a story; an embedded librarian provides better access for students to him/herself and the library’s resources. (Kesselman & Watstein, 2009, para. 1)

Like the one-shot model, the embedded model introduces students to the library and its services but can also provide more detailed benefits, as often this process becomes more advanced regarding research.

An embedded librarianship permits a more concentrated approach for librarians to engage themselves in team/group or department work and evolves highly focused, targeted, and specialized information research results due to cogent and firm relationships. Embedded
It is important for librarian managers to have a successful beginning in an embedded librarian program. Successful practices for sustaining the embedded librarian role entail four themes: marketing and promotion; delivery of sophisticated, value-added services; ongoing service evaluation and communication of the evaluation results; and engagement and support of library and information user-group management. (p. 165)

The point is this program, like any other, should be periodically (yearly, bi-yearly) evaluated and revised. Drewes and Hoffman (2010) conclude that “the embedded librarian, who is truly integrated into the academic, administrative, athletic, cultural, research, and learning arenas of the university, provides quality and depth to the total campus experience” (p. 80). Librarians should be integrated on numerous levels of an institution to be most effective and play a major role in the entire campus community.

**Pedagogical Approaches of Academic Libraries**

Today, society challenges educators with creating pedagogical methods that are attuned to current demands and expectations for student learning. Instilling in students the ability to think and act creatively is required in today’s higher education system. In addition, faster technology and access to online information initiate a need to explore new pedagogical approaches for helping students navigate and select sources of reliable information (Henderson, Nunez-Rodriguez, & Casari, 2011).

One of the important factors that allows for information literacy to develop in community college students is the commitment to teaching and learning. Teaching and learning have been central to the community college mission since the early 1900s, when faculty emphasized
instruction over research. Later this emphasis was redefined as student centered rather than instructor centered. The learning college principles and the emphasis on learning are a natural fit with information literacy, particularly since accrediting agencies, professional organizations, and state departments of education recognize information literacy as a necessary part of higher education (Warren, 2006).

Since 1992, community colleges in Illinois have built upon their academic transfer curricular role to coordinate the state’s Information Literacy Summit. This annual meeting brings together librarians and other educators from high schools, community colleges, and universities to share instructional practices. The various workshops and conversation lay a foundation for partnerships and improving learning experiences as students transfer from one level of education to the next. Internal partnerships also improve learning while making efficient use of community colleges’ limited resources. For example, Missouri’s Department of Education identifies managing information as a general education requirement for all public institutions of higher education. The goal of this general education requirement is to develop students’ abilities to locate, organize, store, retrieve, evaluate, synthesize, and annotate information from print, electronic, and other sources in preparation for solving problems and making informed decisions (Warren, 2006).

In 2002, “Information Competency: Challenges and Strategies for Development” resolution was adopted. This educational body recommended that faculty should foster widespread collaboration across the curriculum. Included were academic and vocational instructors, deans, librarians and counselors. The report also encouraged ongoing faculty
development to support faculty’s use of technologies and pedagogies as well as to revise courses and curriculum to include these new student competencies (Warren, 2006). One of the first things future teachers learn in their education classes is the importance of creating and using lesson plans. Ideally, these lesson plans include a list of materials necessary for the class (e.g., handouts), learning objectives (more on this below), and an outline of the class structure: the main topics to be covered, any activities, and notes on anything instructors want to make sure students remember to do or special requests from a professor (Hodge, 2015).

Moving away from teaching information literacy as solely skills based and making our pedagogy more explicit will not only work to improve student learning but can also transform our image on campus (Pagowsky, 2015). Shifting away from what the teacher will do to what the students will learn is a key element in successful lesson planning and teaching because it prompts the instructor to plan the class in a way that meets those objectives, as opposed to simply making sure that each item on a list of concepts has been checked off by the end of class. If the library works closely with a department, course syllabus library- or research-related learning objectives may already have been articulated, although in most cases the librarian may need to create their own specific requests of the professor (Hodge, 2015). Montgomery (2015) asks:

How can librarians liven up one-shot sessions that are boring and ...foster more student-instructor and student-student interactions? The constructivism theory position is that knowledge is constructed through real-life experience and emphasizes hands-on, collaborative learning. This really speaks to being a facilitator versus a director of student learning. (p. 21)
Due to the limited time often available to librarians with these sessions, creativity is the key for student engagement. Collaborative learning in the form of group work and utilizing online interactive resources are popular techniques.

Librarians are consistently challenged to present information literacy in ever more dynamic ways. We introduce new databases, attempt to teach the importance of the keyword search, and encourage students to use technology—all valuable learning tools.

Even so, librarians often have difficulty convincing students that what we are trying to teach them is not only valuable, but applicable. The challenges of teaching are numerous, perhaps especially for the academic librarian. While one of our mandates is to instruct, we are often limited in our capacity to do so since the class we are instructing is not really ours. (Reale, 2012, p. 81)

Librarians can transform their teaching by choosing one subject they are responsible for and revolutionizing this approach.

Library literature suggests librarians should work to get to know the faculty ahead of the instruction time. This includes scheduling a meeting where librarians connect with faculty to discuss elements such as teaching models that will be used. These meetings can also be opportunities for librarians to assure faculty that this is a partnership (Reale, 2012). Knowing your discipline and reflecting on each library orientation by taking notes are suggestions that work as the librarian plans and collaborates while planning for information literacy sessions.

Librarians utilize these methods to aid students with evaluating the validity of websites; points of interest for validity involve date of website (shows whether it is updated), authors, texts (grammar or citations) and images. These quick validity steps assist students with evaluating whether the site has legitimacy to aid in their research.
Additional suggested methods for visual information literacy include introducing a website to a class and engaging students by asking for their evaluation; ask students how the images on the site are valuable to their evaluation as well as count or note the images on the site’s page. Remove students from their comfortable context of the screen and introduce them to the print archives, returning to electronic locations to allow students to make connections between words and images; enhance instruction of image databases to exhibit how images from these databases are used in several contexts, and encourage students to explore how these images and words work together or might differ in another context. (Harris, 2005, p. 328)

Each suggested pedagogical method provides evidence that librarians serve as instructors; as in various disciplines, they often take a variety of approaches and ensure student success in information literacy and in the numerous lifelong learning goals. Assessment has become essential, and community colleges, like other institutions, must determine whether their students are learning in addition to whether programs are effective.

**Best Practices of Teaching Information Literacy**

The environment in which people learn has changed significantly since the Internet has made it possible to access information quickly. According to Farkas (2012):

[I]n many professions, what one needs to know to be considered informed is constantly changing, making it necessary to think of learning as a continuous life-long endeavor. The Internet has opened up a world of learning beyond the formal classroom, offering people opportunities to develop their own personal learning environments. (p. 3)

The constructivist theory of learning has become popular among educators. “Unlike behaviorists, Jean Piaget saw student motivation and their worldview as key to the learning process, because they bring that view into any learning environment” (Farkas, 2012, p. 9). Farkas (2012) comments, “Constructivist pedagogy views students as active participants in learning who construct knowledge based on their existing understanding as well as interactions with peers and
their instructor” (p. 10). In this way, learning occurs when students are allowed to be active participants and engage in meaning making.

Critical thinking skills have been mentioned as a successful outcome for experiential learning. By applying formal knowledge to solve the problem, the students achieved the aim of the program to develop community awareness, project management skills and leadership qualities essential in industry today (Lewis, 2008). Although incorporating critical thinking skills within a discipline may create a challenge for educators, the goal is to create a curriculum that encourages decision making, which is the basis of critical thinking skills. Hamilton and Klebba (2011) remind us that while experiential learning is widely adopted as a means to deepen learning, “this approach does not automatically produce learning at the higher-order levels associated with critical thinking” (p. 1).

The first step when examining how to rejuvenate undergraduate education is with the instructors. It is argued that teachers are the link between the student and the content to be learned. What is more, the teacher’s primary role is to engage students with the information they are learning (Estepp, Roberts, & Carter, 2012). Implementing this experiential learning model allows students to create transferable knowledge while building upon previous knowledge in various perspectives assists students with constructing a deeper understanding of the material or information learned or taught (Sala, 2005).

Student development has also been reported for successfully incorporating the experiential learning model. Gilbert, Banks, Houser, Rhodes, and Lees (2014) mention that undergraduates who engage in part-time work relevant to their major and career combined with
academics have improved success at organization, efficiency, and academic performance and have higher rates of graduation than their peers. Their article specifically mentions the academic STEM disciplines of science, technology, engineering, and mathematics. Gilbert et al. add, “Undergraduate experiential learning, such as internships and research opportunities, has the potential to increase student learning, motivation, skills development, graduation rates, and entry into advanced degree programs, though research of effectiveness in STEM areas is in its early stages” (p. 707).

Drawing on critical pedagogical theory, a broader perspective on information literacy can be gained that recognizes the potential for information literacy to support society’s status quo in terms of class, race, or gender relations; views information as a social construct that is created by a human being for a particular use; recognizes the need for librarians as important partners in the educational process to move beyond the functional view of information literacy toward a more holistic view of information literacy; understand there is more to overcoming the digital divide than disturbing information technology more broadly; recognize students as information users with own experiences; and emphasize information literacy is meaningless without purpose and action (Swanson, 2004). Expectations for classroom behavior and engagement need to be made clear at the beginning of a course (verbally and in the syllabus) and then maintained throughout the class (Blackburn & Hays, 2014). Best practices for information literacy courses include problem-based instruction and active learning that will aid in keeping students engaged.

When working with partners, setting clear expectations from the beginning is critical. Questions to address regarding expectations include: What is your role as librarian in the course?
How much involvement will you have with the assignments and grading? Careful analysis of the syllabus along with detailed conversations with the instructor form an excellent pre-embedding strategy (Kvenild, 2012). Librarians have been moving from a pedagogical focus on teaching information tools to teaching transferrable skills; these best practices offer both librarian and faculty clear guidelines for successfully building information skills and resources.

**Summary**

This review of literature discussed previous research and comparative articles on the standards, benefits and barriers of information literacy. In addition, models and pedagogical approaches of librarianship along with examples of librarian best practices application is important when teaching information literacy.

The following outlines the research design of this project and expounds on the methodological approach and data collection methods utilized during this multisite case study.

**Research Design**

This section provides an overview of the methodological approach used for this research study, followed by an overview of the sites of data collection. Next, I discuss the methods, data analysis, criteria for trustworthiness, and limitations of this study. I conclude this section with an overview of my own positionality as it pertains to this project.

**Methodological Approach**

This research project design was in the form of a multisite case study (Merriam, 1998), where participation was solicited from all seven Inner-City Community Colleges (INCC)
libraries. A case study is an in-depth analysis of one or more events, settings, programs, social
groups, communities’ individuals, or other bounded systems in their natural environment
(McMillan, 2012). For this research, the bounded unit was INCC Libraries. This type of study
involved collecting and analyzing data from several cases. This approach is distinguished from
the single case study because of subunits or subcases embedded within; the more cases included
in a study, the greater the variation across the cases (Merriam, 1998). Instead of collecting data
from one INCC campus (single), I enlisted volunteer librarian and faculty participants from all
seven campuses (subcases).

A multisite study was used for this project because each institution has a library. The
multisite case study allowed me to analyze several different librarians and their methods for
engaging in information literacy education. The decision to examine several INCC campuses
was made to learn as much possible about each embedded librarian program available at each
INCC campus. As Merriam (1998) suggests, in a multicase study there are two stages of analysis
(within-case and cross-case): “Each case is first treated as a comprehensive case in and of itself;
once completed, cross-case analysis begins to build a general explanation that fits each
individual case, even though the cases will vary in their details” (p. 195). Importantly, the
decision to include all seven campus libraries for participation in this study was made based on
occurrences within the last three to four years in which INCC libraries on each campus
experienced a decline in full-time librarians due to retirements and budget cuts. Given the
declining number of librarians at each campus, and in order to ensure truthfulness, I chose
multiple sites from which to gather data. While all seven campuses were proposed for this
research project, the INCC Institutional Review Board approved five campuses to be solicited. Only three campuses had participants agree to participate in this study.

The use of multiple data sources is highly desirable in any data collection activity (James, 2010). Therefore, the aim of this multisite case study of INCC libraries was to explore how embedded librarians within college-level courses, especially those requiring research, promote information literacy in the community college classroom. A multisite case study approach was employed because it afforded the ability to hear librarian respondents’ views first-hand from within the field of librarianship. This method ensured information was obtained from those who actually do this work and ultimately helped with identifying successful strategies. Each library possesses characteristics that needed to be explored in their natural setting (James, 2010). This approach will also allow for an exploration of the interesting phenomenon of how information literacy is used to impact student achievement.

Site

The site for this study encompassed three INCC libraries, with campus locations representing the South and North sides of a major midwestern city. Represented sites included Theatre Arts, Transportation, and Info-Tech Colleges. Again, although all seven campuses were proposed as sites, the INCC Institutional Review Board received approval from only five colleges, and participants represented only three college libraries. The compiled demographics for each campus are presented below.

- Theatre Arts College is located in the Englewood neighborhood; its College to Careers focus is theatre and fine arts. TAC’s campus has 61% females and 39% males enrolled,
with a higher population of African American students (82%) and the next highest population noted as Hispanic students (12%) enrolled. Three librarian participated from this college.

- Transportation College (TLC) has the largest campus and is located on far Southeast side; its College to Careers focus is transportation and logistics. TLC has 63% females and 37% males enrolled. African American students make up almost three-quarters of the student population (69%), with Hispanic students making up almost another quarter (24%). Four faculty participated from this college.

- Info-Tech College (ITC) is located on Northwest side; its College to Careers focus is information technology. ITC also maintains a library in Humboldt Park. The college has 56% females and 44% males enrolled, with 62% Hispanic student enrollment and 22% Caucasian student enrollment (Institute of Education Sciences, 2018). One librarian participated from this college.

**Participants**

Participants included collaborative partnerships between INCC librarians and faculty employees in their respective disciplines. The age characteristics of both INCC librarians and faculty varied from 25 to over 75 years of age; age characteristics are comparable to librarian members of American Library Association (ALA, 2000, p. 1). Gender distribution represents a larger number of women than men (two men librarians, two female librarians, one male faculty, and three female faculty participants). This is representative of ALA demographics of the current librarian population; gender distribution may also skew toward more course faculty women than
men. Ethnicity is comprised of a diverse population at each campus and often reflects the student population representative of the neighborhoods surrounding each college campus. This research study included four African American and four Caucasian participants. Collectively within both librarian and faculty participants, four hold Doctor of Philosophy (PhD) degrees in education, literature, and library and information science and four hold master’s (MA or MS) degrees in science, nursing, library science, and library and information science.

**Data Collection Methods**

First, I enlisted participant assistance by generating a recruitment email to embedded librarians (Appendix A) and faculty (Appendix B). The sampling pool or sample size of participants included one part-time and three full-time INCC librarians and one part-time and three full-time faculty. The goal was to obtain participants from at least five INCC campuses, but due to delayed INCC approval consent was received for four. Participants for this case study were asked to participate in one hour-long, semi-structured interview and document analysis of the participant colleges which consisted of each library’s website, handouts, or student activities. This specific type of interview was selected due to the fact that

flexibility of worded questions or the interview is a mix of less or more structured questions. Interviews are guided by a list of questions or issues to be explored, and neither the exact wording nor order of questions is determined ahead of time. (Merriam & Tisdell, 2016, p. 110)

The decision to utilize semi-structured interviews allowed participants the opportunity to freely share their views and opinions without restrictions or structured interview questions. This
process also aided me in with gleaning vital information to assist with data collection. Prior to the scheduled interview, an Informed Consent Form (Appendix C–librarians and Appendix D–faculty) was supplied via email requesting return prior to their scheduled interview via email or in person. Upon return of the consent form, participants were contacted.

Semi-structured interviews consisted of a “person-to-person encounter in which one person elicits from another” (Merriam, 1998, p. 71); questions covered themes discussing assessment of student engagement, professional experience, perspective of information literacy, embedded librarian and benefits, as well as best practices for instruction and assessment. The interviews were conducted in comfortable and familiar settings and were held in locations consisting of either the participants’ INCC library, conference room or faculty office space. I followed Merriam and Tisdell’s (2016) suggestion regarding a skilled interviewer “being respectful, nonjudgmental, and non-threatening” (p. 129). To ensure this process was comfortable and relaxing for each participant, I made every attempt to adhere to these suggested skills.

I asked participants several types of questions (Appendix E–librarians and Appendix F–faculty): “experience and behavior, opinion and values, feelings, and knowledge” (Merriam & Tisdell, 2016, p. 118). These questions were formed after engaging in the content analysis. These particular questions were selected for the purpose of gleaning subjective and encouraging answers without the possibility of participants feeling pressure of right or wrong responses.

To ensure conversations were documented correctly, each semi-structured interview was audio-recorded to “ensure everything [was] preserved for analysis” (Merriam & Tisdell, 2016, p.
The audio recording also assisted with transcribing revisions. The transcript identified the researcher by name, but each librarian or faculty member was given a pseudonym in the form of two capital letters after the librarian or faculty title designation (e.g., Librarian AB or Faculty CD). Notes were also taken during the interview if the participant made mention of an activity or handout. The notes served as a reminder to request these additional documents after the interview.

After interviews and audio transcriptions, I forwarded participants the transcribed interview via email to allow for member checks or respondent validation to “ensure internal validity or credibility” (Merriam & Tisdell, 2016, p. 246). The member check strategy was utilized to allow the participant the opportunity to reflect on their interview and add a richer perspective to their responses. Once all participants reviewed their transcribed audio interviews, made revisions or expanded on their responses, the document was forwarded back to me via email and revisions (per participants’ requests) were applied to their transcribed documents.

I identified each set of questions by topics, by chunking key words and phrases and comparing and contrasting words and phrases from librarians and faculty members (Miles, Huberman, & Saldaña, 2014). These words and phrases were collapsed and became themes. Merriam and Tisdell (2016) comment that “finding relevant materials generally is a systematic procedure that evolves from the topic of inquiry itself” (p. 175). Following the same process, I reviewed data in the form of handouts or active learning activities and the librarian participants’ library websites; these were also separated and assigned under each category.
According to Merriam and Tisdell (2016), “Websites, papers available through file transfer protocol, and various forms of electronic paper can be considered documents that are assessed online” (p. 184). In addition to reviewing the college libraries’ webpages, any downloadable documents falling under identified color-coded themes were also reviewed. “Illustrations and programs—even games—available in static form to be downloaded by the user can be treated as artifacts[;] these forms of data mostly share the same features as documents available in the physical environment” (Merriam & Tisdell, 2016, pp. 184-185). For the purposes of this study, I reviewed public webpages and documents which consisted of faculty or librarian syllabi, handouts, or quizzes to ensure confidentiality.

**Data Analysis**

This multisite case study produced data from multiple sources. The selected tools used in this qualitative research included semi-structured interviews and document analysis (James, 2010). To provide a framework, I reviewed the original research questions, which summarized this process and organized the findings into common themes and patterns (James, 2010). These sources were used to identify common themes and patterns, as “nodes or points connected by links are very helpful to focus on multiple variables at the same time” (Miles, Huberman, & Saldaña, 2014, p. 111).

Descriptive coding, one of three elemental methods, served as a foundation approach for data analysis. This coding method assigns labels to data, which allows summarizing in a word or short phrase and eventually provides an inventory of topics for indexing and categorizing (Miles et al., 2014). This method was selected because the interview questions were designed to collect
data from the participants’ perspectives of professional development, instructional best practices, and librarian–instructor collaborations.

The coding entailed reviewing transcribed responses each participant had checked. Next, I extracted common words or short phrases that correlated within each group of thematic questions for both groups (librarian and faculty participants). Faculty participants began the review process, of which a total of 15 questions were used to probe each response. The second review process contained the librarian group, but 30 questions were utilized to obtain responses. In the second part of this process, I analyzed documents comprised of participants’ INCC library assignments/handouts, syllabi, quizzes and instructional resources (PowerPoint slides). The method of content analysis was used for these documents to guide interview protocol questions. For example, library websites and course syllabi were viewed, analyzed, and from these, representative questions emerged that participants were asked during their interview.

According to Merriam and Tisdell (2016), “In qualitative studies, a form of content analysis is most often used to analyze documents. Content analysis is an unobtrusive technique that allows researchers to analyze unstructured data in view of meanings, symbolic qualities, and expressive contents” (p. 179). Using this method as a guide, I analyzed and reviewed transcribed interview responses and collected data for meanings and symbolic qualities.

Criteria of Trustworthiness

To ensure trustworthiness in this study, two methods were employed. Interviews from librarians and faculty and document analysis allowed me to compare and cross-check data
collected (Merriam & Tisdell, 2016). By collecting data in different forms, I was able to get different perspectives and ensure findings were consistent.

Further, to enhance trustworthiness, I employed member checks during the research process (interviews, document analysis). A member check or respondent validation is:

[the] process of soliciting feedback on your preliminary or emerging findings from some of the people you interviewed. This rules out the possibility of misinterpreting the meaning of what participants say and do and the perspective they have on what is going on and identifying the researcher’s biases and misunderstanding of what was observed. (Merriam & Tisdell, 2016, p. 246)

This process allowed me to obtain accurate responses from participants by providing each participant his or her transcript and identified major themes that were observed in the interviews and documents. Participants were given the opportunity to make corrections or add any necessary information.

**Limitations**

A primary limitation for this study was timing and participation. Changes to the original research design were made because of the library orientation sessions were not scheduled or facilitated during the last two weeks of the semester, when the IRB finally gave their approval. As such, I had to amend the data collection process. The originally planned two interviews and observation of librarian participants were reduced to one interview and document analysis.

Another limitation entailed lack of participation from librarians and faculty. This lack of participation likely stemmed from fear of being observed by a fellow colleague and department chair who not only is employed at another institution (often unspoken rivalry is a factor) or the possibility of revealing any professional development flaws in the form of student engagement,
active learning, or andragogy best practices. Additionally, because the IRB only approved five campuses for the research site instead of seven, there were fewer participants to solicit for the study.

**Positionality Statement**

As a librarian and department chair of the library, learning is often facilitated through reference queries and research education with interdisciplinary collaborations as an embedded librarian, among other responsibilities. Being employed for twelve years with INCC has allowed cultivation of many partnerships from a variety of disciplines which have provided the opportunity to create embedded librarian–library instruction sessions. In addition, this role has allowed me the opportunity to work closely with the directors of Information Technology, Transfer and Career Services and the Office of Instruction and Student Services, with whom several innovative instructional resources have been developed for the institution.

Professional development is a key component of my role as both department chair and librarian, which has provided me the ability to stay current with various library trends. Assisting me with remaining current, I have been an active participant or organization member in several teaching and learning organizations. I was selected as one of 100 librarians for the 2011 Harvard University Leadership Institute for Academic Librarians, co-presented at several National Institute for Staff and Organizational Development (NISOD) conferences (2012, 2014, 2015, 2016, 2017), and participated in the 2013 EDUCAUSE-Breakthrough Models Academy for Higher Education Professionals (my team won 2nd Place). I am an active member of the following organizations: Association of College Research Libraries (ACRL), American Library
Association, and a variety of library consortiaums (Network of Illinois Learning Resources in
Community Colleges [NILRC], Moraine Valley Community College Library, John A. Logan
College Library, and Illinois State University Milner Library).

**Findings**

Findings from this study suggest the barriers INCC librarians encounter which prevent
them with executing their job responsibilities. These findings pertain to the following:
importance of the embedded librarian, lack of institutional support, and inconsistent faculty
collaborations. The information collected in Chapter 2, utilizes literature reviews to support the
importance of information literacy through embedded librarian programs. The next chapter
details how information was collected, methodological approach, and analysis of data. The final
chapter presents a summary of the findings, reflection of these findings, and recommendations to
the institution on how to resolve these issues of concern.
CHAPTER 2
LIBRARIAN-FACULTY COLLABORATION: A MUST FOR INFORMATION LITERACY
IN COMMUNITY COLLEGES

Abstract

This qualitative case study analyzed the pedagogical approaches of Inner-City Community College librarians at Inner-City Colleges (a pseudonym) as they facilitate information literacy and the embedded librarian–faculty collaboration. Librarians traditionally provided library instruction in a brick-and-mortar classroom, but classrooms have changed over the past few decades to include the latest technology. This change makes librarians leaders in implementing the latest technology in classrooms. Embedding entails taking the librarian from a traditional classroom environment and supplementing class appointments with the librarian in the library with visits to the classroom by the librarian, which may entail more than one class session, the librarian even co-teaching the class in some cases. The resources provide the reader with supporting evidence on how librarians contribute to information literacy, how embedded librarian collaborations impact and aid students, and how librarians apply pedagogy to support academic success.

Keywords: embedded librarian, information literacy, library instruction, pedagogy
Introduction

According to Lindstrom and Shonrock (2006), there is a growing emphasis on teaching and learning as a component of the mission of 21st-century libraries; the librarian’s role is essential in this mission. Librarians assist students with more than finding books. Instead, the librarian in today’s multimodal world assists with research skills through information literacy (IL) sessions instead of relying solely on reference encounters and formal library instruction. Librarians, through collaborations with faculty and campus departments, are asked to integrate information literacy into the curriculum in an effort to increase growth in collaborative endeavors involving librarians and teaching faculty for the goal of reaching larger numbers of students.

This is particularly true at the community college, where librarians are expected to work with students to hone their information literacy skills. Because community colleges have the mission to develop curriculum that readies students for the changing social and vocational world (Cohen, Brower, & Kisker, 2014), these institutions are expected to also ensure students have information literacy, as it is quickly becoming a skill that is essential in the contemporary world (Latham & Gross, 2013). Therefore, librarians who work at community colleges are often the first introduction to students and a great beginning for those who transfer to four-year colleges or universities.

Librarians are often tasked to teach to and about information literacy and to collaborate with faculty in order to support students. Specifically, the embedded librarian, or a librarian assigned to work with a specific academic course, objective, and/or discipline (Shumaker, 2012), is expected to work with faculty to ensure students gain needed outcomes and skills from a course and/or project. According to Shen (2011), “Both librarians and faculty need to work
together to effectively promote cultural immersion curriculum. Librarians are information collectors and distributors, instructors and facilitators as teaching is an inherent part of reference services provided by them” (p. 19). Librarian-faculty collaborations are vital when working toward a student experiential learning experience. Using embedded experiential exercises will enhance information literacy through an increase in the level of interest and involvement in the course. Providing students with library instruction involving more than lecturing is the key to engagement.

Yet, according to Bury (2011), “Despite this widely-held perception of the importance of faculty-librarian collaboration teaching IL competencies, an overwhelming amount of published material about IL is written by librarians for librarians and contained predominantly in library literature, not higher education journals” (p. 45). As such, while the role of the librarian and collaboration with faculty are critical, particularly as they pertains to teaching about IL, few outside of the librarian literature discuss these important topics. This disconnect within the literature directly impacts how the practice of embedded librarianship is understood and implemented.

This project examined how embedded librarians promote IL in collaboration with faculty within a community college course. Specifically, this qualitative multisite case study (Merriam, 1998) was guided by the following questions:

1. What benefits do embedded librarians and faculty identify regarding the role of the embedded librarian?

2. What barriers do embedded librarians identify when teaching about information literacy in the classroom?
3. What resources do embedded librarians identify as necessary for effective instruction related to information literacy?

The primary aim of this research study was to examine ways in which embedded librarians engage in strategies that promote IL as well as how they collaborate with faculty. Findings from this study suggest that while both faculty and embedded librarians indicate both IL and the role of librarians are key, barriers such as a lack of institutional support and inconsistencies with faculty served as impediments.

**Defining Information Literacy**

The Association of College and Research Libraries (ACRL) Framework defines information literacy as a set of integrated abilities which encompass reflective discovery of information, the understanding of how information is produced and valued, and how information is utilized in creating new knowledge and participating ethically in communities of learning (Stadler & McDermott, 2018). The ACRL’s Framework (2015) has six core concepts which allow librarians flexibility when teaching information literacy; they are as follows: (a) IL authority is constructed and contextual, (b) information creation as a process, (c) information has value, (d) research as inquiry, (e) scholarship as conversation, and (f) searching as strategic exploration (p. 2).

Zurkowski defined information literacy as “resources applied in a work situation; techniques and skills needed for using information tools and primary sources and used in problem solving” (cited in Behrens, 1994, p. 310). Mackey and Jacobson (2011) stated, “Librarian professional and educational organizations like the American Library Association (ALA) and the Association of College and Research Libraries (ACRL) have developed definitions of information literacy and outlined characteristics of information-literate
individuals” (p. 63). Information literacy or (IL) is one of the defining concepts of academic librarianship and influences core functions which include reference, collection development and library instruction (Stadler & McDermott, 2018).

The teaching of information literacy is critical for students at the community college level. According to Small, Zakaria, and El-Figuigui (2004), information literacy skills include research and critical thinking skills and has been described as a primary role of the librarian in community colleges:

Students must learn to locate, evaluate, and use information in all forms and, typically in education contexts, these skills are taught and/or reinforced by librarians…Student-centered teaching methods such as problem-based learning and inquiry learning are most effective for teaching IL skills in a way that is integrated with curriculum content, structure, and sequence. (p. 97-98)

Thus, while IL is critical for students, it is equally important that IL be taught in a manner that is integrated, structured, and appropriately sequenced in and out of the classroom.

According to Twork (2013), “Students who are involved in active learning must engage in such higher-order thinking tasks as analysis, synthesis, and evaluation. Examples of skills include cooperative learning, experiential learning, and problem-based learning” (p. 70). Active learning techniques have long been embraced as a means to engage students with developing information literacy skills and can include almost anything students do beyond passive listening. Some examples techniques include brainstorming, hands-on technology, cooperative learning, and inquiry-based learning. The technique of inquiry-based learning is driven by student questions, facilitated through instructor guidance, and associated with the development of skills in communication, collaboration, and lifelong learning (Bond, 2016).
Yet, in many cases, faculty do not always engage in the types of consistent integration needed to teach about IL. According to Dubicki (2013):

Although faculty believe that information literacy skills are important, many do not utilize library instruction sessions to improve those skills. Faculty require students to conduct research for their courses, are aware that their students are not as information literate as they could be and understand that library instruction improves research skills, and yet faculty do not consistently integrate instruction into their courses. (p. 99)

Thus, while faculty may cite the importance of IL, they often may not be consistent in how they engage students with these skills. Moreover, faculty may not be consistently collaborating with librarians to ensure appropriate integration into their classrooms.

**Benefits of Information Literacy**

Information literacy support from accrediting agencies has been an important tool in developing and expanding information literacy instruction programs. These outside forces encourage acceptance internally and create opportunities in new ways to incorporate information literacy. Significant changes have brought growth in community college populations. These demographic changes have created the need to shift instructional methods and objectives to best serve learners. Everyone who is part of the institution’s community is a target audience for information literacy instruction. Using more creative ways to engage students, colleges often offer Learning communities (Tinto & Engstrom, 2002, p. 1453). Learning communities provide librarians and instructors with opportunities to share teaching strategies and curriculum (Warren, 2006).

The American Library Association’s Information Literacy Competency Standards for Higher Education state:

Because of the complexity [of] our multimodal environment, individuals are faced with diverse information choices in their academic studies, workplace, and personal lives. Information is available through libraries, community resources, special interest
organizations, media, and the Internet. Increasingly, information comes to individuals in unfiltered formats, raising questions about its authenticity, validity, and reliability. Information literacy forms the basis for lifelong learning and is common to all disciplines, learning environments, and levels of education, enabling learners to master content of their investigations, become more self-directed, and assume greater control over their own learning. (Information Literacy Defined, para. 1)

According to the American Library Association (2000), an information-literate individual can determine the extent of information needed; access the needed information effectively and efficiently; evaluate information and its sources critically; incorporate selected information into one’s knowledge base; use information effectively to accomplish a specific purpose and understand the economic, legal, and social issues surrounding the use of information; and access and use information ethically and legally. Information literacy is essential in the creation of lifelong learners. As academic librarians struggle continually to ensure that students successfully navigate the plethora of information available and are able to think critically about this information, it is logical to consider information literacy skills instruction as a method of helping meet this goal (Magusin, 2005).

**Barriers to Information Literacy**

Librarians face many barriers and challenges in teaching critical information literacy (IL). One challenge is time; it can be hard to delve deeply into an issue in class periods which are often only fifty minutes long. Another challenge is the method of instruction. The “one-shot” method means librarians often only have a one-time meeting and must deliver all the information at once, not allowing sustained engagement with learners. The most sophisticated pedagogy is limited in this format and it is not always possible to see the long-term impact of the librarian’s work if they do not witness conscientização [critical consciousness] in a student. As such, the “one-shot” model, while seemingly quick, is often not effective.
A third challenge is expectations. This approach to instruction is wildly different from what students encounter in other classes, and often, there is little chance to build rapport and reframe student expectations while expecting them to be experts by the end of the session, which is often not the case. “Faculty expectations is another challenge, as course instructors and faculty have their own set of expectations regarding library instruction; if library practice is to flourish, changing expectations and collaboration with faculty are required” (Tewell, 2018, pp. 21-23). In essence, librarian-faculty communication and collaboration are imperative methods that will encourage stronger relationships for the goal of assisting students with achieving academic success in their courses.

Models of Academic Librarianship

The literature identifies two primary models of academic librarianship that serve to promote IL. The first, the “One-Shot” Model, or interactions that take place in one-time visits, and the Embedded Model, which refers to an ongoing relationship between a librarian and a class or unit. Both are discussed below in further detail.

One-Shot Model

One-time visits (also known as “one-shots”) by the librarian present unique classroom management requirements. For these sessions or classes, the librarian may have as little as 15 minutes or as much as 90 minutes to present material, engage students, and assess learning, often without ever setting foot in the classroom before or after this singular lecture. Librarians may have or receive a defined checklist of items to be covered from the library or be invited to give “the library speech” as an open-ended lecture with no further defined goals than “introducing students to the library by the instructor of the course” (Blackburn & Hays, 2014). This is often times transactional in nature.
One-time instruction sessions provide just enough basic skills training for the students to find sources required for their assignments but are primarily used for introducing students to research (Artman et al., 2010, p. 94). “Time limitations also fail to provide an adequate means of presenting the information in different contexts or allow for the multiple presentations of contexts that allow for long-term memory retrieval” (Artman et al., 2010, p. 98). One option to aid in resolving these concerns is for librarians to create alliances with faculty to improve students’ research options and behaviors. Although difficult to assess student learning, the one-time model is often utilized as an introduction to the library and provides students with services available to aid with their research needs.

Librarians do more one-time instruction than any other type of information literacy instruction. Librarians see these short sessions as familiarization exercises which come from hands-on experience rather than talking-head instruction. One-time instruction sessions have been studied for their impact upon student work, with various outcomes. Generally, the increased integration of content into the curriculum leads to more positive student outcomes (Epps & Nelson, 2013). Integration of information literacy within course curriculums encourages successful knowledge transfer of information literacy.

**Embedded Model**

In higher education environments, librarians embed in different modes depending on the needs of user groups. Some librarians embed in traditional classroom environments, supplementing class trips to the library with librarian visits to the classroom. These librarian engagements can be over two or more class sessions, with the librarian possibly even co-teaching the class. This model provides in-depth knowledge of student research projects during the research and revision process. It is a popular choice for first-year experience and freshman
composition courses in which students might not gain sufficient expertise in just one visit to the library (Kvenild, 2012, para. 1). Like the one-shot model, the embedded model introduces students to the library and its services but can also provide more detailed benefits, as often this process becomes more advanced regarding research.

An embedded librarianship permits a more concentrated approach for librarians to engage themselves in team/group or department work and evolves highly focused, targeted, and specialized information research results due to cogent and firm relationships (Sharma, Kumar, & Babbar, 2014). “A successful practice for sustaining the embedded librarian role entail four themes: marketing and promotion; delivery of sophisticated, value-added services; ongoing service evaluation and communication of the evaluation results; and engagement and support of library and information user-group management” (Shumaker 2012, p. 165). Moreover, it is key that the embedded librarian is “…integrated into the academic, administrative, athletic, cultural, research, and learning arenas of the university, and provides quality and depth to the total campus experience” (Drewes & Hoffman, 2010, p. 80). As such, it is key that the embedded librarian actually be embedded, not just within the library functions, but in all functions across the campus. Because students, and information literacy, inhabit all aspects of college, the embedded librarian must be integrated across the college.

**Best Practices of Teaching Information Literacy**

Critical thinking skills have been mentioned as a successful outcome for experiential learning. By applying formal knowledge to solve the problem, the students achieve the aim of the program to develop community awareness, project management skills and leadership qualities essential in industry today (Lewis, 2008). Although incorporating critical thinking skills within a discipline may create a challenge for educators, the goal is to create a curriculum that
encourages decision making, which is the basis of critical thinking skills. The first step when examining how to rejuvenate undergraduate education is with the instructors. It is argued that teachers are the link between the student and the content to be learned. What is more, the teacher’s primary role is to engage students with the information they are learning (Estepp, Roberts, & Carter, 2012).

Best practices for information literacy courses include problem-based instruction and active learning which will aid with keeping students engaged. When working with partners, setting clear expectations from the beginning is critical. Questions to address regarding expectations entail the librarian’s role in the course and how much involvement the librarian will have with assignments and grading (Kvenild, 2012). Librarians have been moving from a pedagogical focus on teaching information tools to teaching transferrable skills; these best practices offer both librarian and faculty clear guidelines for successfully building information skills and resources and are essential to planning faculty-librarian collaborative sessions.

Methodology

This research project used a multisite case study approach (Merriam, 1998) to explore how embedded librarians within college-level courses, especially those requiring research, promote information literacy in the community college classroom. The primary aim of case study approach is to provide an in-depth analysis of settings, programs, social groups, and events within a bounded system (McMillan, 2012). Here, bounded systems are specific sites of inquiry that are context rich (Merriam, 1998).

Site

The site for this project was three community college libraries, that were part of a larger community college system in a major urban area in the Midwest. Importantly, the decision to
include several sites for inquiry was due to the declining number of librarians at each campus, as well as to ensure data saturation.

The site for this study encompassed three libraries of the Inter-City Community Colleges (INCC), with campus locations representing the South and North sides of a Midwest city. Represented sites included the Theatre Arts, Transportation and Logistics, and Info-Tech Colleges. Each of the colleges within the system is known for a designated career. Theatre Arts College is for Theatre and Fine Arts, Transportation College for transportation and logistics and Info-Tech College is known for info-tech.

The compiled demographics for each campus are presented below.

- **Theatre Arts College (TAC)** has the primary focus for theatre and fine arts. The gender demographics of enrolled students include 61% of students are female and 39% are males. Racially, there is a higher population of African American students (82%) and the next highest population of students is Hispanic students (12%). This college had three librarian participants from six librarians (three full-time and three part-time).

- **Transportation College (TLC)** was the largest campus in the community college system. This campus has the focus of transportation, distribution and logistics. TLC enrolled 63% females and 37% males. African American students make up almost three-quarters of the student population (69%), with Hispanic students making up almost another quarter (24%). Four faculty participants responded from this college.

- **Info-Tech College (ITC)** is the primary focus for information technology. The college had 56% females and 44% males enrolled, with 62% Hispanic student enrollment and 22% Caucasian student enrollment (Institute of Education Sciences, 2018). One librarian participant agreed to assist with this research.
Participants

Participants for this research project were solicited using purposeful sampling (Patton, 1999). Participants included librarians and faculty who worked collaboratively to promote information literacy in classroom settings. In total, 11 librarians were solicited, and 10 faculty were contacted per the list of names provided to the researcher. The faculty contacted were those who actively utilize the library through requests of library orientation-information literacy sessions. One part-time and three full-time librarians agreed to participate. A total of three full-time faculty also agreed to participate. Table 1 provides key information regarding participant names, their professional roles at the college, and demographic information.

Table 1

Participant Names, Professional Roles, and Demographics

<table>
<thead>
<tr>
<th>Participant Name</th>
<th>Position (Faculty or Librarian)</th>
<th>Gender</th>
<th>Race</th>
<th>Age</th>
<th>Highest Degree Held</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andrew</td>
<td>Librarian</td>
<td>Man</td>
<td>Caucasian</td>
<td>50+</td>
<td>PhD</td>
</tr>
<tr>
<td>Amy</td>
<td>Librarian</td>
<td>Woman</td>
<td>Caucasian</td>
<td>25-35</td>
<td>MLIS</td>
</tr>
<tr>
<td>Corey</td>
<td>Librarian</td>
<td>Man</td>
<td>Caucasian</td>
<td>25-35</td>
<td>MLIS</td>
</tr>
<tr>
<td>Tammy</td>
<td>Librarian</td>
<td>Woman</td>
<td>Caucasian</td>
<td>30-45</td>
<td>MLIS</td>
</tr>
<tr>
<td>Ellen</td>
<td>Faculty</td>
<td>Woman</td>
<td>Haitian</td>
<td>50+</td>
<td>MS</td>
</tr>
<tr>
<td>Kimberly</td>
<td>Faculty</td>
<td>Woman</td>
<td>African American</td>
<td>35-45</td>
<td>PhD</td>
</tr>
<tr>
<td>Tremaine</td>
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<td>Man</td>
<td>African American</td>
<td>35-45</td>
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</tr>
<tr>
<td>Khadijah</td>
<td>Faculty</td>
<td>Woman</td>
<td>African American</td>
<td>35-45</td>
<td>PhD</td>
</tr>
</tbody>
</table>
**Methods**

Participants for this case study were asked to participate in one hour-long, semi-structured interview. This specific type of interview was selected due to the “flexibility of worded questions... the interview [is] guided by a list of questions or issues to be explored, and neither the exact wording nor order of questions is determined ahead of time” (Merriam & Tisdell, 2016, p. 110). Questions covered themes such as assessment of student engagement, professional experience, perspective of information literacy, embedded librarian and benefits, as well as best practices for instruction and assessment. Each interview was audio-recorded and transcribed verbatim. Notes were also taken during the interview if the participant made mention of an activity or handout. The notes served as a reminder to request these additional documents after the interview.

In addition to interviews, handouts or active learning activities and the librarian participants’ library websites were also analyzed. Analysis of these documents specifically reviewed variations of information literacy displayed on the college’s webpages and pedagogical practices, assessment tools and active learning techniques within reviewed documents. According to Merriam and Tisdell (2016), “Webpages, papers available through file transfer protocol, and various forms of electronic paper can be considered documents that are assessed online” (p. 184). Analysis of these documents included, in addition to reviewing the college libraries’ web pages, any downloadable documents falling under identified color-coded themes.

Analysis of documents “allows researchers to analyze unstructured data in view of meanings, symbolic qualities, and expressive contents” (Merriam & Tisdell, 2016, p. 179). All active learning handouts, assignments, and information literacy PowerPoint slides used during librarian instruction sessions examined elements representing categorical themes of the interview.
questions. These themes included attributes or strengths of information literacy, benefits of embedded librarians or program, pedagogical practices, and assessment tools. In total, fifteen to twenty documents were examined from both librarian and faculty participants. These documents encompassed several variations of information literacy and pedagogical practices, assessment tools, and active learning techniques.

**Data Analysis**

This project used descriptive coding, a method that assigns labels to data, such as words and phrases, the provide the ability to categorize and index the data (Miles et al., 2014). Here, descriptive coding was used as classify and interpret the data “to make statements about implicit and explicit dimensions and structures of meaning-making in the material and what is represented in it” (Merriam & Tisdell, 2016, p. 195).

To achieve descriptive coding, I engaged a coding process whereby words and phrases were chunked together. Each group’s responses to the topic questions were reviewed for short phrases germane to each topic. Topics were established based on particular recurring ideas or practices. Examples of codes that emerged from data included barriers, need for resources, and lack of support.

**Criteria of Trustworthiness**

To further enhance validity, I employed member checks (Merriam & Tisdell, 2016) during the research process (interviews and document analysis). After participant interviews were transcribed, I provided each participant a copy of their transcript and identified major themes that were observed in their interviews and documents. This allowed participants the opportunity to make corrections or add any necessary information.
Limitations

For this project, two primary limitations were identified. First, the role of the researcher may have served as a limitation. I serve as a fellow librarian, department chair of my college of employment library, and I am union chapter chair, which is equivalent to the president of an organization. The union representative position encompasses several job families (full-time faculty, full-time and part-time professionals, and security officers). Both roles of department chairperson and union representative could possibly present the element of intimidation or trepidation for librarian participants. To ease these possible feelings, I interviewed participants in their place of comfort (their home college) and asked them to select the location (office, meeting room). These actions aided with a level of comfort for the librarians and during the interviews an ease and lack of nervousness were exhibited.

Another limitation presented itself during the research study in the form of a shortened time frame. The study was unable to take place until the last two weeks of the Spring 2019 semester; this obstacle prevented many librarians who may otherwise have participated in the study. Unfortunately, this short time frame impeded the sample size as the last two weeks of any semester are hectic because of finals, which increases library usage but hinders librarian availability as many are the sole full-time librarian and/or department chair.

Findings and Discussion

Through interviews with both faculty and librarian participants, as well as analysis of participant college webpages and documents, three primary themes emerged. These findings include the librarians and faculty citing the importance of the embedded librarian, the lack of institutional support, and inconsistent faculty collaborations.
Importance of the Embedded Librarian

Throughout interviews, both faculty and librarian participants discussed the essential role of the embedded librarian. For instance, Amy shared:

If I'm an English faculty, my study is English, but I might not be aware of the latest techniques of how to communicate research to students or I might not be aware of ... I might not be totally familiar, honestly, with our databases because I'm an English faculty, and that is technically not my job.

Similarly, Andrew shared, “That the knowledge is there from their instructors who understand their discipline and then our ability to understand how to do research in that discipline. When those two marry together, the students are going to benefit greatly.” For both Kimberly and Andrew, the role of the embedded librarian was important because they were knowers of research, databases, and key resources for students.

In addition, two faculty members also discussed how the larger institution benefits from embedded librarians. Kimberly shared, “…the library, uh, is a huge component of the institution…So, when we add that to some of the other programs and components, you know, within an institution, I would say this is a formula designed for students to be successful.”

Echoing Kimberly’s belief that the embedded librarian role is beneficial for the larger institution, Khadijah shared that “the embedded librarian should be used in all disciplines because it will help to strengthen the student's ability to do research and understand the importance of the power of reading, you know, and critical thinking.” These faculty discussed how the embedded librarian role works to not just support student success, but the larger institution as well.

From these quotes, participants shared that the role of the embedded librarian is essential for students to better understand information literacy. Participants shared about the importance of this role for student success and the importance of these individuals to help support and teach
about research, communication, and critical thinking. An embedded librarian is focused on the needs of one or more specific groups, building relationships with these groups, developing a deep understanding of their work, and providing information services that are highly customized and targeted to students’ needs. As Nolan (2013) describes it, “Embedding requires more direct and purposeful interaction than acting in parallel with another person or group” (pp. 13-14).

According to literature written on embedded librarians and programs, these partnerships promote collaboration between the librarian and faculty. In addition, they aid with building learning resources and information literacy to both student and instructor.

**Lack of Institutional Support**

Throughout interviews, librarians discussed at length the barriers they faced due to a lack of institutional support. Librarians cited a lack of staff, an inability to participate in professional development, and a lack of time to do basic job functions. For example, Corey, a librarian, discussed how the institution could provide better information and messaging about the role and resources libraries and librarians provide the institution. Corey shared what institution should be:

> Letting the students know about what the library is here for them, we have other services, you know, there's tutoring services, there's computer lab services and sometimes I do think the role of the library has not been made clear to the entire, the rest of the faculty.

For Corey, the library offers many services; however, often students simply do not know what resources are offered.

Similarly, Tammy, another librarian, offered that the institution needs to better advocate for libraries and librarians. Tammy offered that institutions need to hire more librarians so we can do more of it. That would help, to make us more visible. We are often...we advocate for ourselves. It would be nice if the dean's office or some other areas would recommend our services. Sometimes the amount of work that we're already doing, the classes that we're visiting, we don't always have, we can't always give the first choice because we don't have people here to do that.
For Tammy, the fact that the libraries are understaffed means that they are not only overtaxed with supporting students, they often do not have time to properly educate the campus about what resources and supports they offer. For both Corey and Tammy, institutions need to share information about library services to help support the library’s mission.

Participants also cited that the institution needed to further support student learning by providing opportunities that allow librarians and libraries to have the agency and independence of an academic department. For example, Andrew shared that institution should require a long-term semester at long information literacy course, which would then give us the opportunity to justify having more librarians on campus, which would give us the ability then to divide and conquer a lot more in terms of knowledge base. Um, the second thing is that the institution needs to support the independence at the library as an academic department and not as a forward-facing stupid department.

Further, Amy thinks the institution could support libraries by sharing how important the role of the library is in supporting students. Amy offered, “I feel like if it's top-down pressure, it'll be, I don't want to say easier, but it'll make it more important if it's coming from the top versus coming from me and saying, ‘I really want to work with you’.”

For both Tammy and Amy, the institution needed to provide them the independence and agency to support students. Further, the institution needed to provide this information to the larger campus to show their support and to illustrate the important role of the library and the librarians.

Overall, many indicated that the lack of institutional support made their jobs more difficult. Importantly, from these quotes, no librarian believed their respective institution supported embedded librarianship or their campus’s library. Additional views shared listed consistent allocation of funding to allow libraries to adequately provide services and resources to
students. All three college libraries are experiencing staffing issues in the form of both librarians and clerical staff.

Libraries have for long played a central role in the lives of universities, in supporting learning, teaching and research. Like the rest of the sector, however, academic libraries are now facing a renewed and intensified period of financial stringency (Nicholas et al., 2010, p. 2). In addition to providing service to the institution, libraries serve the needs of the community. Sadly, libraries cannot provide service or accomplish these goals with diminishing funds.

**Inconsistent Faculty Collaborations**

In interviewing faculty, it became clear that they had differing views on the role of the embedded librarians. While some faculty discussed the importance of collaborating with the embedded librarian assigned to them, other faculty indicated a “hands-off” approach where they left all aspects of research to the librarian. Librarians noted these differing approaches and cited the inconsistency as a barrier in working with faculty.

Although Ellen is of the view that the embedded librarian benefits the institution, she shared she:

[I] chose to embed the librarian into my course… is because I make them write and I make them research. So, if they're going to do research and I'm not a librarian, so I don't want to take that position of taking my class time to go through the process of how to do research into the library. if they're going to do research and I'm not a librarian, so I don't want to take that position of taking my class time to go through the process of how to do research into the library.

Here, Ellen shared that since she was not an expert in library processes, she was unwilling to take the “position” or class time to go over how to engage in library research with students. Thus, she relegated all of it to the librarian.

In contrast, however, Tremaine, another faculty member, shared that he works to
collaborate with the librarian so that both he and the librarian teach about research and information literacy. He offered that this collaboration provides him learning opportunities:

It encourages more opportunities of research in periodical journals, peer review journals, understanding the difference between periodicals and Peer Review Research. Um, having them to find, understand keywords and how they impact the information that they're looking for. Being able to find all different types of things other than the basics of just understanding of the card catalog and how to go and find a book on a shelf.

While Ellen was a hands-off faculty member with research skills and information literacy, Tremaine was far more collaborative. Importantly, librarians commented that these inconsistent collaborative faculty-librarian relationships provide obstacles for librarians in the form of faculty often assigning projects or research papers without informing or alerting librarians of these assignments. In addition to this complaint, librarians also commented on the lack of information instruction requests which also hinders partnerships.

**Recommendations Conclusions**

Findings show that while participants note the importance of the role of the embedded librarian, barriers of a lack of institutional support and inconsistent faculty collaboration mediated the embedded librarians’ ability to promote IL. Given these findings, three primary themes emerged.

**Information about Resources and Services**

As participants discussed, it is critical that students know what resources and services a library offers. In many instances, participants felt that they not only had to provide the services but work to educate the campus that the services existed within the library. Thus, the first recommendation is that community college campuses support library resources and services by better advertising and promoting these services. Librarians are working to support students by offering these services but do not have the time to promote the resources also offered them.
Thus, campuses can do a better job offering information, websites, and messaging about available resources.

**Financial and Staffing Support**

Libraries are underfunded, which limits their ability to provide services and resources to library students/patrons. In addition, libraries are mired with developing strategic plans for ongoing capital improvement as well as maintenance for allocating resources to support these plans. Participants shared that libraries are often understaffed, which limits their ability to provide services and resources to students and patrons, thereby hindering consistent allocation of funding to substantially support libraries with services particularly information literacy and embedded librarian programs.

In order for this to occur, and to ensure appropriate funding and staffing occurs, it is critical that administration collaborate with existing libraries and librarians on their campus. As participants mentioned, librarians felt as if they were treated as a “stupid department” and often not taken seriously. They felt as if they had little agency or independence. Thus, it is not enough to simply provide further resources to a library; rather, conversations with those who provide the library resources must be consulted about where they feel resources are needed.

**Consistency in Faculty Relationships**

A final recommendation includes outreach to develop support and inform faculty about the library. Suggested activities include work with faculty advisory committees who make recommendations for collections, programs, and other library activities; working with administration (dean, vice president) for the purpose of creating co-teaching opportunities for librarians and faculty in First-Year Experience courses, and working with faculty to illustrate
how library instruction and information literacy can complement lesson planning and course objectives.

**Conclusion**

Embedded librarians contribute to the institution’s mission through information literacy programs and librarian–faculty collaborations. Through these programs and collaborations, students can accomplish career goals or advancement as well as develop lifelong learning skills. By increasing communication on all levels, particularly among librarians and faculty, these recommendations will allow the opportunity to advocate for libraries and ultimately incorporate embedded librarian programs.
CHAPTER 3

REPORT OF RESULTS/FINDINGS

Executive Summary

This qualitative case study analyzed the pedagogical approaches of librarians at inner-city community colleges as they facilitate information literacy and the embedded librarian–faculty collaboration. Librarians traditionally provided library instruction in a brick-and-mortar classroom, but classrooms have changed over the past few decades to include the latest technology. Because this change makes librarians leaders in implementing the latest technology in classrooms, it is critical to examine their practices, views, and experiences in these roles. This multisite case study (Merriam, 1998) sought to explore how embedded librarians and faculty who work with them describe how they promote information literacy (IL) as well as to identify barriers and challenges associated with their roles. Findings suggest that while both librarians and faculty cite the critical role embedded librarians play in promoting IL skills, the lack of institutional support and inconsistent faculty contributions serve as barriers. Recommendations to address these challenges include institutional support through staffing as well as through collaboration and training programs for faculty to better utilize embedded librarian roles.

Keywords: embedded librarian, information literacy, library instruction, pedagogy
Introduction

Information literacy (IL) is an understanding and set of abilities enabling individuals to recognize when information is needed and have the capacity to locate, evaluate, and use effectively the needed information. In an academic setting, IL encompasses a variety of skills related to research that leads to information-seeking behavior that can be transferred beyond the university to professional and lifelong learning (Salisbury, Karasmanis, Robertson, Corbin, & Hulett, 2012). In other words, embedding information literacy within course curriculums is critical to developing students’ research skills.

Embedding information literacy into library instruction is favored by librarians, and collaboration provides an essential starting point for inserting it into the design of the various disciplines or subjects. This collaboration process is a logical partnership as academics have oversight and responsibility for their subject design, and librarians have expertise in teaching and learning for information literacy. “Articulating information literacy skill development within a subject or course through collaboration between librarians and academics is not only considered best practice, it is a key and recurring theme in the library literature” (Salisbury, Karasmanis, Robertson, Corbin, & Hulett, 2012, p. 2).

The importance of promoting IL is particularly true in the community college setting. Community colleges, which are tasked to meet the needs of diverse student groups, must engage in curriculum that promotes the ever-changing social, civic, and vocational needs of a community (Cohen, Brower, & Kisker, 2014). One element of these ever-changing needs is IL, which is increasingly critical in a multimodal world. Those within community colleges must be
taught how to identify, evaluate, and analyze different types of information in order to be informationally literature, a skill that is essential in today’s digital society (Grafstein, 2002).

Given the importance of IL, especially within a community college setting, this research study examined how embedded librarians promoted IL and collaborated with faculty within community college-level courses. Specifically, this study was guided by the following questions:

1. What benefits do embedded librarians and faculty identify regarding the role of the embedded librarian?
2. What barriers do embedded librarians identify when teaching about information literacy in the classroom?
3. What resources do embedded librarians identify as necessary for effective instruction related to information literacy?

**Background**

During the Fiscal Year 2008 Annual Program and Service Analysis (APSA) of Academic and Student Support Services, the Inner-City Community Colleges (INCC) identified the need for a more in-depth, focused quality review of the libraries. In Fall 2009, library faculty from all INCC system colleges and administrators participated in a district-wide steering committee for the purpose of designing and planning a library quality review process. Internal and external data sources were reviewed, which included national library survey data, INCC financial data, and INCC library information provided by librarian faculty. Challenges identified in this report revealed various core challenges hindering INCC libraries. These challenges included:

- INCC invests fewer financial resources in its libraries than other similar institutions.
INCC libraries are understaffed. 

INCC students have access to fewer resources than their community college peers. 

Some identified challenges included underfunding and understaffing, challenging administrative procedures, insufficient access to IT-related data sources, technologically outdated, and insufficient district-wide coordination. Sadly, ten years later, INCC Libraries are experiencing the same challenges as identified in 2008. The purpose of this multisite case study was to explore the current challenges still facing INCC libraries.

Site

Three Inner-City Community Colleges (INCC) libraries representing the South and North sides of the city participated in this study. Sites represented were the Theatre Arts, Transportation and Logistics, and Info-Tech Colleges. Seven campuses were proposed as interview sites; with approval was received from five colleges by the INCC Institutional Review Board. From these five colleges, participant assistance was received from the following three colleges:

- Theatre Arts College (TAC) is located in the Englewood neighborhood; its College to Careers focus is theatre and fine arts. TAC campus has 61% females and 39% males enrolled with a higher population of African American students (82%), with the next highest race noted as Hispanic students (12%) enrolled. Three librarian participated from this college.

- Transportation and Logistics College (TLC) has the largest campus and is located on the far Southeast side; its College to Careers focus is transportation and logistics. TLC’s campus has 63% females and 37% males enrolled. A highest population is African
American students (69%) and second highest is Hispanic students (24%). Four faculty participated from this college.

- Info-Tech College (ITC) is located on the Northwest side; its College to Careers focus is information technology. Info-Tech College also maintains a library in Humboldt Park, has 56% females and 44% males enrolled, and a 62% Hispanic and 22% Caucasian student enrollment (Institute of Education Sciences, 2018). One librarian participated from this college.

**Participants**

Once institutional approval was received, participant recruitment was enlisted to the approved colleges by generating a recruitment email to librarians possibly embedded in course(s) (Appendix A) and faculty recommended by librarians (Appendix B). Participants included one part-time and three full-time INCC librarians and one part-time and three full-time faculty. Interviews were scheduled and Informed Consent Forms (Appendix C–librarians and Appendix D–faculty) were delivered via email requesting return either through email or in person prior to the participants interview.

**Data Collection Methods**

Participants engaged in a one-hour, semi-structured (Patton, 1999) interview. This interview type was selected because of its “flexibility of worded questions or the interview is a mix of less or more structured questions. Interviews are guided by a list of questions or issues to be explored, and neither the exact wording nor order of questions is determined ahead of time” (Merriam & Tisdell, 2016, p. 110). All document analysis of each institution’s library website, handouts, or student activities was conducted after interviews.
Semi-structured interviews consisted of “person-to-person encounter[s] in which one person elicits from another” (Merriam, 1998, p. 71). Interviews were conducted in comfortable and familiar settings and held in locations consisting of either the participants college library conference room or office. Following Merriam and Tisdell’s (2016) description of a skilled interviewer, I was “respectful, nonjudgmental, and non-threatening” (p. 129) during the interview. Each interview was audio-recorded to “ensure everything is preserved for analysis” (Merriam & Tisdell, 2016, p. 131) and aided me with transcribing revisions. All participants (librarians and faculty) were assigned a pseudonym to ensure confidentiality. Notes were also taken during the interview as a reminder regarding additional questions or documents after the interview.

**Criteria for Trustworthiness**

To “ensure internal validity or credibility” (Merriam & Tisdell, 2016, p. 246), transcribed interviews were forwarded to participants for member check, or respondent validation. The member checks strategy was utilized to allow participants’ the opportunity to reflect on their interview and add a richer perspective to their question responses. Once reviewed by the participants, documents were returned with suggested revisions (if applicable) and applied to the transcribed document. A tally of artifacts was noted of receipt on a data collection form to ensure validity (Appendix N).

Each set of questions by topics were color-coded using the following: Information Literacy (yellow), Embedded Librarian (turquoise), Assessment (green), and Pedagogy (purple). Each response was separated into the color-coded group (librarians or faculty) to ensure “finding relevant materials via a systematic procedure that evolves from the topic of inquiry itself” (Merriam & Tisdell, 2016, p. 175). Utilizing the same process, data from handouts, active
learning activities and library websites were also separated and assigned under each category. According to Merriam and Tisdell (2016), “Webpages, papers available through file transfer protocol, and various forms of electronic paper can be considered documents that are assessed online (p. 184). In addition to reviewing the college libraries’ webpages, any downloadable documents falling under identified color-coded themes were reviewed. “Illustrations and programs—even games—available in static form to be downloaded by the user can be treated as artifacts, these forms of data mostly share the same features as documents available in the physical environment” (Merriam & Tisdell, 2016, p. 184-185).

**Data Analysis**

Data analysis consisted of using descriptive coding, a method that assigns labels to data that allows summarizing in a word or short phrase and eventually provides an inventory of topics for indexing and categorizing (Miles, Huberman, & Saldaña, 2014). Participants were separated into two groups (librarians and faculty) using the same color-coded process: Information Literacy (yellow), Embedded Librarian (turquoise), Assessment (green), and Pedagogy (purple), and reviewed for short phrases based on particular recurring ideas or practices that were germane to each topic. Common words or short phrases were extracted which correlated within each group of thematic questions for both groups (librarian and faculty participants). Fifteen exploratory questions were asked of faculty and thirty questions of librarians.

Document analysis included artifacts from webpages, syllabi, active learning assignments/handouts, quizzes/exams and instructional resources (e.g., Kahoot, PowerPoints). According to Merriam and Tisdell (2016), “In qualitative studies, a form of content analysis is most often used to analyze documents. Content analysis is an unobtrusive technique that allows researchers to analyze unstructured data in view of meanings, symbolic qualities, and expressive
contents” (p. 179). Library websites reviewed examined whether librarians’ methods and practices were congruent with the colleges’ mission statements. These documents were coded as interviews, using color-coding techniques using either short phrases and words.

Findings

After interviews and document analysis were coded and analyzed, three primary themes emerged from interviews with embedded librarians and faculty as well as document analysis: 1) Importance of Embedded Librarian Role, 2) Lack of Institutional Support, and 3) Inconsistent Faculty Collaboration. Below each finding is presented, along with quotes that represent the finding.

Importance of Embedded Librarian Role

Participants discussed at length the importance they saw of the role of the embedded librarian. Participants viewed the embedded librarian as a key component in reinforcing students’ understanding of information, strengthening students’ ability to perform research and comprehend the power of reading and critical thinking, grasping knowledge of pertinent library resources both internally and externally, being the go-to person with the ability to assist both students and faculty with obtaining information. Participants shared the following views,

- I also think that in teaching a composition course, you know, that you can't teach a composition course, whether it's the first semester or second semester as a faculty member without collaborating with the librarian. Um, I think it's an essential part of both courses that there's an embedded librarian moment.

- Embedded librarians are a great asset, a great asset in that given those embedded tools, those deep dive tools that students need to have in order to be able to accomplish things they need to do inside and outside of the classroom.

- Just reinforcing, their understanding of information. Enabling them to not only know about the library within the institution, but also outside of the institution. Due to the relationship that, you know, they have established not only with the professor but the embedded librarian.
Participants discussed the importance of the embedded librarian role, especially as it pertained to promoting IL. Importantly, both librarians and faculty recognized this role as “essential,” as an “asset” both in and out of the classroom and even the institution. Thus, participants echoed what literature cites as the key functions of the embedded librarian. Literature discusses that embedded librarians provide purposeful and relational instruction (Nolan, 2013) and allow students opportunity to have more tailored instruction. Furthermore, embedded librarians help support faculty instruction and research (Carncross, 2013). Thus, those who served in embedded librarian roles, as well as those faculty who work with them, know the importance and critical nature of these resources.

**Lack of Institutional Support**

While participants cited that they recognize the importance of the role of the embedded librarian, participants described that they did not feel that same support from the larger institution. Participants described barriers regarding the lack of support they received from the institution through a lack of staffing and a lack of funding and a lack of information about what the libraries and embedded librarians actually do within the institution. For example, participants discussed underfunding as vital concern, as it impacts all aspects of staffing, library collections, services, and programs. As a result, these restraints lessen students’ access to library learning resources, specifically information literacy through library orientation sessions and embedded librarian programs, which hinders librarians from participating in events, workshops, and conferences college-wide or external professional development. In addition, staffing is an issue due to inconsistent budget allocations from administration which precludes replacement of
retiring or resigning librarians.

Shared quotes include:

- I think it comes down to personnel. If we were to have librarians go to department meetings, which are all held roughly at the same time, we would have like four librarians at four different meetings and no one here in the library to actually do the work. That's the biggest thing. We don't have the manpower…

- But it really can be overwhelming. Sometimes the amount of work that we're already doing, the classes that we're visiting, we don't always have ... we can't always give the first choice because we don't have people here to do that. We encourage faculty to have us visit more than once because it's clearly not enough, but we also have to find a balance between having the staff to do this work.

- …hire more librarians so we can do more of it. That would help. to make us more visible.

Participants also noted a lack of institutional support through a lack of information and messaging about what librarians and libraries do and serve. One participant shared:

- It would be nice if the dean's office or some other areas would recommend our services. Sometimes the amount of work that we're already doing, the classes that we're visiting, we don't always have, we can't always give the first choice because we don't have people here to do that.

- Letting the students know about what the library is here for them, we have other services, you know, there's tutoring services, there's computer lab services and sometimes I do think the role of the library has not been made clear to the entire, the rest of the faculty.

Participants shared that the institution could illustrate support for what they do and indicate the importance of their services by simply endorsing, advertising, and promoting the services offered. Also shared were issues with assessment and challenges such as time and institutional support often hinder successfully assessing student learning or successful library orientation sessions.

In addition, participants voiced concerned with the lack of support from faculty colleagues regarding utilizing information literacy resources and services as well as support from
administration in the form of advocacy and budget. Comments from these discussions include the following:

- I tried to use the one on one time at the end of the session to assess how much a student understands about information literacy. I would love to do that individually. I think we can even have a section because then I can mark progress at the end, but I don't have that luxury so, but most times when I can do is I can look to see where a student on their computer, when I'm walking around, it's searching for materials.

- Course time is so limited, and there's a lot of content, so ... there was one faculty member that I worked closely with. I visited the class seven times throughout the semester. But it was ... you know I recognize that it's a challenge to fit everything in... So, finding the time to fit everything in is a constant struggle.

Thus, while participants noted the importance of assessment, they felt there was not enough time due to issues of understaffing, and a lack of faculty collaboration made assessing student learning difficult. For one participant, time to engage in assessment felt like a “luxury” instead of a basic function of the job.

It is critical that institutions provide adequate support for embedded librarians and libraries on campuses. According to Magusin (2005), embedded librarians need help from the larger institution to meet their goals of promoting information literacy. As it stands, librarians struggled to navigate the information, to get students to think critically, and to collaborate with faculty. Thus, it is a barrier that they do all this while being understaffed and still expected to do outreach efforts.

**Inconsistent Faculty Collaborative Library Reinforcement**

Finally, a finding regarding inconsistent understandings of faculty collaborations and partnerships emerged. For example, some faculty who participated in the study described a more “hands-on” and collaborative approach to working with the embedded librarian, whereas other
faculty indicated that they did not want to necessarily provide library overviews to reinforce requested sessions. For example, one faculty member shared:

- I actually do a brief overview of, you know, research and the process of research and how it is done. But then I also, um, have made appointments with the embedded librarian to, uh, do their presentations.

Another faculty, however, offered:

- If they're going to do research and I'm not a librarian, so I don't want to take that position of taking my class time to go through the process of how to do research into the library. So, I knew that I needed to come to the library and to say, you know, you need to embed into my classroom because I give them research paper to do on a weekly basis.

These notions were underscored by librarian interviews when they expressed frustration with the inconsistency of faculty’s roles in collaboration. Participants voiced their frustrations with faculty colleagues attempting to provide library instruction during course lectures which limited collaborative relationships with both part-time and full-time faculty instructors, recycling library activities provided previously by librarians, limiting the amount of time to provide information literacy sessions or providing information on course assignments. These obstacles impede preparation of upcoming sessions as well as often exhibit a lack of respect of participants as a colleague or professional. Participants also shared these frustrations:

- But I also think that professors in terms of that need to be consistent because sometimes I have professors who are like, "Yes, they need five sources, but we don't need any in-text citations," and I'm like, "But then how will they prove to you that they've read the article," and they're like, "Well, I just need to know that they looked at an article," and I'm like, "Well, but then they're not going to look at an article. They're just going to continue to do what they're doing, which is, again, not information literacy or learning, frankly.

- There are some professors on our campus for instance, that are very interested in collaboration. However, unfortunately, one of the problems is some of our professors have been here long enough that they are, I don't know if it's complacency or if it's burning out or it's a little bit of both...Collaboration is actually really difficult. Um, what the professors who are here interested in
Within embedded librarianship, it is a best practice to collaborate with faculty to ensure they have all the information they need to support both the faculty and the students (Shumaker, 2012). To be effective, “embedded librarians need a full understanding of the nature of the task and the goals of the effort” (Shumaker, 2012, pp. 4-5). Without consistent collaborations, and without being fully integrated, it is difficult for librarians to fully engage and assess students and their learning. According to Reale (2012), “only you can properly communicate the importance of your role to students and professors. Students and professors do not consciously think we are an insignificant part of the research process; if we are not right in front of them, they may not think about us at all”. (p.87). Thus, if faculty are only relegating some aspects of information literacy to librarians, but not fully collaborating with them, students will not see them as a resource or as part of their learning.

**Recommendations**

The purpose of this multisite case study was to examine how embedded librarians within college-level courses, especially those requiring research, promote information literacy in the community college classroom. Findings indicate that while participants recognize the important role of the embedded librarian, many challenges emerged due to a lack of institutional support and faculty collaboration. Thus, the following recommendations are meant to address these issues.

1. Identify best practices and collaborate to develop a plan for managing embedded librarian programs. This can include how to provide opportunities to teach faculty the importance
of collaborating. Each institution could create collaborative workshops during the Spring semester, the first two weeks when faculty return from holiday break. This would allow librarians to promote the embedded librarian program through these collaborative workshops which would include information on meeting and planning embedded sessions, discussing course assignments and projects, as well as possible collaborative active learning assessments. These workshops would foster interest in those who are not familiar and update or energize those relationships currently active between librarian and faculty.

2. Increase communication to ensure librarian contribution in any policy changes that will impact libraries.

By inviting librarians to participate on committees on both college and district levels, librarians have the opportunity for them to share issues of concern, inform those unfamiliar with libraries, and actively contribute to decisions or policy changes that will affect libraries. When librarians are excluded from participating on these committees, distrust is developed and the opportunity to receive input from professionals in the field or discipline of study is lost.

3. Develop a strategic plan for capital improvement and maintenance for all INCC libraries and allocate resources to support this plan.

Reallocating sources from both college and district resources to support needs of the libraries will aid with services and staffing. In addition, assistance from both college and district levels for obtaining alternative resources would also contribute to increasing funding and ultimately addressing staffing issues.

The course of action suggested for implementation of recommending plans of action should begin Fall Semester 2020 during Faculty Development Week with librarians and faculty
in the form of collaborative workshops. This process will begin application of best practices, participation on policy changes and strategic planning.

**Summary**

The primary challenges facing INCC libraries is the importance of the embedded librarian role, lack of institutional support; and inconsistent faculty collaborative library reinforcement. These challenges heavily impact all facets of INCC libraries which include staffing, facilities, library collections, and services. The result affects students’ access to fewer library services and resources than their peers at similar institutions.

The recommendations to identify best practices and collaborate to develop a plan for managing embedded librarian programs, increasing communication to ensure librarian contribution in any policy changes that will impact libraries, develop a strategic plan for capital improvement and maintenance for all INCC libraries, and allocate resources to support this plan will combat the current practice of lack of funding or reallocation of resources.

The current practices prevent the libraries from providing services and resources equivalent to surrounding community colleges. In addition, inadequate access to these resources places INCC students many of who are economically disadvantaged, even further at risk the employment sector as well as their performance upon transferring to four-year institutions.
The purpose of this multisite case study (Merriam, 1998) was to examine how embedded librarians within community college-level courses, specifically those requiring research, promote information literacy in the classroom. This study was guided by the following research questions:

(1) What benefits do embedded librarians and faculty identify regarding the role of the embedded librarian? 
(2) What barriers do embedded librarians identify when teaching about information literacy in the classroom? 
(3) What resources do embedded librarians identify as necessary for effective instruction related to information literacy?

To answer these questions, a qualitative multisite case study approach was applied in three libraries of the Inner-City Community Colleges (INCC). Participants for this study included four librarians (three full time, one part time) and four faculty instructors (three full time, one part time). Participants were interviewed in one on-site, semi-structured interview (Patton, 1999). In addition, I performed a document analysis of webpages from the libraries as well as with documents that were collected from participants such as syllabi, assignments, and quizzes.

After interviews were completed, they were transcribed verbatim. In both the interview transcripts and the documents. I analyzed for this project, I used descriptive coding (Miles et al., 2014) whereby I assigned labels to chunks of data to summarize them into a word or short phrase. From this process, themes emerged from the data. After themes emerged, both transcripts
and themes were sent to participants as a means of member checking (Merriam & Tisdell, 2016), to uphold trustworthiness. Participants were given an opportunity to add, change, and/or give feedback on their transcripts as well as the themes that were identified.

From the data, three primary themes emerged. First, both faculty and the embedded librarians discussed the importance of the role of the embedded librarian to promote information literacy to students. Second, it became clear from data that there was an overwhelming lack of institutional support that made the work of the embedded librarians difficult and hindered their abilities to help students. For example, after analysis of the embedded librarian transcripts as well as from the documents, it was clear that the librarians were extremely understaffed and expected to do more with less resources. Finally, the third theme that emerged about inconsistent faculty collaborations with the embedded librarians. Specifically, while some faculty understood and engaged in collaborative relationships with the embedded librarians, some faculty did not. Thus, it made working with faculty inconsistent and difficult when there were consistent expectations or accountability of how these collaborations should work.

Discussion of Findings

This section provides a brief overview of each finding that emerged from this study. This section also discusses relevant research to put each finding into the larger context of the literature in the field.

Importance of Embedded Librarians

Importantly, both faculty and librarians discussed the importance of information literacy and the role embedded librarians play in teaching it. Participants noted that information literacy was a necessity for students and embedded librarians provide opportunity for instruction and
implementation of these skills. This notion was echoed in the literature that discusses the importance of information literacy and the role librarians play in promoting it.

Knowledge of the research process itself and the so called “rules of engagement” (documenting this process) need to be explained and reinforced by librarians; a goal of these information literacy instruction classes is to introduce research concepts for lifelong learning (Michalak, Rysavy, Hunt, Smith, & Worden, 2018). Each librarian explained that one goal of the library instruction sessions was to increase students’ understanding. Information literacy could serve as a bridge from critical thinking as it is presently taught to a process involving more easily and rapidly learned techniques in the identification and management of knowledge (Weiner, 2011). Librarian participants viewed information literacy’s end goal as being to teach students skills needed to obtain knowledge.

Integrating information literacy into higher education curricula is a value in that it forms strategic alliances across campus and ties assessment to student learning outcomes. Students who use the library at least once during their first year had a significant difference in their GPAs and were more likely to continue from their first to second year. In addition, correlations between library use, GPA, and retention were connected to the number of library resources accessed and to participation in library instruction, and there was a significant relationship between upper-level information literacy instruction and the students’ GPAs upon graduation (Luetkenhaus, Hvizdak, Johnson, & Schiller, 2017). Both faculty and librarian responses point out how the introduction of research, coupled with the library activity and course library assignment, contributed to students building and enhancing writing and reading comprehension.

Participants responses aligned with literature that discusses how librarians can play a supportive role by reaching out to teaching faculty to offer help in teaching students critical
information literacy skills, including evaluating and applying research sources (Angell, 2018). Both librarian and faculty participants viewed information literacy and critical thinking as correlates to aid students with academic and life-learning success. Both groups viewed information literacy as essential to critical thinking through the use of collaborative library and course in-class/homework assignments. In this way, participants noted the importance of the role these embedded librarians played in promoting information literacy.

Lack of Institutional Support

It became clear that throughout the study embedded librarians were experiencing a lack of resources, primarily through a lack of staff. Participants noted that they were expected to do their jobs with very little staff and resources. What is more, embedded librarians felt unempowered to be able to even ask for resources and staff and discussed how they wished their institutions would allow them to use their expertise and independence and not treat them as the “invisible department.” Participants shared feeling invisible and struggled with being able to promote the many services offered because of the lack of staffing.

The recent decline of the financial support for academic libraries has left many libraries understaffed; several libraries are under budget and retired librarians are not being replaced due to hiring freezes (Aman, 2010). Community college libraries are accustomed to being flexible when it comes to providing services. A diverse student representation is part of the strength of community colleges and their libraries, but with today's thinly stretched resources it can also make selecting services quite challenging (Osika, & Kaufman, 2012).

Libraries assist colleges by making collection decisions that support changing curriculum in addition to offering services relevant to the students served. Limited or nonexistent institutional support creates interdepartmental issues like staffing which can be devoted to new
services, resources, and deficiency in staff skills required to develop, manage, adapt or adopt new technology.

Spalding and Wang (2006) recognize that libraries around the world are suffering from either stagnant or decreasing budgets due to technological advances and a fluctuating economy. Libraries can no longer assume that their current funding position in their institution is guaranteed every year. Librarians historically have been great at providing quality services and collections but need to spend time explaining the library’s importance in how it can contribute to helping faculty and students (Spalding & Wang, 2006). Spalding and Wang (2006) note several tips for librarians:

- Make the institution aware of the role the library plays.
- Increase visibility and funding for the library.
- Librarians with more knowledge and confidence lead discussions and teaching about public policy issues plaguing access to information.
- Educate the user on better understanding available collections and services and how to use them to achieve academic and research goals.
- Provide visibility for librarianship as a desirable career choice for bright college graduates. (p. 495)

The best way to ensure continuation of this support is for librarians to continue being the voice to support libraries and our students. Through collaboration and advocacy librarians will keep their libraries in constant view of administration and hopefully on the receiving end of organizational support.
Inconsistent Faculty Collaborations

The final finding that emerged from this study was about collaborations between faculty and the embedded librarians. While embedded librarians cited often-inconsistent collaborations with faculty, stating that some faculty worked well and tried to collaborate, whereas other faculty simply did not, faculty also discussed this. For example, one faculty shared how she worked hard to collaborate with the embedded librarian and, in doing so, it helped both her and her students better understand how to do research. On the other hand, another faculty member shared that he did not work to collaborate and instead let the embedded librarian focus on teaching about researching methods. He did not want to “take the time in his class” to go over researching techniques and instead merely left it to the librarian.

Faculty have more influence over students’ learning and have developed a relationship with them; as such, students are much more likely to listen to an information literacy message if it comes from their professor whom they know and trust and who has control over their final grade. In addition, it may help faculty become better researchers and library users (Cowan & Eva, 2016, p. 164). In this way, consistent faculty collaboration and support during the information literacy sessions offered with the embedded librarians are key for students to recognize the importance of these skills. Collaborations are important as often students tend to turn a “deaf” ear to their instructor but become more receptive to a different approach or delivery of information. Collectively, both the librarian and instructor have the opportunity to aid with the success preparation of students becoming information literate.

Collaboration with librarians has long been encouraged, but collaboration for information literacy purposes is critical considering the increase of technology in the amount of information
that is available. Collaborations with faculty representatives are multidimensional, rather than focusing solely on collection development; the integration of information literacy into discipline-specific curriculum and the provision of research consultations for faculty and students are two of the best examples of collaboration. The most effective collaborations foster a closer relationship with teaching faculty because the library is focused on faculty needs and endeavors to understand and address a department’s research and instructional desires (Jacobs, 2010, p. 5). Both librarian and faculty participants expressed the importance of collaborative relationships and contributions to students successfully completing or performing well with course assignments. Yet, to ensure this occurs, it is critical that there be consistent collaborations and both faculty and librarians work together to ensure student success.

**Implications and Reflections**

Important implications from this study have emerged. First, it is clear that while many cite the importance of information literacy and embedded librarian roles in promoting it, the institution has done little to support it. This lack of support has been a historic one as, during the FY 2008 Annual Program and Service Analysis (APSA) of Academic and Student Support Services, the Inner-City Community Colleges (INCC) identified the need for an in-depth review of INCC libraries. In Fall 2009, librarians from all colleges and administrators participated on a district-wide steering committee to design and plan this library review process. Findings from that study included fewer financial resources invested in the libraries, understaffing and no hiring of retirement or resignation of library staff positions, and student access to fewer resources than community colleges. Sadly, the libraries are experiencing the same issues almost ten years later.

This has implications for how the libraries are able to promote (or not promote) information literacy. Lack of funding and understaffing hinder INCC libraries from providing
ample services and resources. Funding was especially a grave concern as it impacts all staffing, library collections, resources, and programs. These limitations diminished current and future access to these resources and services, specifically information literacy through library orientation sessions and embedded librarian programs or collaborations. In the last several years, lack of replacement of retiring or resigning library staff has contributed to INCC Libraries providing services to students. To date, several INCC libraries function with one full time librarian and one or two part time librarians. Clerical staffing is also limited as a fully functional library requires clerical library assistants I, II, III in addition to at least two full time and two to four part time librarians. Services disruptions include decreased hours and days of operation, less careful purchasing of print and audio materials, fewer electronic modes, and little marketing resources for the purpose of promoting events or educational workshops.

The ultimate implication of this lack of institutional support is that INCC librarians’ views regarding these practices are that of devaluing and underappreciating libraries, librarians and subsequently students. There are additional aspects of the data-driven process that still needs investigating and further research is needed regarding the current practice of many library institutions experiencing these same issues of concern. Focus should include how lack or low funding and understaffing affect services, particularly information literacy and embedded collaborations. Monetary support from administration is vital to successfully accomplish the goal of student academic success in the form of information literacy.

This study also has implications for me as a professional in the community college landscape. As a librarian, I have experienced these findings, too. In doing this project, I discovered a dire need for librarians to go beyond discussing issues affecting libraries. Sadly, my colleagues and I are tremendously overworked and understaffed, which unfortunately is the
current state of many peers in this profession. This lack of resources is jeopardizing me from
providing services comparable to other surrounding community colleges in the form of events,
activities, hours and days of operation. I hesitate to attend professional development
opportunities or experience guilt if away longer than two days from the department, being the
sole full-time librarian. In addition, the strain of lack of support from my faculty peers and
administration has caused me to shut down from participating on committees, institution events
or activities. I realize this “burnout syndrome” is inhibiting me from engaging in the profession
over fifteen years ago interested me.

This study has both aided me with this realization and armed me with a focus to continue
the battle of librarian superhero for student success. Although some days are a struggle, I am
slowly discovering the passion again.

**Recommendations**

The case study findings indicate that embedded librarians serve a key function within
promoting information literacy; however, underfunding and understaffing hinder the ability of
INCC libraries to provide ample library services and resources to students. Underfunding is a
vital concern as it impacts all aspects of staffing, library collections and resources, and programs.
As a result, these restraints lessen students’ access to library learning resources and services,
specifically information literacy through library orientation sessions and embedded librarian
programs.

Based on the findings, the following recommendations are presented to INCC
administration, specifically vice presidents of Academic and Support Services:

1. Identify best practices among the seven colleges and collaborate to develop plans for
managing implementation of embedded librarian programs.
Without additional funding or reallocation of resources, the INCC libraries are unable to provide students with services or resources. The vice presidents have an important leadership role in the implementation of college-level recommendations at each college. Each campus is advised to create a committee that will include the vice president of Academic Affairs and Instruction, dean of Instruction, at least two faculty representatives who currently collaborate with a librarian, and one or two librarians.

2. Increase communication to ensure librarian contribution in any policy changes that will impact libraries.

Libraries are often excluded from academic planning, resulting in limited input of district projects, policies, request for proposals (RFP) and procedural changes that significantly impact library functions or delivery of support to students. In addition, schedule semi-annual meetings (Fall and Spring Semesters) with library faculty and staff, executive directors, Student Affairs, and college business offices to coordinate library needs.

3. Develop a strategic plan for capital improvement and maintenance for all INCC libraries and allocate resources to support this plan.

Communication is essential and imperative among colleges and district administration to ensure librarian feedback on policy changes impacting the libraries. Schedule semi-annual meetings (Fall and Spring Semesters) for librarians and staff, executive directors, Student Affairs, and college business offices to coordinate library needs.
Recommendations for Future Research

While the findings from this study illustrate important steps for ensuring embedded librarians are more integrated within the community college system, there continues to be a need for future research. Specifically, it is critical that institutions not only provide embedded librarian programs, but also assist faculty on how to utilize them as a resource. As such, a recommendation for future research is to pilot and evaluate a program that examines how to engage faculty in best practices using embedded librarian programs. Specific attention should be paid to how faculty understand, use, and implement library resources as well as information literacy.

Conclusion

“Academic librarians have a significant responsibility to help students become information literate. Their teaching role is complex and challenging and has shifted over time from a strict focus on teaching students how to find materials in the library to broader goals which include teaching transferable skills such as critical thinking and information evaluation” (Julien, Gross, & Latham, 2018, p. 179). Importantly, this study found that while there is a need for information literacy and library orientation sessions, and librarians are key in promoting these, librarians are hindered by a lack of institutional support through understaffing and underfunding. Moreover, partnerships with faculty are a best practice, as they are crucial for connecting students early towards the goal of developing research skills.

The primary challenge facing the INCC libraries is underfunding, which impacts all facets of the INCC libraries including staffing, library collections and resources. This lack of support hinders library programming and students, who have access to fewer library learning resources and services. Curriculum and teaching are at the forefront of the INCC libraries’
efforts to improve student outcomes, in addition to providing the resources and services students need to learn and persist in their studies. Libraries contribute to students’ academic success through library resources and services provided to them. Library services and educational programs are important for the development of students’ information literacy. Institutions must invest in libraries, provide resources, and value the work librarians do, not as a means to support the institution, but to support student success and life learning.
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APPENDIX A

RECRUITMENT EMAIL TO EMBEDDED LIBRARIANS
To: colibrarians@INCC.edu

Hello Librarian Colleagues,

I am currently a Northern Illinois University doctoral student working on my dissertation project, “Librarians in Community Colleges: Strategies for Promoting Information Literacy.” I am seeking assistance with my dissertation project that is examining the roles embedded librarians play in information literacy in the community college setting. Specifically, I am hoping to examine embedded librarians’ experiences with teaching to and about information literacy and the challenges and successes embedded librarians have experienced.

My plan is to begin (date). I am reaching out to both full-time and part-time librarians with the goal of interviewing and observing embedded librarians.

The process will entail:

- An interview prior to the requested library orientation session inquiring about your experiences with information literacy, embedded librarian, and assessment.
- Document Analysis of the following: Syllabi, PowerPoints related to information literacy, course materials related to information literacy, any course texts, textbooks, etc. about information literacy students receive, any webpages or documents that talk about goals related to students' objectives as it pertains to information literacy

Some personal data from you is part of the data collection process (your age, race, educational background) however, the information will be kept private and confidential and kept confidential in a locked cabinet with the sole holder of the key being the researcher (Sharon Silverman). You will be given a pseudonym and no identifiable information will be used in a publication or presentation.
The two interviews will take between 1 hour and 1 hour 30 minutes (depending on your response answers). There are no right or wrong answers, what’s important is your opinion. After the interview, I may contact you later to clarify certain responses to these questions. Participation in this research is completely voluntary and you may choose to withdraw from the research at any time or not answer questions that you do not feel comfortable answering. The participant information form and consent form have been attached for your information. If you wish to participate and/or have further questions, please contact me.

Thank you,

Sharon

Sharon T. Silverman

Graduate Student

Northern Illinois University
APPENDIX B

EMBEDDED LIBRARIAN INFORMED CONSENT FORM
Title of Study: Librarians in Community Colleges: Strategies for Promoting Information Literacy

Investigators: Sharon Silverman

This form describes a research project. It has information to help you decide whether or not you wish to participate. Research studies include only people who choose to take part—young participation is completely voluntary. Please discuss any questions you have about the study or about this form with the project staff before deciding to participate.

Introduction

The purpose of this study is to examine how embedded librarians within college-level courses, especially those requiring research, promote information literacy in the community college classroom.

Description of Procedures

If you agree to participate, you will be asked to complete an hour-long interview, an observation of your embedded librarian class session, and then another hour-long interview. Interviews will take place at an agreed-upon time and location.

Risks or Discomforts

Importantly, you may feel uncomfortable at times discussing your experiences. As such, you can stop participation at any time and there will be no penalty.
Benefits

If you decide to participate in this study, there may be no direct benefit to you; however, findings from this project will benefit how other librarians in community college settings engage in promoting information literacy to students.

Costs and Compensation

There are no costs or compensations for this study.

Participant Rights

Participating in this study is completely voluntary. You may choose not to take part in the study or to stop participating at any time, for any reason, without penalty or negative consequences. There will be no negative consequences if you choose not to participate. Your choice of whether or not to participate will have no impact on you.

If you have any questions about the rights of research subjects or research-related injury, please contact the Research Compliance Coordinator, Patty Wallace, (815) 753-8588 or pwallace@niu.edu, Office of Research Compliance and Integrity, Northern Illinois University.

Confidentiality

Records identifying participants will be kept confidential to the extent permitted by applicable laws and regulations and will not be made publicly available.

To ensure confidentiality to the extent permitted by law, the following measures will be taken: all information collected will be stored in a locked cabinet with the sole holder of the key being the researcher (Sharon Silverman).
Questions

You are encouraged to ask questions at any time during this study. For further information about the study, contact Sharon Silverman at z1727282@students.niu.edu.

Consent and Authorization Provisions

Your signature indicates that you voluntarily agree to participate in this study, that the study has been explained to you, that you have been given the time to read the document, that you are 18 years or older, and that your questions have been satisfactorily answered. You will receive a copy of the written informed consent prior to your participation in the study.

1. Your signature below indicates agreement to participate in this study.

Participant’s Name (printed) __________________________________________

_________________________________________ Date

Participant’s Signature

2. Your signature below indicates agreement that your interviews will be audio recorded.

_________________________________________ Date

Participant’s Signature
To: TDL-faculty@INCC.edu, health-faculty@INCC.edu, produce-faculty@INCC.edu, TAC-faculty@INCC.edu

Hello Faculty Colleagues,

I am currently a Northern Illinois University doctoral student working on my dissertation project, “Librarians in Community Colleges: Strategies for Promoting Information Literacy.” I am seeking assistance with my dissertation project that is examining the roles embedded librarians play in information literacy in the community college setting. Specifically, I am hoping to examine embedded librarians’ experiences with teaching to and about information literacy and the collaborative relationships with faculty who collaborate with librarians for the purpose of them being embedded in their course(s).

My plan is to begin (date). I am reaching out to you at the recommendation of the librarian currently embedded in your course(s).

The process will entail:

- An interview prior to the requested library orientation session inquiring about your experiences with information literacy, embedded librarian, and assessment.
- Document Analysis of the following: Syllabi, PowerPoints related to information literacy, course materials related to information literacy, any course texts, textbooks, etc. about information literacy students receive, any webpages or documents that talk about goals related to students’ objectives as they pertain to information literacy.

Some personal data from you is part of the data collection process (age, gender, and educational background); however, the information will be kept private and confidential and kept in a locked cabinet with the sole holder of the key being the researcher (Sharon
Silverman). You will be given a pseudonym and no identifiable information will be used in a publication or presentation.

The interview will take between 1 hour and 1 hour 30 minutes (depending on your response answers). There are no right or wrong answers; what’s important is your opinion.

After the interview, I may contact you later to clarify certain responses to these questions.

Participation in this research is completely voluntary and you may choose to withdraw from the research at any time or not answer questions that you do not feel comfortable answering.

The participant information form and consent form have been attached for your information.

If you wish to participate and/or have further questions, please contact me.

Thank you,

Sharon

Sharon T. Silverman

Graduate Student

Northern Illinois University
APPENDIX D

FACULTY INFORMED CONSENT FORM
Title of Study: Librarians in Community Colleges: Strategies for Promoting Information Literacy

Investigators: Sharon Silverman

This form describes a research project. It has information to help you decide whether or not you wish to participate. Research studies include only people who choose to take part—your participation is completely voluntary. Please discuss any questions you have about the study or about this form with the project staff before deciding to participate.

Introduction

The purpose of this qualitative multisite case study is to examine how embedded librarians within college-level courses, especially those requiring research promote information literacy in the community college classroom.

Description of Procedures

If you agree to participate, you will be asked to complete an hour-long interview and observation of your requested embedded librarian class session. Interviews will take place at an agreed upon time and location.

Risks or Discomforts

Importantly, you may feel uncomfortable at times discussing your experiences. As such, you can stop participation at any time and there will be no penalty.
Benefits

If you decide to participate in this study, there may be no direct benefit to you, however, findings from this project will benefit how other faculty-librarian collaborations in community colleges settings engage in promoting information literacy to students.

Costs and Compensation

There are no costs or compensations for this study.

Participant Rights

Participating in this study is completely voluntary. You may choose not to take part in the study or to stop participating at any time, for any reason, without penalty or negative consequences. There will be no negative consequences if you choose not to participate. Your choice of whether or not to participate will have no impact on you.

If you have any questions about the rights of research subjects or research-related injury, please contact the Research Compliance Coordinator, Patty Wallace, (815) 753-8588 or pwallace@niu.edu, Office of Research Compliance and Integrity, Northern Illinois University.

Confidentiality

Records identifying participants will be kept confidential to the extent permitted by applicable laws and regulations and will not be made publicly available.

To ensure confidentiality to the extent permitted by law, the following measures will be taken: all information collected will be stored in a locked cabinet with the sole holder of the key being the researcher (Sharon Silverman).
Questions

You are encouraged to ask questions at any time during this study. For further information about the study, contact Sharon Silverman z1727282@students.niu.edu.

Consent and Authorization Provisions

Your signature indicates that you voluntarily agree to participate in this study, that the study has been explained to you, that you have been given the time to read the document, that you are 18 years or older, and that your questions have been satisfactorily answered. You will receive a copy of the written informed consent prior to your participation in the study.

1. Your signature below indicates agreement to participate in this study.

Participant’s Name (printed) ____________________________________________________________

_________________________________  Date

Participant’s Signature

2. Your signature below indicates agreement that your interviews will be audio recorded.

_________________________________  Date

Participant’s Signature
APPENDIX E

INTERVIEW QUESTION TOPICS (LIBRARIANS)
Good Morning/Afternoon/Evening,

Thank you for agreeing to participate in this research study. Before I begin, this interview will be recorded to allow accurate documentation of your responses. Some personal data from you is part of the data collection process (age, gender, and educational background) however, the information will be kept private and confidential and kept confidential in a locked cabinet with the sole holder of the key held by me. You will be given a pseudonym and no identifiable information will be used in a publication or presentation.

Once transcribed, I will contact you via email to allow you to review for any corrections.

Are you ready to begin?

__________________________

Interviewer (I): Sharon Silverman

Participant (P):

Date of Interview:

Start Time of Interview:

End Time of Interview:

Location of Interview:

Interview Topic: The student and Library Literacy/Resources

__________________________

Interview Questions 1

Theme: Information literacy

1. How do you define information literacy?

2. Why do you think information literacy is important?

3. How can the institution support library information literacy?

4. What are the attributes of an information literate person?

5. How will information literacy strengthen students’ academic performance?
**Theme: Embedded Librarian**

1. What do you wish faculty knew about your role as an embedded librarian?
   2. What do you think are the benefits to faculty as the embedded librarian in their course?
   3. What do you wish the institution would do differently to support embedded librarianship?
   4. What are the benefits to students in these embedded sessions?
   5. What do you feel the institution is doing well regarding the embedded librarian program?

**Theme: Assessment**

1. What challenges have you had to overcome to implement an embedded librarian program at your institution?
   2. Tell me how you assess information literacy?
   3. What is your pedagogical approach to aid students with becoming information literate?
   4. How do you assess your embedded librarian course collaborations?
   5. What changes would you like to see regarding how embedded librarians are integrated in your institution?

**Theme: Information literacy**

1. What professional resources do you consult to provide print and digital resources in the collection? (Reviews from professional library journals, workshops, conferences, and membership in professional organizations.)
   2. What do you believe to be the characteristics of an exemplary librarian? (Continued professional growth, connected relationships with staff and administration …)
   3. What are some of the challenges you face providing library instruction?
   4. How do you ensure student understanding?
   5. Specifically, what do you expect the student to know?
Theme: Pedagogy

1. How do you collaborate with instructors to determine student needs? (Email and face to face discussions provide support prior to and during instruction.)

2. What things do you routinely do to extend your content knowledge in the subject/subjects you teach? (Professional development, conferences, read professional journals to seek information on emerging topics and trends in the field.)

3. Describe the process you use as you plan your library session(s). (Knowledge of district-approved information literacy curriculum and general curriculum, collaboration with teachers, application of academic and information literacy standards, differentiation of instruction, instructional strategies, activities, and assessment.)

4. How do you adapt instruction for those students who need extra time and alternative strategies to master a concept? (IEP, discussion with classroom teacher and/or learning support professionals)

5. How do you develop collaborative and/or differentiated instruction?

Theme: Assessment

1. What types of assessments do you use? (Rubrics, checklists, graphic organizers, exit tickets, surveys, formal research projects, questioning and discussion strategies.)

2. How do you set your goals in relationship with academic and information literacy standards? (Library/librarian Standards for instructing students in a variety of resources to meet their instructional goals in all subject areas.)

3. What do you do when you are halfway through your lesson and you realize that your students don’t understand the concept you are teaching?

4. What strategies or techniques do you use to maximize student engagement? (Utilize a wide variety of instructional activities, focus on inquiry-based learning, require participation from all students, encourage student interaction with one another.)

5. How do you know that your instruction is effective?
Good Morning/Afternoon/Evening,

Thank you for agreeing to participate in this research study. Before I begin, this interview will be recorded to allow accurate documentation of your responses. Some personal data from you is part of the data collection process (age, gender, and educational background) however, the information will be kept private and confidential and kept confidential in a locked cabinet with the sole holder of the key held by me. You will be given a pseudonym and no identifiable information will be used in a publication or presentation. Once transcribed, I will contact you via email to allow you to review for any corrections. Are you ready to begin?

Interviewer (I): Sharon Silverman

Participant (P):

Date of Interview:

Start Time of Interview:

End Time of Interview:

Location of Interview:

Interview Topic: The student and Library Literacy/Resources

Interview Questions

Theme: Professional Experience

1. What is your faculty status? (tenured, non-tenured, adjunct)

2. What is your primary academic discipline?

3. How long have you been teaching in this discipline?

Theme: Information literacy
1. How do you define information literacy?

2. Why do you think information literacy is important?

3. How is information literacy important to the institution?

4. What do you consider attributes of an information literate person?

5. How will information literacy strengthen your students’ academic performance?

**Theme: Embedded Librarian**

1. How has the embedded librarian reinforced expectations for student research to your students?

2. What do you think are the benefits of a faculty-embedded librarian collaboration?

3. How has the faculty-embedded librarian impacted the design of your research assignments?

4. What is the benefit to students having a librarian embedded librarian in their course?

5. How does the embedded librarian program benefit the institution?

6. How has the collaboration with a librarian embedded in your course impacted your use of the library and library resources?

7. Do you collaborate with the embedded librarian regarding the instructional context in your course(s)?

8. How often do you request or utilize library instruction services for your course(s)? (Derived from Miami University Middletown, 2010).