

AN ABSTRACT OF THE DISSERTATION OF

Melinda McCormick Coslor for the degree of Doctor of Philosophy in Education
presented on April 2, 2015.

Title: Libraries and the Community College Baccalaureate: Meeting the Challenge

Abstract approved: _____

Darlene F. Russ-Eft

The community college baccalaureate movement has shown strong growth across the country as a strategy to meet workforce shortages. A variety of forces are driving the movement including (a) employer demand for higher credentials; (b) geographical access to education; (c) lower cost education; (d) a trained workforce to compete in the global economy; and (e) a pathway to the baccalaureate degree for terminal, two year programs. Researchers reported that the three most expensive preparations made by community colleges implementing a baccalaureate program are hiring appropriate level faculty, upgrading labs, and upgrading the library. No research was found on how libraries changed to meet the needs of a community college baccalaureate program.

The purpose of this study was to understand how community college libraries enhance information resources and adapt services to support community college baccalaureates. It used a multiple case study with an interpretive, hermeneutic approach, in order to gather the voices and perspectives of those involved in changes in the library. The study took place in three libraries serving community colleges serving different populations in different settings: urban core, urban/suburban, and urban/rural in Washington State. To be included, the colleges had successfully implemented at least one baccalaureate program and achieved regional accreditation and, if required, achieved specialized accreditation. The subjects were librarians at community colleges with direct knowledge of the implementation process. At each site, one library administrator and at least one faculty librarian were interviewed.

The researcher interviewed each of the participants separately at the work site using a partially open question protocol. The researcher transcribed the recordings and

asked the participant to clarify or correct the transcript. The transcripts were coded using HyperRESEARCH qualitative research software. A draft of the case study from the themes that emerged during coding was sent to the participants to review and provide feedback in a telephone interview. These steps were taken to guard against researcher bias.

The library administrator served as the library advocate throughout the process. The librarians sought guidance outside the college and from discipline faculty within the college. Collaboration between librarians and discipline faculty emerged as a strong factor in planning and implementing changes to the library information resources and the design of information literacy instruction. The librarians cited underprepared students and communications between the librarians and discipline faculty as the biggest challenges they faced. The librarians were also concerned about ongoing funding and technology. The libraries conducted little assessment beyond the general user satisfaction surveys conducted by the colleges.

Based on the results of the study, it was recommended that library leaders need to facilitate communication and planning between librarians and discipline faculty to ensure that collection development and information literacy instruction meets the needs of students and the program. Librarians need to recognize that returning adult students may have a skills gap in library research and technology. Librarians can prepare to assist students in learning those skills. Library leaders need to continue to advocate for ongoing funding to support the information resource needs of the baccalaureate program. Libraries need to formalize assessment efforts.

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April 2, 2015

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Libraries and the Community College Baccalaureate: Meeting the Challenge

by

Melinda McCormick Coslor

A DISSERTATION

submitted to

Oregon State University

in partial fulfillment of
the requirements for the
degree of

Doctor of Philosophy

Presented April 2, 2015

Commencement June 2015

Doctor of Philosophy dissertation of Melinda McCormick Coslor presented on April 2, 2015

APPROVED:

Major Professor, representing Education

Dean of the College of Education

Dean of the Graduate School

I understand that my dissertation will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my dissertation to any reader upon request.

Melinda McCormick Coslor, Author

ACKNOWLEDGEMENTS

My road to the Ph.D has been enriched by the guidance of wonderful professors. Among this great group I include my major professor, Dr. Darlene Russ-Eft, my secondary professor Dr. Alex Sanchez, and, with admiration and appreciation, Dr. George Copa. I would also like to thank members of my committee: Dr. Margaret Niess, Dr. Joseph Krause, and Dr. Debra Gilchrist.

The Ph.D. road is a largely solitary venture requiring independent research, reflection, and writing. However, the road would have been lonely indeed without the camaraderie of my cohort. In this venture, I have been extremely fortunate to have had such supportive and agreeable traveling companions. Our joys, pains, accomplishments, and losses were shared. Our shortcomings were forgiven and our strengths were celebrated. At times when I felt every personal obligation was being shortchanged by the pursuit of my goal, my cohort understood. To this intrepid group of “Beans,” I owe a deep gratitude.

I would also like to acknowledge the community within my place of employment. The support of colleagues who recognized the value of professional development both to me and my institution cannot be underestimated. Their willingness to listen over and over about the challenges and enlightenments while offering encouragement and wisdom was appreciated. Their occasional inquiries about my progress reminded me that a good dissertation is a done dissertation. I want to especially thank Dr. Thomas Keegan, Dr. Gary Tollefson, Dr. Kenneth Lawson, Dr. Maureen Pettitt, and Dr. Harriet Custer along with the faculty and staff of Skagit Valley College. A special thanks and recognition goes

to my colleagues in the library: Margret Mills, Elena Bianco, Linda Hendrick, Susan Kent, Julie Bishop, Stephanie Hunter, Maureen Lee, and Kim Engberg.

Finally, to my family who endured the greater part of my personal “drive time” on the road to my degree, I want to offer a special thank you. To my son, Charlie, who found himself in the unusual position of entering college at the same time as his mother, I thank you for your patience when I missed Mother’s Weekend and Homecoming each year. Thank you also to my son, David, who throughout high school tolerated a mom who needed quiet time so she could study. I only hope they comprehend how much their indulgence and support meant to me. With luck, they’ll come to recognize that education is a life-long endeavor.

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DEDICATION

I dedicate this dissertation to my sons Charles Clark Coslor and David Wesley Coslor who make me proud to be their mom.

To C.S.M., R.G.C., and G.M.G., in memoriam.

Chapter One—Focus and Significance

Often called the “people’s colleges” (Cohen & Brawer, 2008; Floyd & Skolnik, 2005), community colleges are recognized as adaptive and responsive to the needs of their communities (Cohen & Brawer, 2008). Over the years, the community college mission has expanded from the junior college “offering two years of instruction of strictly collegiate grade” (Unpublished Proceedings of the Second Annual Meeting of the American Association of Junior Colleges as quoted by Brick, 1994, p. 59); to “terminal vocational education” (Eells, 1941a); to developmental education; to community education; to contract training; and to community service (Ratcliff, 1994, 2002). More recently, this has included offering specific baccalaureate programs to fill unmet workforce needs within the community (Bemmel, Floyd, & Bryan, 2009; Floyd & Skolnik, 2005; Walker & Floyd, 2005).

Baccalaureate programs offered by community colleges are relatively new. They represent a vertical expansion of the traditional community college mission, but the colleges still hew to the mandate of open access and serving the needs of the local community (Fliegler, 2006; Walker, 2005). The community college baccalaureate (CCB), as described here, differs from other models, such as the university center or the university extension, in that the community college confers the baccalaureate degree (Floyd, 2005). The emergence of the community college-conferred baccalaureate has prompted accrediting bodies to reexamine definitions for these “hybrid institutions” (Floyd, 2005, p. 37; Higher Learning Commission, 2001) to allow for dual accreditation at both the baccalaureate and associate levels (Floyd, 2005).

The decision to offer a CCB program has a profound effect on every area of the college (Furlong, 2005; Hofland, 2011). The library has been specifically mentioned as an area requiring significant upgrading to meet accreditation standards for a four-year program (Furlong, 2005; Glennon, 2005; Hofland, 2011; McKee, 2001, 2005; Remington & Remington, 2005; Ross, 2006). Indeed, the library has been cited as one of the three greatest costs for community colleges when implementing a baccalaureate program (McKee, 2001, 2005; Remington & Remington, 2005; Ross, 2006). In their research, McKinney and Morris (2010) noted “that several participants in this study were surprised at how many additional resources the library would need to accommodate the new degree” (p. 203). It is important, therefore, for policy makers, leaders, and practitioners to be aware of both the fiscal and institutional impact in preparing the library to meet the challenge of a CCB program.

Research Purpose and Questions

Research has indicated that libraries have been upgraded during implementation of CCB programs (McKee, 2001, 2005; Remington & Remington, 2005; Ross, 2006), yet very little has been published on the process, and no research studies have been identified that would inform policy makers, leaders, or practitioners. The purpose of this study was to understand how community college libraries enhanced information resources and adapted services to support this new mission area. The central question of this study was how do community college libraries successfully prepare to meet the needs of a CCB program?

Four research questions provided focus for this study:

1. How do libraries identify changes needed to meet the needs of a CCB program?

Libraries are complex organizations (Gilstrap, 2009) managing information resources in many formats and providing services in many contexts and environments (Godin, 2006). Identifying areas of impact in order to support a baccalaureate program enables a library to plan for change (Lawless, 2001).
2. How do libraries plan and implement the changes needed to meet the needs of a CCB program? Planning for implementation helps staff know what to expect and also prepares students and faculty for change (Lawless, 2001; Vierthaler, 2006). Identifying steps taken during implementation will help detect possible patterns among libraries. Though every library is different and every baccalaureate program presents different challenges, similar themes are expected to be identified that may inform leaders and practitioners.
3. How do libraries manage the challenges encountered while implementing changes? Organizational dynamics, funding, and political realities, both internal and external to the program, conspire to create potential challenges. How libraries navigate those challenges would be useful for college and library leaders to know in the context of this study. Application of systems and complexity theories may provide insight to understanding the actions of libraries (Gilstrap, 2009).
4. How do libraries evaluate the success of the changes and what additional changes were made as a result of the evaluation? The purpose of evaluation is to improve the quality of the program (Patton, 2002; Russ-Eft & Preskill, 2001, 2009) and

may involve a variety of assessment tools. Assessments may be internal, such as institution-conducted user satisfaction surveys, or they may be external, such as accreditation evaluator reports (Russ-Eft & Preskill, 2001, 2009). The process of planning, implementation, and evaluation is iterative. Closing the feedback loop through evaluation provides leadership with the information to assure that the library is meeting identified needs.

Significance

The societal benefit of an educated workforce, both on local and national levels, is often cited for this movement into the CCB (Walker, 2005). Employer demand for higher entry-level credentials (Bemmel et al., 2009; Burning Glass Technologies, 2014; Walker & Floyd, 2005) and documented personal financial benefits of a baccalaureate degree (U.S. Department of Labor. Bureau of Labor Statistics, 2012) have contributed to a greater demand for baccalaureate degrees than the universities can meet (Bemmel et al., 2009; Walker & Floyd, 2005). The CCB is one of several models cited for helping place-bound students complete their education (Burke & Garmon, 1995; Floyd, 2005). In addition, career and technical programs often provide no other pathway to a baccalaureate degree (Walker & Floyd, 2005). These factors have led to a movement among community colleges to meet local demand for baccalaureate programs (Walker, 2005).

This study is significant because the literature demonstrates that (a) there is an increased interest in the CCB, (b) upgrading the library is one of the three most expensive activities for a college implementing a CCB; (c) case studies of faculty preparing curricula for a new CCB program often mention the use of library resources to support

their work, their professional development, and students; (d) accrediting bodies expect the library to demonstrate increased breadth and depth for general education resources and deeper resources for the baccalaureate programs; and (e) this area of study contributes to needed new knowledge.

Increased interest in the applied baccalaureate. Beginning in the mid-1990s (Burke & Garmon, 1995; Call, 1997), interest began to grow in the CCB as an alternate model for making higher education available in local communities (Floyd, Skolnik, & Walker, 2005). The CCB Association was founded in 1999 to support the movement (Walker, 2005). Some early adopters, such as Great Basin (Hofland, 2011; Remington & Remington, 2005) and St. Petersburg (Furlong, 2003, 2005), identified shortages of teachers or nurses within their communities as a motivation. As a barrier for place-bound students, Floyd (2005) noted a lack of reliable and convenient class offerings through the university center or university extension models. Student demand for inexpensive and locally-accessible baccalaureate degrees contributed to the interest to explore the CCB as an extension of the community college mission to serve their communities (Walker, 2005).

Expense for upgrading the library. Bemmell, Floyd, and Bryan (2009); Cook (2000); Essink (2013); Glennon (2005); McKee (2001, 2005); Remington and Remington (2005); as well as Ross (2006) reported that faculty salaries, libraries, and laboratories were the three highest costs to an institution when implementing a CCB. As high-cost areas, library leaders need to ensure that dollars are spent responsibly and will have the greatest impact. Remaking the library as a baccalaureate-serving program requires vision and planning.

Use of library resources to support faculty work. Ross (2006) and Hofland (2011) found that faculty placed high value on improved library resources to support curriculum development, professional development, and upper *as well as* lower division students. Faculty not only believed that the improvements in the library supported their work in the baccalaureate program, they believed it provided benefits for everyone at the college. Identifying steps libraries took to meet the needs of the faculty and students at baccalaureate-granting community colleges could offer a roadmap for other libraries.

Expectations of accrediting agencies. As part of their responsibility to maintain quality in higher education, regional accrediting associations and commissions review library holdings and services. A change in level of degree offered (e.g. from associate to baccalaureate degree) requires the college to submit a substantive change notification and acquire approval from its respective accrediting body. Accrediting bodies have studied and revised substantive change policies to address the CCB movement (Floyd, 2005; Higher Learning Commission, 2001). Libraries must be able to “demonstrate significant change” (Discussion, Northwest Commission on Colleges and Universities, Evaluator Training, Seattle, Washington, March 1, 2012) in terms of depth and breadth of the collection to support both the specific baccalaureate program and general education (Hofland, 2011).

Need for new knowledge. Ross (2006) studied the professional development and support required for faculty as they developed and implemented a baccalaureate program at a community college. He employed a mixed methods design that included both a survey and semi-structured interviews. For future research, he recommended expanding the study to other instructional and non-instructional areas of the college.

McKee (2001) cautioned that funding to upgrade the library may affect allocations to traditional programmatic areas of the college and should be studied. Though my research will not specifically address fiscal impacts on traditional programmatic areas, I will identify changes to library allocations. McKee's concern highlights the importance of careful planning and stewardship of allocated resources.

Leeder (2013) noted a lack of participation in scholarly research among community college librarians. "As a result," she stated, "community college libraries' activities, challenges, and accomplishments are woefully under researched and under-represented in the professional literature" (p. 190). My own search of the literature failed to uncover any previous research into how community college libraries changed to meet the needs of a CCB program. This study will fill that gap.

Terms and Concepts

For the purposes of this study, the term *two-year college* will be used generically to mean junior colleges, technical institutes, or community colleges. *Junior college* will be used to mean a college offering exclusively lower division academic curriculum enabling a student to transfer to a college or university as a junior. *Technical institute* will be used to indicate a college offering only career and technical education (CTE) programs. The term *community college* will be used for a college that offers a comprehensive program of academic, CTE, developmental, and continuing education to meet the educational needs of a local community (Wallace, 1976).

After 1972, community college libraries were commonly referred to as learning resource centers. The 1994 *Standards for Community, Junior, and Technical College Learning Resources* defined learning resources as "an organizational configuration which

provides a core of library and media materials and a variety of related services”

(Association of College and Research Libraries, 1994, p. 572). Based on the use of the terms *learning resources* and *libraries* throughout the literature (Association of College and Research Libraries, 1994; Hisle, 1989), this study will use both terms without any implied distinction.

Chapter Summary

This chapter presented the problem of library program enhancement and development in the context of the vertical expansion of the community college mission with the implementation of a CCB program. The central question for this multiple case study was how do community college libraries successfully prepare to meet the needs of a CCB program? The research questions were:

1. How do libraries identify changes needed to meet the needs of a CCB program?
2. How do libraries plan and implement the changes needed to meet the needs of a CCB program?
3. How do libraries manage the challenges encountered while implementing changes?
4. How do libraries assess the success of the changes and what additional changes were made as a result of assessments?

This study was significant for five major reasons. Review of the literature indicated that (a) there is an increased interest in the applied baccalaureate degree; (b) the library program was one of the three most expensive aspects of implementing a baccalaureate program; (c) the enhanced library program supports faculty writing curriculum, fulfilling professional development, and conducting research, as well as supporting upper and lower division student work; (d) the library collection and services

must meet higher accreditation standards; and (e) this research will contribute to new knowledge.

Chapter Two—Review of the Literature

The purpose of this study was to understand how community college libraries enhanced information resources and adapted services to support this new mission area. The literature review provides the historical context for the study and identifies major themes that provided the foundation for the study. This chapter explores the following themes in the literature:

- The historical context of libraries within the evolving community college mission. The mission of the community college library evolved in tandem with the community college mission. This section traced the evolution of the community college mission and describes the ways in which the libraries changed to meet the needs of community colleges and the students they served.
- The policy issues of the community college baccalaureate (CCB). Many authors have debated the pro and con of the CCB movement. This section summarized both sides of the argument and provided the foundation for the study of the CCB.
- The implementation of CCB programs. The literature provided insight into how colleges implemented the new baccalaureate programs. In this section, I looked at implementation at the state, institutional, and unit levels. The limited amount of information on libraries serving CCB programs brought to light the need for a study on how community college libraries adapted to the expansion of the college mission.

Key Terms

This section provides definitions of key terms used in the literature review. Though in common usage within respective fields, the definitions ensure clarity and a common understanding for the reader.

- *Applied Workforce Baccalaureate* is a degree designed to meet workforce needs. Walker and Floyd (2005) gave examples “such as teacher education and certification, nursing, culinary arts, electronic technology, information systems technology, computing, and business administration” (p. 99).
- *Bachelor of Applied Science (BAS)* is a degree offered by public community and technical colleges in Washington State with oversight from the Washington State Board for Community and Technical Colleges (SBCTC) and accredited by the Northwest Commission on Colleges and Universities (NWCCU).
- *Career and technical education (CTE)* is defined by the Carl D. Perkins Career and Technical Education Act of 2006 “as organized educational activities that offer a sequence of courses that provides individuals with the academic and technical knowledge and skills the individuals need to prepare for further education and for careers in current or emerging employment sectors” (Perkins Collaborative Resource Network for Program and Data Quality, n.d. para. 2)
- *Collection development* is a professional activity of selecting and removing library materials to meet the curricular and extra-curricular needs of a college in alignment with the institution’s unique mission and goals (Johnson, 2009; Johnston, 1994).

- *Community college* is a comprehensive, two-year college offering university transfer, career and technical education (CTE), General Equivalency Diploma (GED), English-as-a-Second Language (ESL) programs, continuing education to upgrade work skills, and community education for personal enrichment. These colleges confer associate degrees and short-term certificates (Vaughan, 2006; Wallace, 1976).
- *Community college baccalaureate (CCB)* is a bachelor's degree conferred by the community college. The specific area of study is driven by local needs. Some colleges have offered programs in teacher education or nursing. Others have restricted their baccalaureate offerings to CTE areas in which bachelor degrees might not otherwise exist (see also *Applied workforce baccalaureate*). According to Floyd and Walker (2009), "the use of the term 'community college baccalaureate' is being limited to bachelor's degrees solely awarded by community colleges."
- *Information literacy* is a set of skills that includes the ability to articulate an information need, develop a strategy to find the information, access the information legally, use it ethically to fulfill a specific purpose, and, finally, evaluate the research process. Information literacy involves critical thinking skills, may involve technology skills, and encourages meta-cognitive awareness through evaluation of the research process (Association of College and Research Libraries, 2012).
- *Junior college* is a two-year college at the freshman/sophomore level that prepares students for transfer, with an associate degree, to a university or four-

year college. As comprehensive community colleges evolved in the 1960s, the term has gradually disappeared (Arnold, 2010).

- *Learning resource center* is the physical space that houses the combination of traditional library services and audio-visual services (Rusk, 2006).
- *Learning resources program* is a term that came into common usage after 1972 to describe the combined services of library; media services (providing equipment, audio-visual materials, and media production); and sometimes tutoring or developmental instruction. The literature notes that the term library is gaining ground again “often reflecting that, in the vernacular used by students and faculty, our departments continue to be thought of as libraries” (Dowell, 2006, p. xiii). The literature continues to use both terms. No distinction is implied within this study.
- *Library* is a program offering print, non-print, and electronic media to students, faculty, staff, and, often, the community. The library program offers services such as reserves (materials reserved for the use of a specific class or purpose), interlibrary loans, instruction on information literacy, and liaison with faculty to support curriculum, and it provides consultation on effective library research assignments. The term may also refer to the physical facility housing such materials and services. The term may be used interchangeably with learning resources program or learning resources center (Association of College and Research Libraries, 1994; Hisle, 1989)

- *Two-year college* is a generic term that encompasses community colleges, junior colleges, and technical colleges. It makes no distinction between public and private colleges (Wallace, 1976).

These definitions provided needed clarity to improve understanding on the part of the reader.

Approach to the Literature Search

This section describes my approach to the literature search. The initial search focused on identifying literature on the CCB and libraries. To conduct that search, I initially used a search strategy of (*librar** or *learning resources*) and *community college baccalaureate*. I searched the following databases through EBSCOhost: Academic Search Premier; Education Research Complete; ERIC; Teacher Reference Center; and Library, Information Science & Technology Abstracts. A subject search yielded zero articles. A keyword search produced results for the *community college baccalaureate*, but without any focus on libraries or learning resources. A search through ProQuest Direct also yielded zero results. I continued my research using the keywords *community college baccalaureate* and a separate search for *community college librar**. I found a review for a book titled *The Community College Baccalaureate: Emerging Trends & Policy Issues*. Then I reviewed the reference lists of retrieved articles, reports, and books. The reference lists provided more documents, including an article on the transformation of the library for Rogers State University (Lawless, 2001).

I searched the Summit Catalog from ORBIS Cascade Alliance and WorldCat for more books. Searching Google revealed additional reports and articles on the CCB, but still no research study specifically about transforming the library. I also searched for

dissertations both through Google and through the OSU Library's 1Search. One valuable resource discovered during this search process was an article that listed cutting-edge dissertation research on the CCB movement from 1995-2008 (Hrabak, 2009). Many of the dissertations were helpful, and several of them discussed the impact of the augmented library on students and faculty (Hofland, 2011; McKee, 2001; Ross, 2006).

Another rich source was the Community College Baccalaureate Association (CCBA) web site. Though it provided many documents on the CCB, there were no documents found that discussed the transformation of the library. I also searched the web site of the National Council for Learning Resources, an affiliate council of the American Association of Community Colleges, where I found information about a presentation to the CCBA Conference (Todaro, 2007).

I carefully cataloged the retrieved documents into EndNote with author-provided keywords, my own additional keywords, abstracts, notes on the document locations (when helpful), my own research notes, and links to the documents to facilitate easy retrieval. Using that database, I was able to search and compile focused bibliographies for further analysis.

The Historical Context of Libraries within the Evolving Community Colleges

This section reviews the development of community college libraries in the context of the evolving mission of the junior college. From their inception, junior colleges were adaptable and innovative. As the junior college mission expanded over the years to meet the needs of communities, so have libraries changed to meet the needs of the colleges. These unique colleges required unique libraries to support them (Arnold, 2010; Johnston, 1994). For this section, to better understand the relationship of the

community college and the library, I created a timeline of major events in community college history and added major events in the history of community college libraries. This section reflects my understanding of the development of the libraries in the context of their evolving institutions.

The late Nineteenth Century. The first two-year colleges were products of the Community Boosterism movement of the 1800s and were largely locally funded (Ratcliff, 1994, 2002). Many towns established colleges in order to attract new residents and businesses.

In the 1890s, a number of educational leaders in the United States promoted the German model of education that included placing only the upper division (junior/senior) years at the university level. Bolstered by the financial panic of 1893, leaders such as J.M. Carroll, president of Baylor University, and William Rainey Harper, president of the University of Chicago, proposed that high schools extend their curricula to the lower division (freshman/sophomore) college level and small or church-affiliated colleges limit their curricula to the lower division as well. In exchange, the universities would accept their students to the upper division level (Cohen & Brawer, 2003; Ratcliff, 1994, 2002).

The early Twentieth Century. The number of junior colleges increased during the Progressive Era (1910s-1920s) as a result of the establishment of mandatory secondary education. The high schools quickly became overcrowded and junior high schools were developed to relieve the pressure. The newly freed space enabled high schools to offer junior college classes. According to Ratcliff (1994), junior high schools and junior colleges were “twin developments” (p. 8) of the Progressive Era.

During these early years, in general, libraries were not dedicated to junior college students. Usually sharing space with the high school, the junior colleges were dependent on the high school library (Arnold, 2010) and the adult students were limited to library resources and services designed to serve the high school curriculum (Bock, 1979; Genung & Wallace, 1972; Johnston, 1994). Because of this blending of roles, the early junior college library did not identify its place among higher education libraries (Genung & Wallace, 1972).

Two events marked the shift in identity for both the junior colleges and their libraries. In 1921, the American Association of Junior Colleges (AAJC) was founded (Ratcliff, 2002). Shortly thereafter, AAJC defined the junior college as an “institution offering two years of instruction of strictly collegiate grade” (Brick, 1994, p. 59) and issued a recommendation that junior college libraries hold a collection of 2,000 volumes. In 1929, junior college librarians were the first among junior college faculty to form a national organization: the Junior College Round Table under the American Library Association (ALA). In 1930, it recommended a minimum collection of 10,000 books (Wallace, 1976). With these two events, the junior college and its libraries firmly placed themselves as part of higher education.

Early vocational education expansion. In 1925, the AAJC recommended that junior colleges expand their mission to offer terminal vocational degrees. As a result, by 1939, 46% of students in the California junior colleges were enrolled in terminal degree programs. In that year, AAJC organized the Commission on Junior College Terminal Education to study vocational education. The findings, released in three volumes (Eells, 1941a, 1941b; Engleman & Eells, 1941) had a profound effect upon the mission and

direction of two year colleges and marked a similar evolution for college libraries. Ward (1947) described the challenges libraries faced in order to support terminal degree programs when conventional books and periodicals were not available. Such programs required technical diagrams, manuals, and objects not found in traditional academic libraries. She also recommended services such as training in how to use a library and urged introducing the library to vocational students who might not otherwise discover it. This expansion into vocational education marked one of the unique qualities that set two-year colleges apart from other institutions of higher education and consequently set its libraries apart.

Early expansion of libraries. In the early 1930s, students who transferred to universities reported that they had not been adequately prepared to do the library research and writing expected at the junior/senior levels (Arnold, 2010; Bock, 1979; Genung & Wallace, 1972; Johnston, 1994). Universities sometimes cited inadequate junior college libraries as cause for denying acceptance of junior college credits (Bock, 1984). Junior college instructors began to lobby for improved library resources at the two-year college. This expansion was assisted by the Carnegie Corporation. In 1934, the Carnegie Corporation created the Advisory Group on Junior College Libraries to study the state of the libraries. As a consequence, the Carnegie Corporation provided funding for a major expansion of library resources. Ninety-two grants were made to junior college libraries ranging from \$1,500 to \$6,000 (Genung & Wallace, 1972; Johnston, 1994; Wallace, 1976). The expanded library resources helped prepare students to successfully transfer to universities.

The Carnegie Corporation was also instrumental in the development of the community college libraries' philosophy of service. Today's community college libraries can trace their present day student-focused orientation in part to B. Lamar Johnson and the Stephens College Experiment of 1932-38 (Holleman, 1990; Johnson, 1939). With a grant from the Carnegie Corporation (Bock, 1979; Johnson, 1939; Johnston, 1994), this private, two-year, women's college chose to revamp its curriculum to serve the individual student. That plan included making the library a central part of the new curriculum. To do so, the college appointed Johnson to be both the librarian and the dean of instruction. Johnson (1939) was charged "first, to make the library contribute as effectively as possible to the instructional program of the college; second, to teach students how to use books effectively; and, third, to lead students to love books and to read for pleasure" (p. 4). His focus on serving individual student needs laid a foundation for the service orientation of community college libraries today (Bock, 1979; Johnston, 1994).

Community college expansion. In 1947, the President's Commission on Higher Education for American Democracy (also known as "The Truman Commission" (Baker, 1994, p. 14)) set the stage for growth by recommending an expansion of two-year colleges. The report, *Higher Education for Democracy* (U.S. President's Commission on Higher Education, 1947), recommended that community colleges provide access to all qualified high school graduates and be responsive to the needs of their communities (Brubacher & Rudy, 1997; Quigley & Bailey, 2003). The comprehensive community college concept took hold and, as a result, a remarkable growth in community colleges took place during the 1960s.

During that time, the number of college libraries grew, too: "...in the last half of that decade 100 library/learning resource centers were built" (Bock, 1979, p. 6). In 1960, the Association of College and Research Libraries (ACRL), a division of ALA, recommended Standards for Junior College Libraries that included "a minimum of 20,000 volumes, ten times that of 1925 and twice that of 1930" (Bock, 1984, p. 40). The use of the term *standard*, which connoted accreditation standards, as well as the large jump in the recommended size of the collection, prompted an outcry from college presidents. This led to the formation of a joint committee of representatives from ALA, AAJC, and the Association of Educational Communication and Technology (AECT). The committee produced the *Guidelines for Two-Year College Learning Resources Programs*, which was formally adopted by all three organizations in 1972. These guidelines were significant for two reasons: (a) it recommended "provisions for the integration of library and audiovisual services, the inclusion of production in these services, and the involvement of learning resources in instruction" (Hisle, 1989, p. 618); and (b) it marked the first use of *learning resources* as a term to describe the expanded services offered by libraries. During this time period, libraries increased both in number and in services offered.

The learning resource center. After 1972, community college libraries were commonly referred to as learning resource centers. The 1994 *Standards for Community, Junior, and Technical College Learning Resources* (Association of College and Research Libraries, 1994) defined learning resources as "an organizational configuration which provides a core of library and media materials and a variety of related services" (p. 572).

Nevertheless, based on the use of the terms *learning resources* and *libraries* throughout the literature (Hisle, 1989), this study will use both terms without any implied distinction.

Community college librarians focus on collecting current, introductory-level materials that serve the needs of the curriculum, including technical materials for vocational programs (Godin, 2006). The community college serves students with a wide range of needs including English-as-a-Second-Language, developmental math and writing skills, career and technical training, and university transfer. The library must be able to serve students at every level (Roselle, 2013). Librarians in community college typically take on the role of liaison to specific programs of study to share new materials and gather feedback (Cataldo, Tennant, Sherwill-Navarro, & Jesano, 2006; Henry, 2012; Johnson, 2009; Johnston, 1994; Thull & Hansen, 2009). The Liaison with Users Committee of the Reference and User Services Association (a division of the American Library Association) (American Library Association. Reference and User Services Association. Liaison with Users Committee, 2010) described liaison work as

the process by which librarians involve the library's clientele in the assessment of collection needs and services and the measurement of user satisfaction with the collection (p. 97).

The collection and management of the library's information resources has been a core function of the library throughout its history and is an activity that involves all members of the library faculty and staff, as well as the larger college community. Librarians work collaboratively with their liaison instructors to develop the collection, and library staff report on damaged or missing items and unfilled requests received. Collection development includes "the coordination of selection policy, assessment of the needs of users and potential users, collection use studies, collection analysis, budget

management, identification of collection needs, community and user outreach and liaison, and planning for resources sharing” (Johnson, 2009, p. 1). Starting in the 1970s, libraries had difficulty in keeping up with the costs of providing information resources due to restricted or reduced budgets.

The economic stagnation of the 1970s pushed libraries to look for ways to improve efficiencies and share resources (Johnson, 2009). During in the 1970s and 1980s, computer technology had a large impact on libraries by automating library processes for purchasing, cataloging, finding books and other library materials, and tracking loans to students and faculty. Computerized abstracting and indexing services, such as the National Library of Medicine’s MEDLARS, moved online (as MEDLINE in 1971 through dial up access) and the computerized database network of library holdings of the Ohio College Library Center (now called OCLC) also went online in 1971 (Lowry, 2002). Through expanded membership, OCLC provided a worldwide database of bibliographic records that facilitated cataloging and provided a mechanism for libraries to share their materials through interlibrary loan. At the same time that they were automating processes, libraries expanded media services by providing equipment to classrooms and media support for instructors and students (Johnston, 1994).

The 1980s saw the early use of personal computers in libraries. Lowry (2002) stated, “indeed, libraries were often campus leaders in computing” (p. x). By the end of the 1980s, email came into use and, by the early 1990s, rudimentary searching of the Internet gave way to the World Wide Web. From the mid-1990s to the present, library information resources expanded to include databases of full-text journal articles and eBooks, and services expanded to include online reference assistance, information

literacy instruction, and involvement in online, mediated classroom environments (Rusk, 2006).

In the face of expanded access to information, libraries were sometimes regarded as irrelevant entities (Godin, 2006). Yet technology also presented opportunities for libraries to take the lead to connect faculty and students with information in new ways. Computer technology meant that libraries became less the repository of information and more a gateway to information “where all information is digital and accessible through the World Wide Web” (Hensley, 2003, p. 27). However, with rising costs, libraries were forced to face an access or ownership dilemma: choosing between leasing access to information, such as licensed online databases, and purchasing increasingly expensive print materials. Librarians also recognized that libraries could no longer hope to own all the information resources that might be needed for a program curriculum. Greater reliance on interlibrary loan, cooperative agreements with other libraries, and a movement toward patron-driven acquisition have been recent trends. Due to rising costs and limited budgets, library acquisitions are evolving from a “just-in-case to a just-in-time approach to collection development” (Thomas, 2012, "Headnote," para. 1).

Librarians began providing bibliographic instruction in the 1960s with the goal of teaching students how to find information in the library (Crompton & Bird, 2013). The term information literacy first appeared in 1974 (Crompton & Bird, 2013; Grassian & Kaplowitz, 2009; Zurkowski, 1974). As information moved online and away from books, librarians identified information literacy (or competency) as a skill-set needed to function effectively in the increasingly information-rich world (American Library Association. Association of College and Research Libraries, 1989). The Information

Literacy Competency Standards for Higher Education were developed in 2000 for teaching information literacy skills and included performance indicators to aid in assessment (Association of College and Research Libraries, 2012). These standards are currently being revised.

At community colleges, where the focus is on teaching, librarians and discipline instructors often collaborate on information literacy efforts (Branch & Gilchrist, 1996; Caspers, 2013; Goomas, Baker, & Weston, 2015; Roselle, 2013; Silverman & Williams, 2014; Wilson & Sigal, 2014). Students at community colleges vary widely in terms of diversity, age, English language skills, technology skills, life goals, persistence, and academic preparedness. Librarians have found that this variability in the classroom presents unique challenges in teaching information literacy (Roselle, 2013). Librarians have developed multiple strategies to help students build information literacy skills including synchronous instruction in classroom settings, asynchronous self-guided handouts, and online tutorials (Grassian & Kaplowitz, 2009). Working collaboratively with the classroom instructors, librarians have helped create meaningful assignments that enhance learning. They have also taught credit-bearing classes and become expert resources embedded in eLearning classes. Unfortunately, assessment of information literacy efforts can be difficult to track due to lack of consistency, appropriate tools, and the transient nature of community college students (Roselle, 2013).

Section summary. This section reviewed the history and development of the community college mission and the concurrent development of the community college library. Beginning with the creation of the first junior colleges, libraries were either very small or extensions of the high school library. As the junior colleges grew in size and

number, the Carnegie Corporation assisted library development with grants for books as well as support for the Stephens College Experiment. The early vocational education movement of the 1930s pushed libraries to add technical manuals, diagrams, and learning objects not found in university libraries. In the 1930s and 40s, librarians were encouraged to teach students how to use the library. When junior colleges transitioned to comprehensive community colleges and increased in numbers in the 1960s, the libraries also adapted to meet the expanded mission, adding media services and calling themselves *learning resource centers*. Collection development activities saw changes due to tightening budgets and rising costs. Fiscal concerns and new technologies that enabled the proliferation of online information resources forced libraries to consider leasing information instead of purchasing and greater collaboration to share resources. Throughout the 1970s and 80s, libraries embraced computer technology in order to automate records of their holdings and activities. From the early 1990s to the present, the advent of the Internet age and the great potential for distance learning presented new challenges to the libraries to make information and information literacy instruction available online to students and faculty at any time and place, and yet maintain a sense of place within the bricks-and-mortar structure.

This section contributed to my study by placing the library within the context of the community colleges' evolving mission. This placement helped me understand the impact on the libraries from the changing nature of the community college mission.

Policy Issues of the Community College Baccalaureate

This section provides insights into the motivation for colleges to offer the CCB as well as criticisms of the CCB movement on a policy level. Since the founding of the

Community College Baccalaureate Association in 1999 (Walker, 2005), the movement has continued to grow. At least 18 states have authorized the CCB and at least 54 community colleges now confer baccalaureate degrees (Russell, 2010).

Mission. Over the years, community colleges have been criticized for “cooling-out” (Brint & Karabel, 1989, p. 77; Reitano, 1998, p. 123) the ambitions of students from lower socio-economic strata and directing them to dead-end, terminal, career training programs. Beach (2011) stated that the community college “was originally designed to *limit* access to higher education in the name of social efficiency” (p. xx). Today, however, employers in many occupations are requiring a bachelor’s degree for entry (Bemmel et al., 2009; Daun-Barnett, 2011; Jacobs & Dougherty, 2006; Walker, 2001, 2005). Even when an associate’s degree qualifies an employee for entry, the baccalaureate may be required for promotion (Jacobs, 2005; Seppanen, Bloomer, & Thompson, 2005). According to Jacobs and Dougherty (2006), the bachelor’s degree is seen by employers as “a signal of that person’s capacity to benefit from additional training on the job” (p. 56). To meet the workforce needs, community colleges have engaged in a variety of efforts to improve access to baccalaureate degrees. According to Floyd (2006), models included are:

- *articulation models*, negotiated agreements with individual universities to assure students that their community college credits will transfer;
- *university extension models*, programs offered on community college campuses, or nearby, by universities on an outreach basis;

- *university center models*, facilities provided for a variety of university/community college partnerships that lead to baccalaureate degrees conferred by the university;
- *community college baccalaureate models*, baccalaureate degrees (usually applied baccalaureate) conferred by the community college to meet local needs for workforce development.

Several critics maintain that adding CCB programs creates confusion over institutional identity (Glennon, 2005; Wattenbarger, 2000). Will these new colleges be community colleges that offer baccalaureates, four-year colleges that offer associate degrees, or hybrid institutions somewhere between? Russell (2010), Floyd (2006), and Floyd and Walker (2009) reported that it is already hard to identify baccalaureate-conferring community colleges due to requirements from state authorities or regional accrediting bodies to drop *community* from their name and meet four-year college standards. Yet many of them are also required to follow state community college laws (Bailey & Morest, 2004; Levin, 2002b). These colleges may indeed become a new hybrid type of college.

Though critics have argued that the CCB represents *mission creep* (Cook, 2000; Evelyn, 2000; Fliegler, 2006; Martin & Samels, 2002; Mills, 2003), others have said that community colleges benefit from a broad mission portfolio because it increases their ability to adapt to political and economic changes and the support they receive from their communities by serving a variety of different needs (Bailey & Morest, 2004; Dougherty & Townsend, 2006; Jacobs & Dougherty, 2006). Glennon (2005) contended that universities already offer baccalaureate degrees and community colleges risk duplicating

efforts during times of scarce resources. Limited resources might also force colleges to neglect their mandate to serve students needing developmental, General Equivalency Diploma (GED), English as a second language (ESL), high school completion, and workforce certificate programs (Bailey & Morest, 2004; Farnsworth, 2006; Glennon, 2005; Morest, 2006; Wattenbarger, 2000). But, as Levin (2004) stated,

As long as the baccalaureate community college offers [these] programs...then they will carry with them their traditional community college identity, which highlights open access and a comprehensive curriculum (p. 19).

Floyd (2006) also stated that,

...advocates of the CCB degree see this [neglect of the core mission] as a myth rather than the reality, and assert that the new CCBs respond to expanding workforce needs that are not being met by universities (p. 60).

Critics also questioned the benefits for recipients of the CCB degree. Hanson (2009) described the debate as “whether bachelor’s-degree-granting colleges promote workforce development or contribute to students’ economic well-being” (p. 986). Wattenbarger (2000) and Eaton (2005) argued that a bachelor’s degree from a community college will more likely hobble job-seekers. Wattenbarger (2000) and Glennon (2005) went so far as to describe CCBs as second-class degrees, and Glennon stated,

In the long run, the prestige and value of a baccalaureate degree will be diminished hurting all baccalaureate degree holders, not only those with community college baccalaureates (p. 6).

Bemmel et al. (2009) countered that the quality of the programs is buttressed by regional and national accreditations. Further, Hanson (2009) discounted the critics’ reasoning on the strength that community colleges have successfully marketed the value of associate and certificate programs. Hanson argued that

if status is the issue [for graduates and employers], then the baccalaureate represents a chance for community colleges to rise up alongside well-respected institutions (p. 986).

Dougherty (2001), Farnsworth (2006), and Glennon (2005) suggested that community colleges are simply prestige-seeking by moving up the higher education hierarchical ladder. As evidence, Farnsworth (2006) noted that community colleges are not seeking to move down the hierarchy into K-12, though with dual enrollment, high school completion, honors, and early college programs, that point could be debated. While Glennon (2005) argued that movement up the hierarchy would be unnecessarily expensive, considering the potential of other models, Dougherty (2001) thought that the best community colleges offering bachelor's degrees would likely move ahead of mediocre four-year colleges in terms of value provided. But Farnsworth (2006) contended that baccalaureate community colleges are seeking a hierarchical myth and they should consider higher education as a horizontal, rather than a vertical, hierarchy. Each segment offers something of value, and community colleges should focus on the value of their current, traditional mission. Hanson (2009) suggested that those who would hold the community college to the lowest rung perpetuate the double standard of keeping the masses at sub-par educational levels and educational inequality should not be tolerated in a democracy. At the same time, Floyd and Walker (2009) described the CCB as

not an isolated phenomenon that suddenly appeared in response to self-interested, institutional aspirations to be a 'true' college (Floyd, 2006). Instead we believe that it is yet another manifestation of the current, broad-based evolution of postsecondary education.... (p. 91)

Indeed, Jacobs and Dougherty (2006) suggested that vertical expansion of the mission provided cover in response to accusations that community colleges promote

social inequity through “cooling out” student ambitions (Brint & Karabel, 1989, p. 77).

Levin (n.d.) seemed to support that idea when he proposed that the community college applied baccalaureate degree not only facilitated access to higher education, it also provided an answer to those who argued that community colleges direct students into dead-end educational tracks.

Unmet workforce needs. Addressing unmet workforce needs has been one of the most frequently cited motivations for the CCB movement (Bemmel et al., 2009; Daugherty, Goldman, Butterfield, & Miller, 2014; Floyd, 2006; Floyd & Walker, 2009; Furlong, 2003; Petrosian, 2013; Walker & Floyd, 2005). Furlong (2003) reported that Florida had a particularly acute need to increase baccalaureate production, ranking among “the bottom five states in terms of production of baccalaureate degrees, with only 22.3 percent of the population age twenty-five or older holding a bachelor’s degree or higher in the year 2000 (U.S. Bureau of the Census, 2001)” (p. 60). Bemmel et al. (2009) stated that Florida would need “20,000 new teachers...every year between 2005 and 2020” (p. 152), 29,000 for the academic year 2006-07 alone. And yet, Florida universities produced about 6,000 teachers a year and only 50-60% of these would find their way into a classroom. Bemmel et al. (2009) also reported that Florida would need 8,000 more nurses per year, but university nursing classrooms were already full. According to Walker (1999), the Florida Postsecondary Education Planning Commission estimated that, by 2010 there would be an additional 200,000 students taking college classes in the Florida post-secondary educational system, for whom higher education was not prepared. Daun-Barnett and Escalante (2014) studied Florida’s CCB production of teachers and nurses, however, and concluded that the community colleges are not fulfilling the

baccalaureate need in these areas. They recommended that other states refrain from implementing CCBs until additional studies are conducted.

A Washington State study conducted by the State Board for Community and Technical Colleges (Seppanen et al., 2005) determined that an additional 3,000 full-time equivalent (FTE) transfer students in applied and technical baccalaureate programs were needed to meet the needs of industry. Seppanen (2010) later reported that pathways from community colleges into applied and professional baccalaureate programs offered by four-year colleges and universities had resulted in only 700 transfer students, short of the needed 3,000. As part of a larger package of recommended solutions, pilots of CCB programs were approved by the state legislature in 2005. Due to positive outcomes, by 2010, the Washington State Board for Community and Technical Colleges had approved a total of 10 CCB programs offered by seven community colleges. Throughout the process, the Washington State Board for Community and Technical Colleges worked with state universities and community colleges to identify and respond to unmet workforce needs.

Some proponents of the CCB have posited that globalization has influenced the expansion of the community college mission in several ways. Levin (2004, n.d.) suggested that the CCB fulfills state policies to grow a globally competitive workforce. England-Siergerdt and Andreas (2012) cited pressure from a global economic marketplace as a factor in Washington State's decision to move into applied workforce baccalaureate degrees. Garmon (2002), Levin (2004), Walker (2001), and Walker and Floyd (2005) cited employer and worker demand for training for a global jobs market as a key motivator. While Walker (2002, 2006), Jacobs (2005), and Garmon (2002) used a

business perspective to argue that community colleges face competition from colleges operating without bricks and mortar and a possible shrinking market as workers choose alternative educational options. In this way, globalization created competition in both the workplace and the field of education that contributed to community colleges choosing the CCB to fulfill their workforce training mission (Jacobs, 2005; Levin, n.d.).

Advocates of the CCB also cited lack of geographical access to universities as a motivating factor. In Florida, Bemmell et al. (2009) reported that confounding traffic patterns in densely-populated areas greatly hindered access to universities. Remington and Remington (2005) reported that Great Basin College in rural Nevada began to offer baccalaureates, because the nearest university was over 200 miles away. Troumpoucis (2004) also reported that 93% of teachers in Nevada were educated out of state. In Washington State, Seppanen et al. (2005) reported that the greatest need was in urban King County and rural central and eastern Washington. Perna, Finney, and Callan (2012) reported to the Washington State Legislature that Washington was behind on the production of baccalaureate degrees due in part to “a mismatch between the distribution of the population and the location of public four-year colleges and universities” (para. 26).

Floyd (2005) described a hypothetical college student as female, married, with three children in school, who wanted to complete her dream to become a teacher, but was hampered due to the distance to the closest universities. The community college had provided her with the remedial education she needed to move into college-level classes, but could not take her beyond her associate’s degree. Daugherty et al. (2014) also suggested that community colleges were more experienced in serving nontraditional

students. Providing access to rural or otherwise place-bound students was a major factor cited for joining the CCB movement.

Troumpoucis (2004) reported “concern that community colleges are encroaching on universities’ turf and could...disrupt the balance of the relationship between the two....” (p. 7). These concerns seem couched in a fear that community colleges goals included offering bachelor degrees in liberal arts. However, Floyd (2006) pointed out that the majority of these baccalaureates are

applied workforce degrees in such areas as technology, management, business, nursing, law enforcement, agriculture, engineering, and teacher education (p. 61).

She also stated in justification for the CCB movement that increased university focus on graduate degrees and research has resulted in a decreased interest in some undergraduate degrees, “including those offered for place-bound students and those in disciplines such as teacher education, technology, middle management, and allied health” (p. 60).

Social good. Studies have shown that income increases with more education (Baum, Ma, & Payea, 2010; Prince & Jenkins, 2005, April; U.S. Department of Labor. Bureau of Labor Statistics, 2012). Research by Baum, Ma, and Payea (2010) demonstrated that not only is there a significant positive effect in income with increased education, but the gap had widened over the years. In addition there is an inverse relationship between unemployment and education. One of the most significant findings, however, was that householders with a bachelor’s degree were associated with much less reliance on food stamps and school lunch programs. Society realized a savings on social and prison programs and an increase in tax revenues with a college-educated population. These college graduates also tended to have jobs that provided benefits. They were more

likely to follow healthy habits, participate in their communities, and read to their children. In short, the benefits of an educated populace extend beyond the financial benefits to the individual; they enhance the larger society.

Section summary. This section examined the incentives and concerns regarding the CCB movement. Proponents cited higher entry requirements for workers into some occupations, new skills and occupations needed by workers and employers to be competitive to meet a global economy, and lack of access due to geography (i.e. place-bound students), available needed programs, or cost. Others cited lagging production of needed baccalaureate graduates in some fields, such as nursing and teaching, and the competition for community colleges in an international higher education marketplace. Still others cited public policy to support a competitive workforce and the social good of an educated society.

Detractors cited confusion over institutional identity, mission creep, and competition for limited resources. They also worried that community colleges were seeking greater prestige by moving up the higher educational hierarchy and would ultimately hurt workers with “second class” degrees.

The proponents have largely answered the critics’ concerns. Nearly a third of the states have approved the development of CCB programs, and regional accreditation has been earned. More research will be needed to determine whether the CCB has lived up to its promises.

The Implementation of Community College Baccalaureate Programs

As the CCB movement grows, studies on implementation of CCB programs, the process, and outcomes have become available. However, the number of studies is still

limited. Many of the studies addressed implementation of CCBs on a macro level, looking primarily at how states made implementation possible. Some studies looked at how a baccalaureate program was implemented on a college campus, but only a few looked at the effect implementation had on the library. This lack of research on how a library adapts to support a baccalaureate program speaks to the need for this study. The following section looks at implementation at each of these levels.

Implementation at the state level. In 2008, Townsend, Bragg, and Ruud completed a state-by-state inventory of applied baccalaureate programs offered at any public institution. That study became the basis of an interesting analysis. The team noticed a pattern among the states adopting applied baccalaureates (Bragg, Townsend, & Ruud, 2009). They reported that the process was often initiated by a single person or a small group of people, usually leaders within higher education, and sometimes bolstered by an interested elected official. State officials would then try to balance perspectives by collecting information from other higher education leaders and the public to create a broad view of the postsecondary system. They would offer alternative scenarios to consider and sometimes called a task force to study the issue. If the applied baccalaureate proposal found support, the state moved to approve. In the case of community college-conferred baccalaureates, the next step might be legislative action.

Ruud, Bragg, and Townsend (2010) conducted further analysis by applying Kingdon's Multiple Streams framework (Zahariadis, 2007) to the adoption process at the state level. This framework posited that three streams influence policy decisions: problems, policies, and politics. Zahariadis (2007) stated that at crucial opportunities, called "policy windows" (p. 73), entrepreneurial policymakers exerted leverage to bring

together the three streams to influence policy decisions. Ruud et al. (2010) found the framework useful in understanding the decisions made by states that implemented applied baccalaureate degrees.

In Florida, for instance, a study by the Postsecondary Education Planning Commission (1999) identified low baccalaureate production as a problem and, therefore, fostered circumstances that supported change. In spite of resistance in the political stream, a policy entrepreneur described as a “champion of community college baccalaureate degrees” (Ruud et al., 2010, p. 145) was successful in directing the policy stream towards community colleges to provide the solution to the problem.

An earlier study by Furlong (2005) provided more information for Florida that corroborated the account of events and seemed to reinforce the usefulness of this model for understanding the CCB adoption at the state level. Furlong reported that the Florida Postsecondary Education Planning Commission proposed a new statewide four-year college system to meet a shortfall in baccalaureate degrees, and at the same time, it recommended that community colleges work with universities to provide local university-conferred, baccalaureate degrees. In 2001, despite the recommendation by the commission, the chair of the state senate’s education appropriations committee, with advocacy from policy leaders at St. Petersburg College and the Florida State Board of Community Colleges, submitted a bill to grant St. Petersburg College, a community college, the authority to confer baccalaureate degrees to meet specific workforce needs. Furlong’s account of Florida’s adoption of the CCB provided more details and further supported the usefulness of Kingdon’s Multiple Streams framework.

Floyd and St. Arnauld (2007) examined community colleges and former community colleges that implemented teacher education baccalaureates across the nation. Their findings supported the multiple roles of state legislative bodies, state oversight agencies, and universities in the political process of adopting CCBs. They also noted the complexities within individual states such as Nevada. With a State Board of Regents model, Great Basin College did not need legislative approval, but it did need legislative funding. The Board of Regents would not approve the program without accreditation, and the accrediting body would not approve the program without funding. Remington and Remington (2005) described a “catch 22 situation” (p. 146). However, with strong advocacy by Great Basin College President Remington, a policy entrepreneur, the needed support was finally won, and the Nevada Legislature awarded funding.

In Washington State, Seppanen (2010) also described a confluence of problem, policy, and politics. She reported that applied associate degree holders needed more transfer pathways options and that space for upper division enrollments was limited. In an earlier policy brief, Seppanen et al. (2005) noted that, in spite of Washington State’s efforts to provide sufficient agreements with universities for applied baccalaureate and other articulated completions, only 10% of applied associate degree graduates transferred to universities to complete bachelor degrees. Data from other states indicated the transfer rate could be 30%. A joint study by the staff of public universities and the State Board for Community and Technical Colleges (SBCTC) recommended increasing capacity for upper division students at university branch campuses, more university centers on community college campuses, and the creation of CCB programs. Because of the efforts of entrepreneurial policymakers, the Washington State Legislature authorized pilot CCB

programs as part of a larger piece of legislation addressing all three recommendations.

The first four CCB pilots were later increased to eight (England-Siegerdt & Andreas, 2012). After the initial pilot, the legislature granted SBCTC the authority to approve future CCB programs without legislative action.

Ruud et al.'s (2010) analysis using Kingdon's Multiple Streams framework provided a useful way to examine the implementation of the CCB at the state level. Each of the states discussed in this section identified a problem of low baccalaureate attainment and suggested policy solutions within a political context. Ruud et al. also discussed states that did not adopt applied baccalaureate programs. Connecticut, for instance, did not perceive any problem with baccalaureate attainment for applied associate degree graduates, and Virginia did not see the CCB as a solution for baccalaureate attainment. This subsection helped me understand the implementation of the CCB in the context of state policy.

Implementation at the institution level. Implementation of a baccalaureate program on a campus presents a different set of challenges from those at the state level. . This subsection will look at the issues that institutions encountered while implementing CCB programs. It will begin by examining organizational behavior theories that might explain some of the issues. It will then describe specific factors and steps, such as planning, accreditation, the local community, financing, faculty, curriculum, campus coordination, and communication. This section will conclude with a discussion of the impact of the CCB on the college.

Organizational behavior theories. Levin (2002a, 2002b, 2004) and Skolnik (2009) examined organizational behavior theories in relation to the implementation of

CCBs in community colleges. Both Skolnik (2009) and Levin (2004) noted a lack of theory development in regard to the growth of the CCB, with Levin (2004) stating that “theoretically based explanations of community college behaviors are the exception rather than the rule.” Skolnik posited that the movement by community colleges into vocational education in the 1950s, 60s, and 70s was a similar shift in mission and perhaps the theories proposed at the time would likewise apply to this latest mission evolution. He discounted the consumer choice and the business domination models (Brint & Karabel, 1989) for lack of evidence that either students or employers had lobbied for CCB degrees. He also doubted that Brint and Karabel’s (1989) institutional model provided sufficient explanation. Brint and Karabel (1989) had argued that community colleges are driven to seek “their own distinct interests.” Skolnik noted that the model overlooked the possible motivation that institutions acted for the “public good” (p. 148). He concluded that Dougherty’s (2001) state relative autonomy theory (the influence of government officials) provided a good explanation for the move into the CCB, but it placed the debate at the state, not the institutional, level. Looking at the institutional versus globalization models, Levin (2004) reasoned that community colleges were also responding to external market forces of globalization. He argued that both institutional and global forces are at work in the development of the CCB. Community colleges seek to be competitive in the global marketplace and provide the advanced work skills needed in the global workplace, but they are also influenced by institutional pressures that include jurisdictional mandates to maintain community college roots while providing university programming (Levin, 2004). More work in theory development needs to be

done to provide sufficient explanation for implementing CCB programs at individual institutions.

McKinney and Morris (2010) examined organizational change inherent in the implementation of the CCB at the institutional level. In their study of two Florida community colleges, they compared emerging themes to Kotter's (2012) Eight-Stage Process of Creating Major Change. McKinney and Morris noted that determining the need for a CCB program, establishing a leadership group, and formulating the vision and strategy for change were congruent with the first three steps of Kotter's process. Other steps seemed evident, but the authors did not elaborate or make connections.

Researchers have only begun to examine organizational behavior theory and organizational change related to the CCB. Further research will improve understanding. The following subsections will examine strategies employed in implementation as well as impacts on the colleges.

Planning. McKinney and Morris (2010) identified five themes for managing change in implementing a CCB. These themes were

[a] Justifying the need... [b] Acquiring authorization... [c] Leading the CCB process... [d] Challenges in the CCB process... [e] Changes in institutional policy and practice (excerpted from Table 2, pp. 205-206).

Both colleges in their study stressed leadership and vision as important to the process and established large task forces with subcommittees to assist in planning the implementation.

Massey, Locke, and Neuhard (2009), Remington and Remington (2005), and Furlong (2005) also reported establishment of task forces to lead planning processes. Massey et al. (2009) described the process to establish nine CCBs within a year at Indian River State College (Florida). They felt that this process generated the broadest possible

commitment to the vision. Remington and Remington (2005) also spoke of setting up an extensive committee/subcommittee structure at Great Basin College to design its baccalaureate program and prepare the proposals. Broad-based planning was cited as a successful model for accomplishing a huge task with the maximum amount of buy-in from the college. Similarly, Furlong (2005) reported the establishment of an Implementation Task Force at St. Petersburg College composed of representatives of each area of the college. Such broad support was credited with making the process successful. Colleges that successfully implemented CCB programs cited establishing broad-based planning groups as an important step in the process.

Accreditation. Achieving accreditation is an important milestone for CCB programs. Furlong (2005) reported that St. Petersburg College hired consultants to assist with preparation of the accreditation documents. Floyd and St. Arnauld (2007) likewise reported that it was important to hire people who were familiar with the accreditation requirements. While entire colleges faced regional accreditation, teacher education programs faced national accreditation and state board of education approval as well. McKinney and Morris (2010) reported that the college administrators found the time and expense required to achieve accreditation much greater than expected. One administrator reported that each program required a 1,000 page document, and the time and cost for the site visit was significant. At the same time, however, Furlong (2005) reported that the application process and feedback from the Southern Association of Colleges and Schools (SACS) to St. Petersburg College was helpful with its program implementation.

Local community. Researchers reported that working with the local community was a key strategy when implementing a CCB program. Floyd and St. Arnauld (2007),

McKee (2005), and Remington and Remington (2005) cited the importance of local support. Remington and Remington (2005) said, “because we involved people from outside the college, they became an integral part of the effort.” McKee (2005) stated that local employers provided feedback on the curriculum that met the employers’ needs. Industry executives became a source for part-time instructors and their employees were the main source of students in the beginning. In addition to relevant feedback, help in developing the curriculum, and political support, Floyd and St. Arnauld (2007) reported that local employers accepted students for clinical placements. Community colleges’ history of connecting with the local community was critical in developing new CCB programs.

In keeping with the value of college/community relations, Grothe (2009) proposed a theory of applied community college baccalaureate degree as a community builder. His theory is a five-stage process that includes (a) demand from local non-traditional career-and-technical education (CTE) graduates, (b) employer demand for a skilled local workforce, (c) the community college mission, (d) appropriate applied CCB programs, and (e) the community is strengthened by local fulfillment of local workforce education. His theory will need further research, but it highlights the importance of working with the local community.

Financing. Financing was noted as a critical area of concern for start-up costs and maintenance of the CCB program. Floyd and St. Arnauld (2007) reported in findings from West Virginia, Georgia, Florida, and New Mexico that seed-money was critical for implementation of their programs. McKinney and Morris (2010) said one college reported needing “\$125 - \$165 thousand dollars to open the door to admit your first

student.” Furlong (2005) reported that St. Petersburg College received \$1 million to lay the groundwork for three baccalaureate-level programs. Remington and Remington (2005) reported that the Nevada Legislature allocated \$1.5 million for their new program. They also noted local fundraising, legislative funding, and grants that enabled Great Basin College to improve their facilities in advance of the new baccalaureate program. For instance, they described “an enormous library expansion, which doubled stack space and tripled study space, [and] greatly facilitated a baccalaureate culture” (p. 143). Colleges wishing to implement a CCB program need to identify start-up funding.

Ongoing funding, too, was important. Furlong (2005) reported that the initial funding allocation for St. Petersburg College was calculated at the university level minus a “research factor” (p. 122) plus student fees set mid-way between community college and university levels. Floyd and St. Arnaud (2007) also reported on the challenges of ongoing funding and stated that

although community colleges are held to the same state standards as universities are for baccalaureate teacher education programs, they do not all receive equal reimbursement for these programs (p. 75).

A case in point: West Virginia University—Parkersburg (West Virginia University’s community college campus) initiated a baccalaureate fee to help compensate for the discrepancy in funding. Chipola College (Florida) used foundation money to support student tuition on an individual basis. As these programs continue, funding formulas will remain important in helping these programs to be successful.

Faculty. A number of studies focused on faculty issues and CCB programs. McKinney and Morris (2010) noted that the Southern Association of Colleges and Schools (SACS) required the colleges with CCB programs demonstrate that 25% of their

faculty in those programs held doctorates. This requirement spurred hiring and required colleges to examine their salary structures and workload. Existing faculty also pursued Ph.D. degrees with support of their colleges. McKinney and Morris noted that Ph.D. faculty members commanded a higher salary than those with master's degrees. With that in mind, colleges found creative ways to make their colleges attractive to prospective faculty. Some offered a sizable jump in pay for Ph.D.s. Some offered 12 month contracts with vacation leave to offset offering the same rate of pay as lower division faculty (Floyd & St. Arnauld, 2007; Furlong, 2005). Some offered reduced workloads to allow for extra prep time. Some provided release time to work on administrative or curriculum-related projects. In most cases, however, it was stated that the baccalaureate faculty were treated no differently from two-year faculty (Floyd & St. Arnauld, 2007), though some reported an expectation of faculty research (Furlong, 2005; McKinney & Morris, 2010). Many were required to teach upper and lower division. There was the same expectation of serving on committees and advising students. Faculty reported that the new hires brought diversity and fresh ideas and energy to the campus. Many reported being excited again about teaching (Hofland, 2011).

Ross (2006) examined the development needs of faculty at institutions implementing CCB programs. His research revealed that

institutions need to plan for faculty workload adjustments, faculty and student research opportunities, increased technology and library resources and increased professional activities for faculty (p. 186).

He further found that upper division classes took more preparation time; research opportunities for students and faculty also impacted workload; and institutional support

must be sustainable. Finally, he found that faculty expressed a desire to work more formally with other faculty.

Researchers found that in complying with accreditation standards for Ph.D. level faculty, issues of change related to increased diversity, new ideas, compensation, workload, expectations of research, and professional development, needed to be addressed. The potential for change in culture should be followed in future research.

Curriculum. According to Floyd and St. Arnauld (2007) many colleges felt that, though challenging, developing a new program provided opportunities to get the program right. They spoke of colleges using “backward design” (p. 76) to create outcomes-based curriculum. McKee (2005) also reported innovative outcomes-based curriculum at Westark College that required students to demonstrate their competence and allowed them to progress at their own pace. Remington and Remington (2005) urged colleges considering baccalaureate programs to look at other models but to design their own program(s) to meet the unique needs of their constituents.

Campus coordination. Researchers noted that CCB implementation touched nearly everyone on campus. McKinney and Morris (2010) reported changes in institutional policy and practices as well as the importance of creating curricular alignment. Furlong (2005) and McKinney and Morris (2010) noted that a new CCB program impacted admissions and financial aid, as well as the library. Furlong (2005) reported that the St. Petersburg College Financial Aid Department needed to apply for upper division federal financial aid, and Counseling hired a new counselor for each of the new CCB programs. Records and Registration created an additional position because of the complexity of evaluating transcripts for the program. St. Petersburg also modified

their admission cycle for the CCB program to enable an earlier commitment date for prospective students. The college also added two employees for marketing and outreach.

Communication. McKinney and Morris (2010) reported that communication to employees, students, and external constituents was extremely important throughout the implementation process. The colleges they studied used e-mail to inform employees on the progress. One college reported that the campus newspaper and the website were useful vehicles for information. Another college reported meeting with campus groups and ensuring their support. Furlong (2005) reported that St. Petersburg College made a concerted effort to keep employees informed. The college conducted workshops, published articles, and sent emails to ensure everyone understood the college's ongoing commitment to its community college mission while expanding into baccalaureate degrees.

Impact on faculty, programs, and student achievement. Hofland's (2011) study on Great Basin College is the only one to look at a 10-year history of the changes resulting from implementing a CCB program. Hofland reported that as a result of the new CCB at Great Basin College, they saw an increase in overall faculty, an increase in the number of faculty with doctorates, and a renewed sense of enthusiasm. Hofland noted that the culture of Great Basin College changed as the college grew and the college developed a new "sense of legitimacy" (p. 122). New faculty from out of state brought new ideas and diversity, and existing faculty sought Ph.D.s. Faculty found that with a four year program, they had time to get to know students better. Faculty reported that the change in curriculum was the most significant impact. They were able to re-envision general education, focus on outcomes, and develop prerequisites while developing new

upper division courses. Faculty reported that they were seeing younger, more traditional students, and they thought the students were becoming more engaged in the college. In addition, the four-year students impacted the college by forming greater bonds with other students, and they raised the expectations among the two-year students.

Floyd and St. Arnauld (2007) reported that among 10 CCB teacher education programs, student graduation, licensure, and employment outcomes exceeded expectations. A program in Georgia reported that they had the highest teacher exam pass rate (100%) in the state for five years. Two other colleges reported that all their graduates found employment in the local communities. Such positive reports on student achievement and outcomes should help lay to rest fears that CCB degrees will be viewed as second-class degrees.

In Washington State, Kaikkonen (2014) reported that the number of graduates from the Bachelor of Applied Science (BAS) programs 2013 (198 students) was nearly four times that in 2010 due in large part to the increased number of programs offered. On average, the community colleges were seeing a fall-to-spring retention or graduation rate of 90%. More males were enrolling in the programs, and the students were becoming more diverse with an increase in the number of students identifying as Hispanic or African-American. The study indicated that graduates of all programs experienced an employment rate of 75% and a median annual income of \$36,786. The report indicated that the number of graduates was in line to meet the state goal of reaching 1,400 graduates by 2030.

The impacts being reported appear to be positive. As noted above, however, studies of colleges 10 years later would be beneficial to determine how typical such positive results are over the longer term.

Implementation at the library level. A number of CCB researchers (Essink, 2013; Furlong, 2005; McKee, 2001, 2005; McKinney & Morris, 2010; Remington & Remington, 2005; Ross, 2006) have commented on the need to expand the community college library to meet (a) the requirements for accreditation as a baccalaureate-granting institution, (b) the needs of students in CCB programs, and (c) the research, curricular, and professional development needs of faculty. In addition, Hofland (2011) reported that the enhanced library provided a benefit to lower division students and the community. Though many researchers discussed a transformation for the library, the central question of this study, *how do community college libraries successfully prepare to meet the needs of a CCB program?* was not answered in the literature presented so far.

Furlong (2005) noted that the St. Petersburg College hired two new full-time librarians. The new librarians cross trained other librarians at each college site. The new librarians acted as liaisons to the CCB programs to ensure that resources and service needs for the programs were being met. In addition, the library established a courier service to ensure that needed print resources were quickly available to students and faculty. Remington and Remington (2005) reported that an “enormous expansion” of the library at Great Basin College contributed to the baccalaureate feel of the institution.

Ross (2006) examined the support and professional development needs of faculty teaching in CCB programs. His findings indicated high identification among faculty for improved library resources. In summarizing eight research sub-questions, plus a grand

tour question, Ross reported that among other responses, faculty cited needing improved library resources to six out of nine questions. The following research questions generated the library answers:

- *What content expertise support was needed for faculty to develop and deliver upper-division courses?* “...library resource improvements...” (p. 164).
- *What technology support was needed for faculty to develop and deliver upper-division courses?* “...electronic access to journals and library materials to support upper-division curriculum” (p. 168).
- *What instructional support was needed for faculty to develop and deliver upper-division courses?* “...improved library resources to better support upper division instruction” (p. 169)
- *What curriculum and course development support was needed for faculty to develop and deliver upper-division courses?* “...increased library resources to support upper-division curriculum development” (p. 170).
- *What importance did faculty place on the various faculty development options in relation to the delivery of third- and fourth-year curriculum?*
 ...all informants suggested that the institution needed to improve library and technology resources. The informants particularly asked for increased electronic journals and electronic classrooms as top priorities (p. 171).
- *The grand tour question—from a faculty perspective, what faculty development strategies should a two-year college undertake when increasing its mandate to include third- and fourth-year baccalaureate programming?* Among other responses, faculty said

that the two most important resource improvements for the preparation and delivery of third- and fourth-year courses involved technology and library resources (p. 175).

Ross' research indicated the importance faculty place on enhanced library resources that support their curricular and research needs. However, it was not within the scope of his study to determine *how* the library adapted to the increased needs of the college.

A single article provided some insight into the transformation of the library.

Rogers State University had been a community college before it was granted independent university status by the Oklahoma Legislature in 1998. Lawless (2001) reported on the expansion of the Thunderbird Library to meet the needs of a baccalaureate-granting institution. In a brief article, he presented a first-hand description of the changes. As the director, he described the change to the library mission and the effect on the library budget, staffing, and library services. For instance, in recognition of the library's need to expand its collection, the library book budget grew from \$47,586 in 1996 to \$205,000 in 2000. The entire library budget increased from \$375,563 in 1996 to \$760,201 in 2000. To prepare for the change, the librarians gathered feedback from faculty through surveys and focus groups to write a new library strategic plan. The library director was placed on the college-wide Strategic Planning Committee. Hours of operation were increased from 79 to 85 hours per week. Lawless reported that the library added 4500 new volumes and planned to hold 100,000 total volumes by 2009. The library also added over 80 periodical subscriptions. In addition, the library added more electronic databases. To help with the addition of computers, copier and fax services, a new librarian position was added to manage electronic resources and automation and to assist with reference services and provide instruction on the use of library resources. As testimony to the

central place the library held in curriculum development, an instructional designer was placed in the library. New reporting structures moved the library higher in the organization to foster “increased efficiency in responding to the needs of academic departments for services to students and faculty” (p. 22). In conclusion, Lawless suggested that libraries take an active stance towards change and be realistic about the challenges and opportunities such change can bring.

Lawless’ (2001) description of the transformation of the library was helpful. However, the community college library field needs a research perspective that provides rich, thick, descriptions from multiple institutions of the process, the changes, and impacts of the transformation to serve a baccalaureate-conferring institution.

In 2007, the Community College Baccalaureate Association invited Julie Todaro, President Elect of the Association of College and Research Libraries (ACRL), to present at the annual conference plenary session, *Of Like Minds*. She recommended that college leaders involve libraries in the planning for new baccalaureate programs. In determining what resources and services would need to be enhanced, Todaro suggested colleges start with accreditation standards for regional and program-specific accrediting bodies. The next step would be to gather any materials written by the college to address the standards. She suggested that the library create a library/program liaison group to identify and design best practices. The liaison group would draft questions for a needs assessment, determine best practices, and identify needed professional development for library staff. Because accreditation standards vary depending on region and program, she recommended early involvement of libraries to meet any requirements.

In a handout, Todaro (2007) provided attendees with a list of potential questions library leaders should consider. The questions covered four major topic areas: (a) reference and information services, (b) circulation and reserve services, (c) instructional programs, and (d) facility and computer/online resources. Because the questions presented were so relevant to my study, they were considered when writing the interview questions.

Libraries have been identified by accrediting bodies, college leaders, and faculty as an area needing enhancement to support the curricular, professional development, and research needs of faculty and students. However, little has been written that would inform college or library leaders about the process followed or the experience of those involved. A multiple-case study would provide researchers and practitioners with thick, rich, descriptive details that might provide insight to others.

Section Summary. This section of the literature review addressed the issues involved in the implementation of CCB programs. It examined implementation at the state, institutional, and library unit levels.

At the state level, factors were identified that led to the decision to allow community colleges to offer CCB programs. Ruud et al. (2010) suggested that Kingdon's Multiple Streams framework was a useful model for understanding the decision process at the state level. The framework posited that problems, policies, and politics influence policy decisions. I looked at descriptions of processes in other states and noted that the Kingdon framework did appear to apply.

At the institutional level, various theories were examined that might explain the attraction CCB programs have for institutions. Skolnik (2009) found little evidence to

support Brint and Karabel's (1989) theories on institutional motivations for behavior and suggested that external forces such the influence of government officials might be in play. Levin (2004) proposed that community colleges were reacting to the global marketplace.

McKinney and Morris' (2010) introduction of Kotter's eight-stage process as a model for institutional change was described in this section. A number of authors (Furlong, 2005; Massey et al., 2009; Remington & Remington, 2005) reported that planning was an important step in the implementation process. Colleges reported that the time and expense to achieve accreditation exceeded expectations (McKinney & Morris, 2010). In some cases, colleges needed specialized accreditation in addition to regional accreditation (Furlong, 2005). Several authors (Floyd & St. Arnauld, 2007; McKee, 2005; Remington & Remington, 2005) cited the importance of involving the community in the baccalaureate endeavor and Grothe (2009) suggested a that the process could be a community builder. Early adopters reported needing substantial start-up funds (Floyd & St. Arnauld, 2007; Furlong, 2005; McKinney & Morris, 2010; Remington & Remington, 2005). Colleges reported hiring faculty with doctorates in order to meet higher accreditation standards (Floyd & St. Arnauld, 2007; Furlong, 2005; McKinney & Morris, 2010). They also described designing innovative curriculum to meet stakeholders' needs (Floyd & St. Arnauld, 2007; McKee, 2005; Remington & Remington, 2005). Furlong (2005) and McKinney and Morris (2010) discussed the effect the new CCB programs had on student services areas such as admissions, financial aid, and counseling and encouraged those colleges adding CCB programs to keep all stakeholders informed on the implementation process. Hofland (2011) looked at the changes in culture as a result

of adding CCB programs to Great Basin College. Finally, Floyd and St. Arnauld (2007) and Kaikkonen (2014) reported that student achievement and program outcomes exceeded expectations.

At the library unit level, the lack of research was identified. Though faculty members suggested that the library was an important partner in curriculum development, professional development, and research, no studies of the library experience with CCB implementation have been found. Lawless' (2001) report regarding the changes made to Thunderbird Library at Roger's State University gave a glimpse, but there were no thick, rich descriptions of multiple institutions that might inform the community college library community. Todaro's (2007) handout of questions to consider helped form the basis of interview questions to understand issues that might be important for college and library leaders.

Chapter Summary

This chapter presented the review of literature that formed the context for this study. The approach taken to search for literature was presented as well as definitions of relevant key terms.

The first section placed the study in the context of the changing and expanding mission of the community college. It also painted a parallel development of the community college library as it evolved to meet the unique needs of the community college. The section demonstrated that early junior colleges were largely in the shadows of high schools and did not provide separate and relevant library resources and services to the adult population attending those institutions. As junior colleges identified themselves as post-secondary in scope, so did the college libraries. When the junior colleges added

vocational training, the libraries identified the unique training manuals, diagrams, and instructional objects to support the programs. In 1947, the President's Commission on Higher Education recommended an expansion of the newly-termed community colleges to meet the local needs of communities. It also represented an expansion of the mission to include developmental education, GED, and ESL. Again libraries adapted to meet the needs of the college. By 1972, many libraries were called Learning Resource Centers as they added media equipment and services. Technology and reduced budgets forced libraries to increase efficiencies and effectiveness and become leaders in technology on their campuses. More recently, some colleges identify local workforce and larger global forces as drivers to broaden their missions and offer CCB programs. The libraries on these college campuses will be compelled through mission change and accreditation standards to adapt to meet the needs of their constituents.

The issues surrounding the development of the CCB movement are complex. Some proponents identified a deficiency in baccalaureate production in specific fields; others identified geographical limitations and place-bound students. Higher credentials for career entry set by some employers raised concern about importation of trained labor or relocation of employers. Some community college leaders pointed to a failure on the part of universities to develop baccalaureate programs to meet employer demands for a baccalaureate credential.

Opponents, however, pointed to a blurring of the mission of community colleges and a desire to move up the hierarchical ladder in search of institutional prestige. Some have suggested that these colleges are responding to criticism that community colleges do a disservice to society by cooling out the ambitions of lower socio-economic populations

and tracking them into terminal degree programs. There are also concerns that CCB degrees will be second class and might devalue all baccalaureate degrees.

Implementation of the CCB was examined from the state, local, and unit levels. Ruud et al. (2010) employed Kingdon's Multiple Streams framework to understand how some states were successful in gaining approval for implementing the CCB. Their work brought to light the confluence of problem, policy, and politics that was needed to move the proposals forward.

Researchers are beginning to seek theoretical foundations to explain the attraction of CCB degrees for community colleges. No one theory seems to have emerged at this time, though Levin (2004) proposed a blend of institution and globalization theories that merits further study. A number of studies described the institutional process to garner local and campus support. Involving as many stakeholders as possible in the planning and implementation seems to be an effective strategy.

At the library unit level, very little is known about the process that libraries have undergone to adapt to the new CCB programs. One descriptive article was published, and one presentation with recommended questions to ask during planning was found. No research studies on this subject were found during the literature search. The research study outlined here will fill a gap to illuminate the process and issues that libraries may face as CCB programs are implemented.

Chapter Three—Design

This chapter sets the philosophical foundation for the research and presents the rationale for the method employed. In determining the best approach to a research problem, Manning and Stage (2003) suggested that the researcher take into consideration the research goals. For this study—understanding how community college libraries enhanced information resources and adapted services to support this new mission area—an interpretive social science paradigm best fits my purposes.

This chapter describes the history of the Interpretive Social Science (ISS) paradigm, the hermeneutic, constructivist philosophical approach chosen, and contrasts the major alternative approaches. I make plain my place in the context of the study, including my prior experience and values that may impact the study. I also discuss the research method being employed and provide a detailed protocol. This chapter provides the reader with a clear understanding of the design of the study.

The Philosophical Approach: Interpretive Social Science

The Interpretive Social Science (ISS) paradigm emerged as an alternative to the traditional scientific paradigm (Manning & Stage, 2003). Traditional researchers seek to determine cause-and-effect, as well as prediction and control of outcomes through quantitative methods. ISS researchers use qualitative methods to understand how people make sense of their world and the meaning they draw from their experiences. Bogdan and Biklen (1998) described five characteristics of qualitative research:

- Qualitative methods are naturalistic. The research is conducted in the participants' natural setting because ISS researchers believe that the context cannot be separated from human actions. All actions occur within the history and

culture of a setting. By conducting research in participants' natural setting, researchers gain insight into how participants come to understand their worlds.

- Qualitative researchers collect detailed descriptive data in order to capture information as completely as possible. The data may include transcripts from interviews, notes taken during fieldwork, written or recorded documents, or photographs. Researchers analyze words as the data, instead of analyzing numbers, and use direct quotes from participants to help establish an authentic narrative account. The resulting thick, rich details enable researchers to better understand the perspective of the participants.
- Qualitative researchers focus on processes. While quantitative methods can measure change, qualitative methods can explain how those changes took place. Qualitative researchers want to understand how participants assign meaning to everyday objects and events. These processes are best explained through qualitative methods.
- Qualitative researchers employ inductive reasoning. The data are collected from what is heard, seen, and felt. While quantitative researchers test hypotheses and theories posited in advance, qualitative researchers use the data to build hypotheses and theories. The data drive the theory.
- Qualitative researchers are interested in the meanings people assign to their experiences. To better understand the meanings people assign, researchers focus on the perspective of the participants. Dialogue often plays an important role in uncovering these perspectives. Researchers ensure that they have accurately

represented the views of the participants by asking the participants to review transcripts and drafts.

Serving a baccalaureate program is a change to a community college library's mission. I wanted to understand how a library adapted to the change: how the staff identified the necessary changes to information resources and services, how they implemented the changes, how they managed challenges such as limited resources, and how they knew they were successful. My role was to uncover the knowledge with the participant and interpret it to the reader. To be authentic, the answers to these questions needed to be from the perspective of the participants. Spending time with the participants in their environments helped me understand how they approached and resolved their challenges.

Historical roots of Interpretive Social Science with a Hermeneutic

perspective. In the 19th Century, Auguste Comte named and described the philosophical approach of positivism (Bettis & Gregson, 2001; Zammito, 2004), defining it “as an epistemology and as a theory of progress” (Zammito, 2004, p. 6). The positivistic characteristics of observation, experimentation, and objectivity had already become the standard in the field of science. Comte sought to apply those same characteristics to the field of study he called sociology (Bettis & Gregson, 2001; Comte, 1988; Neuman, 2003) and embraced the concepts of skepticism and empiricism (Zammito, 2004). Comte (1988) espoused deductive reasoning and maintained that all knowledge must come through the senses. The goals of the positivist approach include the prediction and control of nature (Guba, 1990). According to Bettis and Gregson (2001), “Positivists not

only believe that truly objective research is possible, they also posit that it is the best approach to discover the world and then predict it” (p. 6).

However, some researchers studying social behavior found the positivist approach too restrictive. In the early 20th Century, German thinkers, Max Weber and Wilhem Dilthey, offered alternative perspectives to the scientifically-rooted positivism (Neuman, 2003). Dilthey suggested that science could be split into two divisions: natural and human. He maintained that human science required “empathetic understanding, or *Verstehen*, of the everyday lived experience of people in specific historical settings” (Neuman, 2003, p. 75). Weber agreed and went further by saying that social science needed to study “*meaningful social action*” (Neuman, 2003, p. 75). This alternative to the positivist approach opened the door to interpretive social science and the development of qualitative research methods.

Researchers in the School of Social Science, at the University of Chicago, expanded on these ideas in the 1920s and 30s. They shared several beliefs in common such as the relationship between the development of personality, symbols, and social interaction. They relied on the case study method and used first person accounts, fieldwork, and observations. Their research often focused on people who were unseen, living on the edges of society, reported from the participants’ perspective, and within the context of their environments. This group of sociologists had a profound impact on the development of qualitative methods (Bogdan & Biklen, 2007).

Within the interpretive tradition, hermeneutics had its foundation in the interpretation of religious texts. In the 1700s, Spinoza asserted the importance of considering the historical context of a religious work in order to understand the author’s

intent as well as considering the entirety of a work in order to better understand the parts (Gadamer, 1975). In the 19th Century, Schleiermacher moved hermeneutics out of the realm of the historical, written text and into the understanding of all communication (Crotty, 1998; Gadamer, 1975). At the turn of the 20th Century, Dilthey asserted that the historical context was essential in understanding the meaning placed on any communication, including expressions of art. He spoke of the interpreter moving between the text (or other expressions of human experience) and its historical and social context (Crotty, 1998). In order to understand humans, one must place any experience within the cultural and historical context of the experience. But Heidegger took a more phenomenological direction and described the Hermeneutic Circle as a “circle of understanding” (Heidegger, 1962, p. 195) between the existence of Being (*Dasein*) and being (Crotty, 1998). In other words, the Hermeneutic Circle is the never-ending dialog and openness to new understanding between the entity and its being in the world. However, Heidegger’s student, Gadamer, returned to the relationship between historical context and language. Gadamer believed that our understanding comes through language, but language couched within an historical and cultural framework. The ever-changing relationship between the past and the present helps us understand not only the past, but ourselves within the context of the present. This is what Gadamer (1975) referred to as the “fusion of horizons” (p. 273) which requires openness to what history can tell us.

In my definition of hermeneutics, I relied on Dilthey and Gadamer to interpret the Hermeneutic Circle as a dialectic movement between the interpreter and the author, as well as a movement between the whole and the parts. Both Dilthey and Gadamer

acknowledged the importance of an historical context for understanding. As a librarian with over 30 years of experience, I understand the traditions of the academic library field. My intent for this study was to listen to library practitioners who have implemented the necessary changes to library information resources and services in support of a new baccalaureate program and interpret their perspectives to the larger academic world.

Ontology and epistemology. This section addresses the nature of reality and knowledge as understood within the Interpretive Social Science paradigm. Kuhn (1970) defined *paradigm* as “the entire constellation of beliefs, values, techniques, and so on shared by the members of a given community” (p. 175). Each research paradigm is framed by its perspective on the nature of reality (ontology) and its stance on knowledge (epistemology). For my study, I have taken the philosophical position of constructivist within the Interpretive Social Science paradigm. I believe it is useful to understand how that position influences the way I approach this project. This section will contrast the ontological and epistemological beliefs of constructivism with other research paradigms.

Ontology. Ontology theorizes about the nature of reality. This subsection will contrast the ontological positions taken by the major research paradigms.

Positivist. According to Guba (1990), positivists are *realists* who maintain that absolute reality does exist, that it is external to humans, and defined by the laws of nature. They also believe that humans can discover and understand all aspects of reality.

Post-positivist. On the other hand, as *critical realists*, post-positivists have distanced themselves from positivists. They still believe that reality is absolute and external, but they doubt that humans can fully grasp and understand reality (Bettis & Gregson, 2001; Guba, 1990).

Constructivist. Constructivist ISS researchers take a *relativist* stance and maintain that humans experience multiple realities dependent upon their social context and interpretation. Since reality is socially constructed, each person understands reality in his or her own way (Bettis & Gregson, 2001; Guba, 1990; Patton, 2002).

Critical Interpretive Social Science. In contrast, critical ISS researchers are *critical realists* who believe that reality is external to humans but is distorted by power. According to these social scientists, gender, race, class, and sexual orientation distort the construct of reality. This distorted reality must be revealed to the research subjects (Creswell, 1998, 2007; Guba, 1990; Merriam & Simpson, 2000).

Post-modernist. And finally, post-modernists argue that human understanding of reality is not possible because of a “crisis of representation” (Denzin & Lincoln, 2005, p. 18; Patton, 2002). They maintain that language is socially constructed and cannot accurately represent reality as truth. Indeed, no one truth takes privilege over another (Richardson & St. Pierre, 2005). They further question reality as a goal of research (Merriam, 2009).

Epistemology. Epistemology is the study of knowledge. In addition to how researchers look at reality, they also differentiate among the ways knowledge is generated. This subsection looks at how the paradigms are also distinguished by their stance on epistemology.

Positivist. Positivists maintain an *objectivist*, arm’s-length stance on knowledge. Knowledge must be collected value-free to guard against bias (Bettis & Gregson, 2001; Guba, 1990).

Post-positivist. Post-positivists have established a *modified objectivist* stance.

While objective knowledge is ideal, post-positivists believe it can only really be inferred (Bettis & Gregson, 2001; Guba, 1990).

Constructivist. ISS researchers co-create knowledge in collaboration with their participants (Denzin & Lincoln, 2005). Because the researcher must be placed in the context of the study in order to successfully interpret the participants' reality, the epistemology is said to be *subjectivist* (Bettis & Gregson, 2001; Creswell, 2007; Guba, 1990; Patton, 2002).

Critical Interpretive Social Science. Critical ISS researchers believe that the researcher's values are integral to the study and the researcher plays a role in challenging authority and oppression. This paradigm's *subjectivist* stance places the researcher into the study to avoid objectifying subjects. (Bettis & Gregson, 2001; Creswell, 1998; Guba, 1990; Merriam & Simpson, 2000)

Post-modernist. In the post-modernist paradigm, knowledge is contextually constructed and not limited to a single perspective. The views of the researchers are integral and clearly stated in the study. Ensuring that multiple perspectives are represented is key to the research (Merriam, 2009; Patton, 2002).

The constructivist paradigm was selected for this study in order to capture the perspective of each participant. Each college presented a unique context that influenced how the library participants responded. Each participant experienced reality differently. My role was to understand and represent, as accurately as possible, knowledge within that reality. Through dialog, observation, and documents, the participants and I co-

constructed that knowledge to be sure that the participants' voices were heard and accurately interpreted.

Strengths and weaknesses of Constructivist Interpretive Social Sciences. As with any of the paradigms mentioned above, there are strengths and weaknesses inherent in the Constructivist ISS paradigm. For the constructivist ISS researcher, the strength is the depth of understanding gained from the perspective of the participant that can be uncovered in the research process (Manning & Stage, 2003). In ISS, the researcher becomes the instrument of the research process as she is best able to understand verbal and nonverbal cues, expand or focus on details, and check for clarity (Merriam, 2009).

Critics, however, are concerned that the close relationship between researcher and participant could result in the researcher becoming an advocate or ignoring relevant data. The constructivist researcher must reveal her bias and maintain vigilance for any biasing effect on the research (Manning & Stage, 2003). Nevertheless, the Hermeneutic Circle suggests that each cycle of interpretation results in greater understanding between the researcher and the participant. Interpretation through the Hermeneutic Circle is self-contained and never-ending (Shank, 2006).

Critics also complain that ISS research is not generalizable to a larger population. The results are contextual and can only be said to represent a specific site. Constructivists respond that results can be generalized to theories, policies, and similar situations (Manning & Stage, 2003; Yin, 2009). Merriam (2009) and Stake (2005) suggest that it is up to the reader to draw conclusions about generalizing the results to other similar situations.

In this study, I see my long immersion in the community college library as strength for the hermeneutic, constructivist approach. This experience allowed me to better understand and represent the meanings that the participants derived from their own experience of identifying and implementing the necessary changes in their libraries to serve a new CCB program. At the same time, while colleges and their libraries are unique, there may be similarities among colleges and libraries that allow policy-makers and other libraries to gain insight that would apply to similar situations.

The Researcher's Place in the Context of the Study

Creswell (2007) stated that researchers bring their own understanding of the world to the study. He wrote that researchers make assumptions about ontology and epistemology, as well as the method. He said, "good research requires making these assumptions, paradigms, and frameworks explicit in the writing of a study" (p. 15).

I place a high value on knowledge and learning. My values are couched in the belief that education has a transformative effect on lives, families, and communities. What excites me about the community college is the opportunity it provides adults to start over, fulfill dreams, and improve their lives. Helping students learn how information is organized, retrieved, and used to create knowledge has given purpose to my life.

Much of my training in undergraduate sciences involved an empirical, positivist approach to research where the researcher studies the subject objectively from a distance. However, the social sciences may not always be well-served by this paradigm. People understand events around them within a social construct and with shared meaning. In order to fully understand and interpret how a group of people work together, it is important that I place myself into the context of the issue (Denzin & Lincoln, 2005).

I have worked as a librarian for 34 years, 30 of them at a community college, and 13 of them as a community college library administrator. The topic of adapting the library to meet the needs of an applied baccalaureate program is of personal interest to me because my college recently began work to implement such a program. It was the lack of available research on the library in this endeavor that drew me to this topic.

I brought my own experience and understanding of the field to help shape questions and interpret responses. However, because knowledge is co-created between the researcher and the participant, the opportunity for bias is a risk. By triangulating interviews, observations, and extant documents, as well as participant reviews of the interview transcripts and draft results, I worked to ensure that I shared as accurately as possible the views of the participants.

Research Method: Multiple Case Study

Merriam (2009) stated that case study is recommended when the researcher wants to learn holistically about current, complex issues, with many variables, in a naturalistic setting. Yin (2009) described the method as useful in getting to the “how and why” (p. 9) of a contemporary issue. For this study, the case study method was helpful in understanding how community college libraries adjusted to successfully meet the needs of a new community college baccalaureate program.

Characteristics of case studies. A case study is defined by its unit of analysis rather than the topic (Merriam, 2002, 2009). Cases are bounded by time and context so that the boundaries of the study can be easily distinguished. This particular study is bounded by the context of three community college libraries and the ways in which they developed during the implementation of a community college baccalaureate degree.

Merriam (2009) described case study “as being particularistic, descriptive, and heuristic” (p. 43). Studying an individual case permits researchers to examine specific situations more deeply. The “rich, thick description” (p. 43) that is common with case studies provides enough detail to include many variables as well as to make connections between them in the study. Case study is heuristic in that it engages the reader’s previous experience and helps him or her develop greater insight and understanding regarding a phenomenon and make generalizations.

Stake (2005) described the case study as more of a case choice than a method. Because of this characteristic, case study can be combined with other methods. Case studies can be quantitative or qualitative (Yin, 2009), and methods could include ethnographic, narrative, grounded theory, or hermeneutic (Merriam, 2009; Stake, 2005; Yin, 2009). I chose a hermeneutic approach for this case study because I wished to interpret and make plain the thoughts, activities, and motivations of library staff engaged in change. Case study is especially well-suited for the hermeneutic approach because of the method’s holistic and particularistic nature. The hermeneutic circle is described as “relating parts to wholes and wholes to parts” (Patton, 2002, p. 497).

Stake (2005) described three applications of case studies. This method is used when a case has “intrinsic” (p. 445) value: it is the particular case that holds special interest. Case study may also be used when the study is “instrumental” (p. 445) in understanding how a situation or process works. In this occurrence, the goal is to understand the phenomenon, and the case is secondary. Finally, Stake described the instrumental “multiple case study” (p. 445), used when there is less interest in a particular case and more interest in understanding the phenomenon being studied.

For this study, instrumental multiple cases were examined. This study sought to make clear the process employed by three libraries that changed to meet the needs of new community college baccalaureate programs. Each library was examined as a separate case within the context of its individual college. Cross-case analysis was used to examine similarities and differences.

Strengths and weaknesses of case studies. Yin (2009) reported four common criticisms of case study. The first is a failure of the researcher to demonstrate rigor by following a protocol, tracking evidence, or guarding against bias. The second is the inability to generalize the findings to a larger population. The third is that case studies are large undertakings that produce huge documents. The fourth complaint is a renewed emphasis, “especially in education and related research” (p. 15), on studies that establish cause-and-effect and marginalize case study as a method. This subsection will examine the strengths of the method and the way case study researchers respond to issues of construct validity, internal validity, external validity, reliability, and other criticisms.

Strengths. The case study method is well-suited for grasping the complexities of social groups and situations in their natural settings (Merriam, 2009; Yin, 2009). The method provides the context and the rich, thick descriptions that experimental methods lack (Merriam, 2009). Merriam also suggested that the method is instrumental in understanding challenges, procedures, and programs, as well as serving to improve practice. Additionally, she stated, “Case study has proven particularly useful for studying educational innovations, evaluating programs, and informing policy” (p. 51). Because it broadens our understanding of a phenomenon, the method can lead to the development of hypotheses for further testing (Merriam, 2009).

I chose the case study method for this study because I wanted to understand how community college libraries changed in order to meet the needs of a newly implemented baccalaureate program. The method was ideal because I wanted to understand the libraries' efforts as an embedded unit within the context of the larger community college. This study revealed how the libraries identified the needed changes; how they implemented the change, including advocating for support, adding information resources, and modifying procedures to meet programmatic needs; how they managed the challenges they encountered; and how they evaluated their success. The study was intended to improve practice and inform policy-makers.

Internal validity. Yin (2009) defined a threat to internal validity as an inaccurate conclusion that one variable causes an effect on another without considering possible other influences. Most case studies do not attempt to establish causality (Merriam, 2009; Yin, 2009). According to Merriam (2009), case study is most useful when there are multiple variables over which the researcher has no control. To protect against failures of internal validity, Yin (2009) recommended avoiding inferences about events that were not observed. This study did not endeavor to establish causality through manipulating variables, but rather it sought to describe how a community college library changed to meet the needs of a community college baccalaureate program.

External validity. Critics discount the case study method for any claims of generalizability to a larger population because the method usually looks at a single case with a limited number of participants (Bogdan & Biklen, 1998; Merriam, 2009; Yin, 2009). However, Yin (2009) responded that single case studies can be generalized to a proposed hypothesis instead of populations. Nevertheless, Merriam (2009) and Stake

(2005) maintained that case studies can be generalized to the degree that researchers focus on describing the particulars in the case and encourage the readers to integrate the knowledge into prior knowledge and understandings. Merriam (2009) stated that, “since the general lies in the particular, what we learn in a particular case can be transferred to similar situations” (p. 51). In this way, case study researchers allow the reader to draw their own inferences on how the results might be generalized to similar contexts.

Generalizability can also be strengthened by conducting multiple case studies (Merriam, 2009; Yin, 2009). Yin (2009) stated, for example, that “scientific facts are rarely based on a single experiment” (p. 15). To strengthen theory building, Yin recommended using replication logic in multiple-case studies to strengthen reliability.

This study employed a multiple case method to strengthen its reliability and address the concern regarding external validity. Although every community college baccalaureate program is unique in its content and context, it was expected that similarities would be found in how librarians approached the challenge of upgrading library information resources and services to meet the needs of the new program. Each program was analyzed individually and then compared across cases for similarities and differences.

Reliability. Reliability refers to both replication and bias. In scientific studies, researchers take care to document procedures so that repeating the exact same study will produce the same results. Qualitative studies are challenged by the fact that reproducing the same conditions is not possible. The qualitative researcher’s goal is to report on the experience of the individuals in a particular context through their perspective at a given moment in time. Nevertheless, researchers can assure readers about the reliability of the

results by reflecting on the researcher's position with regard to the study by carefully documenting each step of the process, triangulating the data for consistency, and having participants check for accuracy (Merriam, 2009; Yin, 2009).

Earlier in this chapter I revealed my experience in community college libraries and my interest in how community college libraries adapt when a college implements a baccalaureate program. My prior experience provided a basis of understanding that helped me interpret and convey the experience of other librarians to the reader.

My protocol was detailed and followed carefully. A diary of my thoughts and the steps performed strengthened the reliability of the results. I also triangulated documents with field notes and the participants' interviews to ensure that the information was consistent. I asked participants to review transcripts of their interviews and my findings for accuracy in capturing their words and interpreting the results. By being very open about my views, the process, and providing conclusions that are consistent with the data gathered, I believe the reader can be assured that I have adequately addressed reliability.

Other criticisms. Critics have also complained that case studies can be too big or complex or that the researcher is unable to devote the time necessary to adequately research, analyze, and present the case. Along the same line, case studies can be too long for busy policymakers to read (Merriam, 2009; Yin, 2009). Yin (2009) countered, however, that case studies need not be long or even require a great deal of field work. Stake agreed (2005) that the researcher should decide what is relevant and the level of detail to include in the study. Nevertheless, Yin (2009) stated that skills needed for conducting case studies have not been defined and currently there is no way to determine if the researcher has the skills required. Merriam (2009) also stated that the study is

limited by the researcher's skills and instincts. To address these concerns, I have relied on my major professor, the writings of noted experts on case study, and the advice and feedback of colleagues.

Research Procedures

This section describes how the cases and participants were selected. It outlines the data needed, how they were collected, and how they were analyzed. This section also relates the safeguards taken against threats to validity and measures taken to protect human subjects.

Case selection. Case selection was purposive in order to select sites in Washington State that had implemented applied baccalaureate programs and reflected a variety of college sizes and service areas. I used the Washington SBCTC website to learn which colleges had implemented SBCTC-approved and accredited applied baccalaureate programs. Once I had a list of colleges that met those criteria (a total of six colleges), I sent a formal letter of introduction and inquiry to the library administrator. The letter of introduction and inquiry is included in the appendices (see Appendix A). Three libraries agreed to participate. The resulting list of colleges reflected a mix of urban and rural, and size.

Study participants. The unit of analysis was the library program within the context of the community college. To be chosen, participants had to have been directly involved with the planning and implementation of the changes to the library program. They included the library administrator and any librarians or library staff recommended due to their intimate knowledge of the process of planning and implementing the changes

to meet the needs of a specific applied baccalaureate program. Since the method was a bounded case study, I limited interviewees to library personnel.

Data collection. The data needed to answer the research questions is provided in Table 3.1. at the end of Chapter Three. After initial contact and agreement to participate, I asked each site to supply the Bachelor of Applied Arts program applications submitted to the SBCTC and NWCCU for approval, library budgets, and the Academic Library Survey and/or ACRL Academic Library Trends and Statistics Survey during the development of a single applied baccalaureate program. I reviewed the materials in order to become familiar with the college libraries. One-day site visits were scheduled with a minimum of two participants at each college. During the visit, I interviewed each participant for approximately 60 minutes. I created semi-structured interviews to encourage the participants to share what they thought was important. I included the interview questions in Appendix B.

I recorded and transcribed all interviews and digitized all handwritten notes. I took digital photographs of the facilities. The files were kept in both electronic and paper formats. To protect against technological failures, I backed up electronic files on a flash drive and kept the flash drive in a locked office in another location. The paper copies were housed in a locked cabinet in my home. These steps protected the reliability of the data and the privacy of the participants.

In consideration of the Hermeneutic Circle, I transcribed each interview within one week and sent it to the participant to review. I asked each participant to make corrections to the transcript and, if necessary, clarify the intent of any statement.

Data analysis. The transcriptions of interviews were analyzed and coded employing HyperRESEARCH, a qualitative analysis computer program. The codes were grouped into categories and then condensed into themes (Creswell, 2007). As typical in qualitative case studies, categories and themes used in the analysis of transcripts were not set in advance, but derived through inductive reasoning (Creswell, 2007; Merriam & Simpson, 2000). The codes were allowed to evolve to fit the data.

I triangulated the corrected, coded transcripts with the participant-supplied documents to increase the validity of the results (Merriam, 2009; Yin, 2009, 2012). After writing a draft of each case study, I sent it to the respective case participants. I asked the participants to read the draft and then held individual telephone conferences to gather feedback and correct any errors. These steps were taken to accomplish “member checking” (Stake, 2006, p. 37). I used this opportunity to ask about any anomalous data in the participant-supplied documents and improve my understanding. During cross-case analysis, I compared the results for similarities and differences in order to further increase validity (Stake, 2006).

Strategies to protect human subjects. I asked each participant to sign an agreement to participate in the study. The agreement assured participants that their names and the names of their colleges would not be used in the results of the study. I agreed that no participant’s identity would be revealed without the written permission of all participants at an individual college site.

Each college was assigned an alias to represent its name. No ranking of a college was implied with the assigned alias. Each participant was given an alias for the purposes of this study. All participants at a given college were assigned an alias beginning with

the same letter as the name assigned to the college to help readers connect the findings to the specific college.

Chapter Summary

This chapter established the philosophical foundation for the study and provided the rationale for the method chosen. Within the ISS paradigm, I have chosen a hermeneutic, constructivist approach to my research. This approach enabled me to work closely with the participants, within their natural settings, to uncover and better understand how they identified and implemented needed changes to support a new CCB program at their colleges. The Hermeneutic Circle guided me in dialogic, recursive exchanges that ensured that I developed the deepest understanding of the participants and issues surrounding these changes. This approach allowed me to bring my prior knowledge and experience into the study to aid with interpretation of the participants' experience.

This chapter also described the multiple case study method employed. This method was chosen because the study was bounded by the time period for implementing the change in the library and the context of the library in the community college. It provided the deep, rich descriptions necessary to reveal the many variables in the study. A multiple case study design was chosen to strengthen and clarify the results and the detailed protocol served to support reliability. In addition, the chapter addressed the criticisms of Constructive ISS and the case study method. The chapter also described the procedures for selecting three different community college libraries within Washington State and the selection of at least two library staff at each site. It discussed methods to

ensure trustworthiness and to analyze the data. Finally, it presented procedures to protect the rights of the participants.

Table 3.1. Type and Purpose of Data Collected

Research Question	Type of Data Needed	Purpose of Data
How do libraries identify changes needed to meet the needs of a CCB program?	Written applications to state agencies and accrediting bodies	Documentation of changes proposed; rich, thick data
	Interviews	To understand from the perspective of the participants; rich, thick data
	Direct observation, journaling, photographs	Rich, thick data
How do libraries plan and implement the changes needed to meet the needs of a CCB program?	Written reports	Documentation of progress of implementation; rich, thick data
	Library budgets	Documentation of program changes
	Interviews	To understand from the perspective of the participants; rich, thick data
	Direct observation, journaling, photographs	Rich, thick data
How do libraries manage the challenges encountered while implementing changes?	Interviews	To understand from the perspective of the participants; rich, thick data
	Direct observation, journaling, photographs	Rich, thick data
How do libraries evaluate the success of the changes, and what additional changes were made as a result of the evaluation?	Written reports	Documentation of the success of changes; rich, thick data
	Interviews	To understand from the perspective of the participants; rich, thick data
	Library surveys (ALS and ACRL)	Documentation of the success of changes
	Library budgets	Documentation of the success of changes
	Direct observation, journaling, photographs	Rich, thick data

Chapter Four—Research Findings

Washington State established Bachelor of Applied Science (BAS) degrees to provide a pathway for workforce education students who needed bachelor degrees in order to obtain entry level positions or advance in their fields. The first degrees were implemented in 2006 with the first student cohorts beginning in fall of 2007. The purpose of this study was to understand how community college libraries enhanced information resources and adapted services to support this new mission area. This chapter presents the findings from the research.

All college libraries participating in this study had met the study requirements that (a) their college had implemented a community college baccalaureate program and (b) achieved accreditation as a four year college. Washington State community colleges were chosen based on the legislative approval in 2005 to allow community colleges to offer applied baccalaureate programs as well as the researcher's access to the libraries and their staff. Each participating college had implemented one or more baccalaureate programs that differed from the others in terms of fields of study and modality. They also differed in terms of size of college and types of service area: urban, suburban, rural. The participants interviewed played a significant role in planning and implementing the changes to the library.

Chapter Four consists of a discussion of the soundness of data, definitions of the emergent themes, the findings from the three case studies, a cross case analysis, and a summary of the chapter. Each case examined how one community college library prepared and responded to the addition of one or more baccalaureate level programs.

Evidence of Soundness of Data

Soundness of data addresses issues of trustworthiness in the study (Merriam, 2009; Yin, 2009). Internal validity, external validity, and reliability are criteria used when discussing threats to trustworthiness. The researcher needs to provide assurance that the results of the study are both reliable and valid. In this section, I address the steps taken to increase the trustworthiness of the study. The design of this study did not lend itself to establishing cause and effect.

Internal validity. Internal validity, sometimes called credibility (Denzin & Lincoln, 2005; Merriam, 2009), asks the researcher to consider how well the results approached reality. As discussed in Chapter Three, within the Constructivist Paradigm, the ontology is relativist, and the epistemology is subjectivist (Guba, 1990). In this context, we acknowledge that there are multiple realities among the participants and that an understanding is built or co-created with the researcher.

There are several steps I took to improve the credibility of the data. I was able to spend time in each library in order to observe the students studying there and to develop a fuller appreciation of the context in which the librarians conducted their work. I interviewed each participant privately within the library. To improve the likelihood of candor, I assured the participants that their identity and the identity of their colleges would be disguised by the use of aliases. I asked them if they knew of any risk for themselves by participating. Any questions were addressed, and each person gave their consent to participate. By conducting the interviews in person, I was able to observe small mannerisms (such as smiles, frowns, or puzzlement) that improved communication and my understanding of their responses. I also interviewed between two and four people

at each site in order to get a fuller understanding of their experiences. In this way I was able to triangulate the data provided within a case and across cases.

After transcribing the interviews, I performed member-checking by sending the transcripts to each participant and asking them to correct and clarify inaccurate or unclear information. Upon completing the first draft of the case study, I sent it to each participant within the case. I scheduled telephone conferences with each participant and reviewed the draft with them for accuracy. Based on their feedback, I revised the case studies.

As a hermeneutic researcher, I relied on my 30 plus years of experience as a community college librarian to help me interpret the experiences of the participants. Having been both a reference librarian and an administrator, I was able to discern the different perspectives the participants held based on their positions. I understood the issues of limited resources that community college libraries faced. I was also able to define the practices and tools that are commonly found in libraries. At the same time, I considered any biases I might have held that would have influenced the results. By keeping a journal, I was able to articulate my impressions and questions concerning the data and how it answered the research questions. Writing helped me to reflect on any conclusions I reached to be sure that the conclusions stayed true to the data.

External validity. Also known as generalizability (Shank, 2006) or transferability (Merriam, 2009), external validity refers to the extent to which the study can be applied to other similar studies. Within the Constructivist Paradigm, it is assumed that exact replication of the context of the study is not possible. Therefore, results and conclusions might vary and the ability to generalize the results to a broader population is

questioned as a threat to trustworthiness. The following paragraphs address the threat of external validity for this study.

The cases chosen were similar in that they were all libraries within Washington State community colleges that had added baccalaureate degrees. However, the colleges added programs in different fields (i.e. Radiation and Imaging Sciences, Interior Design, Behavioral and Human Services, and Nursing). The colleges were different sizes and served different populations. Differences in college structures and cultures were also factors that made replication and therefore generalization impossible. Nevertheless, there were similarities that held true across cases, and the findings provided insights that may be useful to practitioners.

Merriam (2009) stated that the heuristic nature of case studies allowed the reader to engage with their own prior experience to improve their understanding and gain insights into the phenomenon being studied. This study can be generalized to the extent that readers can draw their own inferences on how the study might apply to similar situations.

Reliability. Reliability, also called dependability or consistency (Merriam, 2009; Shank, 2006), refers to how well we can be assured that another researcher could follow the protocol for the same case study and arrive at similar results (Yin, 2009). Merriam (2009) pointed out, however, that in the social sciences, replication is impossible because human behavior changes and different researchers may develop different interpretations. She suggested instead that researchers should be concerned that “*the results are consistent with the data collected*” [emphasis in original] (p. 221).

One way to assure that the results are reliable is to carefully document the steps taken. Before embarking on this study, I submitted a detailed protocol to the Oregon State University Institutional Review Board that included the site visit. I pilot-tested the interview questions with a non-informant. I secured the study sites and scheduled the interviews. For each library I collected the following documents: (a) National Center for Education Statistics, Academic Library Survey for 2006, 2008, 2010, and 2012; (b) the Substantive Change Proposal submitted to the NWCCU; and (c) the Bachelors of Applied Science Program Proposal submitted to the Washington SBCTC.

Before each site visit, I sent the Consent Agreement and the Interview Questions in advance so that participants had time to read them. I arrived early at each site and walked through the library, observing the layout and student use of the facility. I met with each participant individually in a private conference room. I recorded each interview. Following the interview, I transcribed the interview and sent the transcript to each participant for their review and approval. I asked them to make changes to correct or clarify the document.

Once I had the approved transcripts, I used HyperRESEARCH qualitative data analysis software to help me organize the coding of the data. I used open coding to assign as many meanings as possible. I followed up with axial coding to group the codes into themes. Then I used the software to retrieve the data with the assigned themes while writing the drafts of the case studies. During this process, I kept a journal of my thoughts about the cases and considered how to organize the results. I organized each case study by emergent themes. When each case study was completed, I sent the draft to the case

participants and scheduled telephone conferences with them individually to gather their feedback. I made revisions based on that feedback.

Reliability was further enhanced by interviewing more than one participant per site and triangulating the data gathered to ensure consistency. I used journaling as a means to watch for signs of researcher bias and to watch that conclusions were consistent with the data. My years of library experience allowed me to approach this study with the background knowledge in the field of academic librarianship. This experience helped me interpret the responses of the participants.

Summary. This section addressed threats to the trustworthiness of the study. The threats include internal validity, external validity, and reliability. Internal validity looks at how well the data aligns with reality. Internal validity was strengthened by following a protocol, collecting multiple interviews for each case on-site, talking with participants with first-hand knowledge, and conducting multiple cases. I employed member-checking to be sure the transcripts and case study drafts captured the reality for each participant.

External validity is concerned about how well the data can be generalized or transferred to a similar situation. The Constructivist Paradigm proposes that each participant experiences reality in her own way and different researchers may interpret that knowledge in different ways. This makes generalizing qualitative research problematic. However, Merriam (2009) suggested that the heuristic nature of the case study method encouraged the reader to engage new knowledge with prior learning in order to infer how the results might apply in similar contexts.

Reliability of the data can be strengthened when the researcher produces an audit trail of the steps followed in conducting the study. Following a protocol and journaling are strategies that assure readers that a study meets the test of reliability. For this study I created and followed a protocol and kept a journal during the study.

Definitions of Emergent Themes

The following major themes emerged from the data gathered from participants. The associated definitions helped provide the focus needed to discuss and analyze the case studies.

- **Planning:** Planning was defined to mean orientation and preparation by the library personnel. Though planning was ongoing, for the purposes of this study planning involved self-organizing activities and an initial analysis of needed changes.
- **Collaborating:** Collaborating was defined to mean working with others both inside and outside of the library. This included library-program relationships, library liaison efforts, committee work, library personnel working together, as well as contacts outside the institution.
- **Providing information resources:** Providing information resources was defined to mean developing a collection of information resources in any format and/or providing access to them, including arrangements with other libraries.
- **Staffing:** Staffing was broadly defined to mean the personnel within the library including new staffing, workload, subject expertise, and professional development provided to library personnel or program faculty by librarians.

- **Teaching:** Teaching was defined to mean information literacy as a learning outcome and the instruction of information literacy (whether a workshop, credit-bearing class, or online tutorials) including how instruction was affected by the modality of the program, students, and student learning.
- **Evaluating:** Evaluating was defined to mean measuring how well the library was achieving its goals for serving the baccalaureate programs and taking steps for improvement.

Case One— Alpha College

This section describes Alpha College and the findings based on interviews of four librarians. Following the description of the college and interviewees, the section explores themes that emerged from the interviews.

Alpha College was chosen because (a) it met the criteria that the college had successfully implemented one or more community college baccalaureate programs (defined as acquiring approval from the Washington State Board for Community and Technical Colleges and achieving regional accreditation as a baccalaureate-offering institution); (b) the community college was located in Washington; and (c) the researcher had access to library personnel.

Background. In 2006, before the implementation of its first baccalaureate program, Alpha College was classified as a Carnegie large, two-year, associate-degree granting institution. Located in an urban area, it serves a number of suburban communities within its district. Indeed, this was the largest of the case studies with more staff in the library than the other colleges studied. The interviews provided rich details

on how the library approached and implemented changes to meet the needs of the baccalaureate programs.

After achieving accreditation as a baccalaureate-level institution, the college was reclassified as a Carnegie medium-sized, four-year, primarily associate-degree granting institution. The college currently serves approximately 10,000 full-time equivalent (FTE) students. The college implemented two baccalaureate degrees: the first, in September 2007, in RAIS, and the second, in January 2010, Interior Design.

During the site visit, the library appeared busy at mid-morning. Alpha College's two-story library was built around a central staircase. Signage indicated it was zoned by noise level so that students could find the environment that suited their needs. The Circulation and Reference Desks were located near the entrance so that students could find help easily.

According to data submitted on the biennial Academic Library Survey to the National Center for Education Statistics, the number of full-time equivalent (FTE) students increased, starting at roughly 8,800 FTE in 2006, topping 10,000 in 2010 and reported at about 9,760 in 2012. This increase took place during a severe economic downturn when community colleges across Washington State were experiencing similar increases in FTEs as students sought to improve their credentials and employability.

Over the same time period, the annual library gate-count statistics indicated that library visits were up 125% from 2006 to 2012. The number of general circulation transactions showed the biggest gain from 2006 to 2008, up 152%, and reserve circulation over the period was up 130%. Total circulation per FTE student increased 150% from 2006 to 2008. The number of workshops presented annually by the library

increased more than 56% between 2006 and 2012. The large increases in usage and the number of presentations were attributed by library personnel to the library's move from temporary quarters into a newly remodeled library building. The increase in the number of FTE students, including the BAS students, was a contributing factor. Also during this period of time, the number of electronic reference sources and the number of aggregated full-text databases¹ increased 220% between 2006 and 2010 and expenditures for electronic serials went up 183% from 2006 to 2010. The print collection increased nearly 23% between 2006 and 2010. Based on a 2005 recommendation from the NWCCU, the funding for library materials was increased by \$20,000 each year until the total allocation reached \$100,000. In addition, a temporary allocation for the first BAS program in RAIS amounted to \$25,000.

Interviews. Four librarians were interviewed for this case study, including the administrator. The participants in the study were asked about their experiences with these new programs. The four interviews took place at the college library on a single day. Each interview was conducted separately in a private room and lasted between 30 and 75 minutes. All participants were given aliases to protect their privacy. The participants were asked to review the transcript of their interview and correct or clarify comments made during the interview. The participants were later asked to provide feedback on the accuracy of a draft of the case study. These steps were taken to ensure that the case study accurately reflected the participants' experience and to guard against researcher bias.

¹ ANSI/NISO Z39.7-2013, 4.8.2.2, defines Aggregated Full Text Databases as a collection of both bibliographic references and full text articles from periodical and/or other titles presented on a continuous basis that may relate to a common discipline or may provide multi-disciplinary coverage.

Findings. The following themes emerged from the recorded interviews: planning, collaborating, providing information resources, staffing, teaching, and evaluating. The library administrator and library faculty knew early in the process that the college would be applying for a baccalaureate program. The administrator, “Audrey,” said that she became aware of the selection of the program through weekly administrative meetings.

Theme One—Planning. Not surprisingly, planning emerged as an important theme during the interviews. The administrator and each of the library faculty members played distinct functional roles in the planning process. Librarian “Amy” explained that one librarian had oversight of collection development and one librarian had responsibility for cataloging new materials and library technology, including managing the databases. As Instruction Librarian and Reference Coordinator, Amy worked on developing instruction modules and resource guides.

Audrey saw her role mostly as a voice for the library at the higher level meetings. She said,

I had to be there and be a library presence in discussions amongst administrators. I had to say that we need to pay attention to additional resources that the library would need to provide to these higher level classes.

When asked who included her in the planning, she responded, “When it comes to the library, I invite myself in. I had to initiate that relationship.” She also saw her role as facilitating the connection between the program chair and the librarian who served as the program liaison to ensure that the library knew what information resources the program would need.

Librarian “Anne” saw her role as a member of the curriculum advisory committee. As a non-voting member, Anne did not feel she had much influence beyond expressing her opinion. At the same time, Anne felt that the details of the curriculum were not available when the proposal was submitted to the SBCTC. She did not feel she could plan until the specifics of the courses were more developed. She said, “But I don’t influence them in their planning; they influence me in my planning.... It’s a reactive role that we play.”

Audrey had a similar observation about her role saying, “It is mostly reacting to what I learn.” She went on,

If it involved the library then the [library] reacted and provided what was needed. I did not plan and say we are going to do this so that if the state board requires this, then we will have something ready. No, it was really the other way around.

Audrey explained that Alpha College saw the BAS as a two-plus-two model where an additional two years of instruction were added to the two-year associate program. That influenced how they approached general education, because the college assumed that all students completed their general education credits in their first two years. However, Audrey said,

The upper level [students] were mostly new to Alpha College and were a totally different cohort from the ones who had graduated from the two-year program.

This became a concern in terms of information literacy instruction because some of the incoming students were not as familiar with library research.

The RAIS program carried its own specialized accreditation and the library had been involved with its previous accreditation activities. However, Audrey shared, “I must confess that we did not do any outside research about other professional groups or what

other institutions were doing.” She said that the collection development librarian at the time, who had previously been a nurse, worked with the faculty to align the current resources with the proposed courses “to see how much [of] what we already have would be useful for the proposed courses and then determine what kind of higher level materials were needed for those courses.” Nevertheless, for the Interior Design program, Audrey stated that they did study the standards set by the Council for Interior Design Accreditation to learn the type of resources expected for the new applied baccalaureate program.

Within the library, the librarians would discuss the work to be done at their regular Monday meetings. Amy said that the planning was not always straightforward; sometimes ideas would come from the program, sometimes from Audrey, and sometimes from other librarians. “Abby” recalled that during the meetings, they would discuss what needed to be done and the most pressing tasks would be their work plan.

Theme Two—Collaborating. Collaboration also emerged as a major theme of the study. The librarians felt strongly that developing and building the relationships between librarians and program faculty facilitated the library’s ability to successfully support the new program. Audrey was asked how the program itself influenced the preparations of the library. She responded that she thought the historical relationship with the program prior to its becoming a baccalaureate was important. She said,

There are some program chairs and there are some faculty who have stronger relationships with the library than others... We all work as a team. Each of us, the five full-time [library] faculty, we are liaison to one or two academic divisions. We try to contact faculty members in different programs within the division to see what they need.

Audrey encouraged the library liaisons to work with both of the baccalaureate program chairs to learn what was needed.

Communication was frequently mentioned as the key to collaboration. Librarians often mentioned that communicating with program faculty was at times challenging.

Amy explained that the Interior Design classes were taught on campus so the instructors were more readily available. She said,

It's been more of a challenge with many of the health science programs, which are taught primarily online. We can identify what we think might be useful and beneficial, but unless we get the feedback from the faculty who are teaching in that program, it's really hard to know if we're going in the right direction.

She added,

There have been instances where we ask and ask and ask and just never really get good feedback. And then we feel for the students who might come and then we don't have the resources that they need just because we don't know what they need.

Abby shared similar thoughts. She said,

One of the biggest challenges with the BAS program, which was Radiation and Imaging Sciences, was that they were never on campus, so it really was difficult to reach them. At the beginning we didn't really have much luck when we tried to connect with those faculty members, we wouldn't get, really, a response. But things are so much better now; it's unbelievable how grateful they are—how they appreciate what we do. I mean, we hear from them all the time.

Anne talked as well about the difficulty in communicating.

A lot of the faculty are practitioners. They don't come to campus that often for the online courses. They may never come to campus. So just communicating is a struggle.

Theme Three—Providing Information Resources. Providing information resources was an important theme in this study. The librarians were concerned that they provided what was needed for the program so that the institution successfully achieved

accreditation as a four-year institution. A number of subthemes emerged through the interviews. Librarians talked about the budget, collection development, access, formats of the information resources, and the challenges they experienced.

Budget. The first community college baccalaureate programs in Washington were pilot programs and received start-up funding from the Washington SBCTC. Subsequent BAS programs were funded solely by the colleges implementing the programs. The BAS programs were expected to become self-supporting. The library at Alpha College received some initial one-time funding from pilot dollars of \$25,000 for upgrading the collection for the BAS in RAIS. The cost of upgrading information resources represented the majority of the expenditures out of the one-time allocation. In the following years, the library received a significantly smaller amount of \$8,000 from the program tuition dollars to maintain subscriptions to print and online resources for the program. Abby expressed concern about ongoing funding to pay for database subscriptions and keeping up with increasing subscription rates. She said they were trying to balance the needs of 1% of the students who happened to be in the BAS programs against the needs of the other 99% who were not.

During the planning for the second program, Interior Design, the library did not receive specific dollars for collection development. The library had recently received annual boosts of \$20,000 per year to bring the overall materials budget to \$100,000 total. At that point, the materials budget was determined sufficient to cover any additional information resources needed for Interior Design. The librarians, however, expressed concern about providing information resources for subsequent programs. Amy said that the library purchased a lot of print materials for Interior Design and books were not

cheap. She thought that model for planning and implementing the first BAS in RAIS worked well but was concerned that it was not followed for subsequent BAS programs. She stated, “They’re worried about filling seats and we’re worried about serving those folks in those seats once they’re built.”

Audrey, the library administrator, felt that part of her responsibility was to advocate for the library at the administrative level. She was working to secure for the library a permanent allocation from total BAS dollars rather than allocations from specific BAS programs. Since the BAS programs would be self-supporting, a skim off the top for library overhead would simplify library funding. She said that in a similar fashion, the library was getting an allocation from the Distance Education program, which was dedicated to online resources for classes in all the departments.

Policies and procedures. Alpha College’s library revised its collection development guidelines to include a section on developing the collection to support new curricular areas. Specifically, the new guidelines stated that the existing collection would be examined first before recommending additional items to support the new program. Audrey explained that the first concern for the collection was in “leveraging existing materials” for the higher level program. The guidelines also stated that the library would consider budget impacts for new materials. Materials to support prerequisite courses would have priority over electives, and courses with research needs would have priority over courses without a research component. In addition, Audrey said, “We try to select resources that would cut across disciplines...that would make the most bang for our buck, basically.”

Abby's area of responsibility was the electronic library collection including, article databases, eJournals, and eBooks. One early challenge was managing the requests for new eBooks from the part-time librarians working with the new BAS programs. She reported that she changed the procedures and set up password-access to the EBSCOhost Collection Manager for the librarians to streamline the ordering of eBooks. Before finalizing any order, however, Abby checked with the collection development librarian per library guidelines.

The library also changed the retention period for interior design periodical titles. Normally, the library kept issues of print periodicals for five years before discarding. The Interior Design program, however, relied on the print materials, primarily for their images, so the library decided to extend the retention period of print periodicals for this program to 10 years.

In addition, the library changed its guidelines to permit mailing materials to students. Students in the online RAIS were not on campus for classes, and many of them were busy working. Their schedules precluded visiting the library to obtain needed materials. Under the new guidelines, when necessary, the library would mail materials to the BAS students.

Access to information resources. Providing access to library materials emerged as an important subtheme for the librarians. The first BAS program, RAIS, was taught entirely online so the format of the information resources and access to them were of major concern. The prospective students were working in their fields, and the instructors were also practitioners. As a result, students and faculty were rarely on campus or had

access only in the evenings and weekends. For that reason, online information resources were selected for the program.

Access did not always mean that the library owned or subscribed to the needed materials. The library formalized agreements with nearby hospital and health sciences libraries to allow Alpha College's students to make use of their collections when onsite at these libraries. Audrey stated, "This is the acknowledgement that we cannot be self-sufficient in everything our programs need."

In addition to providing access to nearby libraries, Alpha College offered to purchase individual articles (also known as document delivery) for the baccalaureate programs. The cost in many cases is similar or cheaper than obtaining the article through interlibrary loan and more cost effective than paying for a subscription. Audrey said, "I've told faculty that we may not be able to afford to subscribe to the journals that they need, but we are willing to buy the article that they need."

Information resources. Although the Collection Development Librarian was primarily responsible for the library print collection, all the librarians worked as a team to select materials. The full-time librarians functioned as liaisons between the library and instructional programs. They made suggestions for purchase and passed along requests from instructors. The collection development librarian reported that she worked closely with the BAS faculty to ensure that appropriate library materials were available. Since she also sat on the college-wide Curriculum Advisory Committee, she was well-positioned to be aware of program needs. When she learned of new programs or updates to existing programs, she reported that she took the changes into consideration as she actively sought new materials for the collection.

The programs influenced the types of materials that were purchased. For instance, Anne reported that because Interior Design classes were taught on campus, the library purchased print materials. Librarians and program faculty visited a subject specific bookstore together to select materials for the new program. For the RAIS program, however, the library worked to find eBooks. Anne reported that purchasing the license to access eBooks was more challenging than buying a physical print book. She elaborated by saying, “So, with a print book, you buy it and it’s yours. For an eBook, you buy it and it’s not really yours.” The library purchased a license to use the eBook. The technical services/systems librarian was responsible for working with the vendor to determine how many users could use the eBook at the same time and whether the license would be annual or perpetual.

When selecting print materials for the BAS programs, Anne reported that she looked for items intended for a baccalaureate level audience instead of a two-year technical audience. Amy also talked about being accustomed to working with freshman/sophomore students and that in terms of collection development, it was a “shift of understanding” to purchase for the higher level students.

Anne pointed out the small percentage of BAS students compared to the associates level students. She said that only about 6 to 10 students completed the RAIS program per year and a few more than that completed the Interior Design program. Because the percentage of BAS students is so small, the librarians

don’t place a huge emphasis on acquiring materials or on support—that a lot of it is just built into our current processes.” She stated, “What we have acquired for the two-year degrees are often good resources for the four-year degrees as well.

One example is providing the Cumulative Index to Nursing and Allied Health Literature (CINAHL) at a level that worked for both the two-year and the four-year students.

All the librarians reported that when selecting online resources, they considered how well the database would serve both the lower and upper level students. Abby, the Technical Services/Systems Librarian, held primary responsibility for ordering, maintaining, and evaluating the online databases, though again, the librarians functioned as a team in selection. Abby said that whenever the library added a new database, it started with a basic subscription and then worked to upgrade the subscription to a higher tier as the library could afford it. When the college added the BAS programs, the librarians decided to upgrade some of their database subscriptions. For instance, the library upgraded from EBSCOhost Academic Search Elite to EBSCOhost Academic Search Premier and then to EBSCOhost Academic Search Complete to ensure they had an adequate number of full-text journals covering a full spectrum of topics for their students. Both the lower and upper division students benefitted from this change.

The library also added more focused, scholarly databases, such as Elsevier's Science Direct. Abby reported that the library reworked their web site so that the scholarly databases were featured more prominently. Before adding a new database, Abby set up a trial through the vendor and encouraged the program faculty to explore what the database offered and provide feedback.

At times, the library considered the professional development needs of the program faculty in selecting some of the materials. For instance, a journal subscription was maintained in spite of its initial low usage. The librarians explained to the instructor

that in order for the library to continue to subscribe to the journal, usage would have to go up. Then they worked with the instructor to find ways to encourage student use of the title to justify its cost. Nevertheless, the library understood that its purpose was the instructor's professional development. Another example was the addition of a database at the request of an instructor. Abby reported that students made use of the database, but, again, it was the instructor's professional development that played into the decision to continue the subscription.

Challenges. Two librarians expressed concern that re-accreditation as a four-year college could affect pricing for online resources in the future. The prices for online resources are based on college type and the number of FTE students. Abby predicted that if database vendors no longer considered Alpha College a community college, the price for the same database would increase. She said, "Just recently, when I asked for a price quote for a [medical] atlas, the rep asked me what is the FTE for our medical school!" Abby said, "We don't even have 100 students in our baccalaureate degree. You're asking me about that?" Another librarian said that once the vendor understands how many FTE students are upper division versus lower division, then it is possible to justify that Alpha College is primarily a community college.

Anne also talked about the challenge of finding appropriate eBooks, because librarians had to worry about whether their current platform vendor carried the book and how many people could concurrently access the title. Then she added that faculty did not always understand the delays necessary to negotiate with vendors as well as the process of cataloging and adding the books to the library catalog.

Abby stated that the library tried to purchase eBooks and eJournals through platforms they already had such as EBSCO. It made adding and maintaining titles easier. However, occasionally, faculty would want a journal from a professional organization. Then they had to figure out how to authenticate their students through EZ Proxy so that they could access the material. In one case, the vendor preferred password access over IP range authentication, and then the Systems Librarian had to distribute passwords to students in the program. The interactive nature of the database made authentication by EX Proxy impractical.

Audrey told of one database the library added at the recommendation of an instructor. The database was developed for medical practitioners, not for a classroom setting. The developer, and sole troubleshooter, was a medical doctor in Paris, France. As a result, the wait for problem resolutions was sometimes as long as 24 hours, and the library received complaints from students.

Another concern was how to balance the needs of a small baccalaureate program against the needs of the larger community college student population. Anne said,

We're a huge college. We do really still see ourselves as a community college. [For] many of us, our emphasis is on the lower level courses so we don't want to lose sight that we provide Adult Basic Education classes [and] pre-college level classes.

She went on to add that the library wants to support the upper division students, but they hope their current materials will support them adequately or that the students will ask for what they need or will visit nearby institutions with higher level materials.

Theme Four—Staffing. Participants talked about the workload and the need for additional staffing. They also considered subject expertise among the library faculty: where it existed and where it was needed.

At the time the college implemented the first baccalaureate programs, the library had five full-time, tenured librarians, each working as liaison to one or two instructional divisions. The library's former print acquisitions librarian had been a nurse at one time. She was able to share her knowledge of the medical field with the librarians selecting online information resources such as databases, eBooks, and eJournals for the RAIS program. After she retired, Anne joined the library faculty with collection development as one of her responsibilities.

The topic of subject expertise among the librarians was mentioned by several participants. While talking about re-accreditation as a baccalaureate-granting institution, Amy said,

The accreditor asked, 'what are you guys doing individually as librarians to improve your knowledge of these programs?' And that was a really interesting question; one we hadn't thought of a lot.... It at least got us thinking about: are there ways that we can improve our own knowledge?

Abby also mentioned the accreditor's question and reflected that the librarians had discussed this issue in their weekly librarians meeting. She said that they understood at the time that it was "impossible" for one of the librarians to acquire the training needed to be a subject specialist or to hire a subject specialist librarian,

The library administrator perceived the library's need for subject expertise differed depending on the program. She recognized the highly specialized nature of RAIS and arranged for a part-time librarian to audit the introductory course. The librarian was able to better understand the how the instructor taught and the terminology for the field. Audrey went on to say,

This helped her in designing the [library] assignments and providing the level of assignments and then actually has been working on a continuous infusion throughout the two years of the students here in the program.

Audrey did not feel that the library needed any specialized knowledge to provide for the Interior Design program saying that the terminology is easily understood.

However, the cataloger stated that although the terminology for Interior Design seemed simple, understanding the scope of the topics required discussion with the department and the creation of explanatory scope notes. Few appropriate subjects headings were available in the Library of Congress Subject Headings list and required that the cataloger create subject headings for the local library catalog.

Initially, a one-time stipend of \$1,000 allowed a full-time librarian to develop information literacy instructional modules and online research tutorials the summer before the program started. In 2012, two librarians went on sabbatical, one at a time, over the course of an academic year, and there were backfill dollars available. The library administrator used those funds to increase the hours of two part-time librarians to work closely with college programs including the baccalaureate programs. They also worked on developing library assignments and updating instructional modules.

Audrey spoke about the extra workload during implementation. She said most of the workload fell on the librarians including her. She also said,

We forget about the administrative support and paperwork that is involved in new endeavors like this.... We need to keep track of all these subscriptions and doing all of the paperwork lands on my administrative assistant as well as actually paying the bills.

Citing the extra workload, the library administrator secured funding Winter and Spring Quarters 2014 for a baccalaureate librarian. The temporary librarian's responsibilities included building relationships between the library and the BAS

programs and working with RAIS students on their capstone projects. Audrey said they hoped that assessment would show the need for a permanent full-time baccalaureate librarian. She added,

maybe not necessarily in the same nature as it is now, but to let the college know that taking on baccalaureate programs, baccalaureate degrees, cannot be put on the workload of existing library faculty.

The administrator stated that the other instructional deans at the college understood the additional workload and supported adding the position. The librarians were hopeful that the baccalaureate librarian position would be made permanent as an affirmation that they had taken on the extra work and done well.

One of the challenges from the perspective of the administrator was generating and maintaining excitement among the librarians for the opportunities inherent in the BAS degrees. She recognized that the librarians had some “anxiety” about the new degrees

because it was uncharted territory that we were moving in and while I see it as huge, as a really good exciting opportunity, many of them, and rightfully so, saw the additional work that was going down the pike for them.

She reflected that she wished she had begun work earlier on funding a baccalaureate librarian to provide better staffing at the outset.

Theme Five—Teaching. The college’s two-plus-two model assumed that general education requirements were fulfilled with the associate degree. The upper level classes did not include general education courses. Yet, according to Amy, faculty told librarians not to

make any assumptions that these students know what you think they might have learned in their first two years of college because many of the

students who came from professional technical degrees didn't have quite as robust general education as we might think they have.

She went on to say that the students might have had English 101, but not necessarily any advanced English classes that would have prepared them to do research. Nevertheless, Amy said she did not think specifically about general education when tutorials were being created. She said that they designed the tutorials to provide all the steps for research so that students could start at the level of instruction they needed.

The library had been working on infusing information literacy throughout the disciplines at Alpha College. Audrey said that with the baccalaureate, the library was "very proactive." She explained that before the first cohort started the RAIS program, she paid one of the librarians over the summer to develop online tutorials about using library information resources. Then later she started using part-time librarians to focus on partnering with the baccalaureate programs to create assignments and additional instruction modules, as well as revise existing modules. The general education requirements were infused through the course research papers so information literacy instruction was focused on those assignments and librarians worked with program faculty. Nevertheless, incorporation of information literacy instruction into writing assignments was at the discretion of the course instructor. Audrey said, "Part of the work we do—we had to do and we still need to do—is also help the instructors help us to push the use of library resources." Added to that was the challenge that faculty new to the college did not understand the role of the library in teaching information literacy.

The students in RAIS took part in an online information literacy e-tutorial within their online class site during their first quarter in their junior year. Audrey reported that

sometimes faculty assumed that was all the students needed for the duration of the program and did not infuse information literacy throughout the program. However, when students reached their capstone project, they often reported that they had forgotten what they had learned in their initial library research class.

The capstone projects indicated that students did not understand the importance of citing sources. The library administrator expressed concern about the quality of the students' projects. She worked on improving capstone projects through one-on-one consultations between student and librarian. Anne was one of the librarians who worked with RAIS students on their capstone projects. She created research guides and presented workshops to classes. The capstone projects were done online so librarians generally conferred with the students by telephone, email, and occasionally, face-to-face.

The modality of the program entered into the way the librarians approached providing information literacy instruction. Amy said,

From the web point of view, in the last number of years, [we] have created quite a few more tutorials that are just short little video clips that anyone can use anywhere because whenever we're thinking about the baccalaureate programs, we have to keep reminding ourselves that these folks are not necessarily on campus. In fact, they probably are not. And so we're trying to figure out ways for us to reach them as best as possible.

Theme Six—Evaluating. Evaluation, whether formal or informal, was explored during the interviews. The participants were asked how they knew if the changes they made were successful. One indicator cited was accreditation.

As part of the process for specialized accreditation, the accrediting association looked at library resources and services. Both the RAIS and the Interior Design programs were accredited by their industry associations.

Regional accreditation of the entire college also required a self-study that included library resources. At the time the RAIS program was implemented, the college had just completed their regional accreditation cycle. However, the substantive change proposal triggered a new accreditation review as a four-year college. The administrator, Audrey, was closely involved in the evaluation as a baccalaureate-granting institution. Though it was challenging to go through the process again so soon, librarian Abby remarked that not much had changed so she was able to update and resubmit the data to the library administrator.

To get some sense of usage, the library watched the circulation of print materials in the Interior Design area. Anne remarked, "It's nice to see that what the faculty have requested... do get used by students."

The librarians did not set up any criteria for measuring changes. However, Anne said, "There is some informal assessment. The diagnostic imaging students were required to talk to a librarian." Nevertheless, she went on to say,

Of the six capstone students I worked with last year, only two of them sent me their bibliographies and only one of them was kind of in the right direction. So I mean, as far as that aspect of our building that into both the curriculum and our research guides, it's obviously not working as well as we hoped it would.

Amy reported that, initially, they received anecdotal emails from the program faculty that were positive. She said that they have tried to add some structure to their assessment as they have developed the relationships. She also said that as they worked with students' capstone projects, the librarians learned where their collection was good or lacking. Nevertheless, she admitted they did not have any formal criteria for assessment.

As they helped students with capstone projects they noted what periodicals were being cited and pulled circulation data. She said,

So we do look at how much are we paying and how much use is happening, especially the specialized resources that are really targeted at particular audiences.”

She thought they were primarily looking at usage of the resources and direct feedback from instructor.

Audrey also talked about usage. She said she used the technology available to the library such as the integrated library system to identify acquisitions for the baccalaureate programs and pulled circulation statistics. They also had usage statistics for the databases. Though non-baccalaureate students would be using these information resources, statistics did indicate increased overall usage. Audrey also remarked that while the college was intent on assessment, libraries often found it difficult to work with college-wide assessment tools.

When asked directly about assessment to determine success, Audrey said,

Well this is where I know that we are lacking because, just like most of the things that we do here, you know, we get things going and, for as long as things are kind of working, then we just let them be.

She went on,

What we do know is that the Interior Design program just went through accreditation last year and they had a very good accreditation report and the evaluators gave the library glowing praises.

She said that they had not instituted rubrics to measure student learning outcomes, but in 2009 they conducted a faculty survey with additional questions for the baccalaureate programs. She also said that she was paying attention to how they can provide information resources and instruction more efficiently. She looked at the needs of all the

programs to see how they could create instructional tools, including Research Guides that worked for all students. Her plan was to create “generic tools...and then tailor some of those tools to the specific programs.”

Abby relied on librarians and instructors for feedback on databases. When the library was thinking about adding a database, Abby set up a trial period and the librarians worked with the faculty, including those in the lower division whose students might benefit. The librarians together made the final decision on adding a new database. Abby mentioned that the librarians sometimes got thank you cards from students. Those were forwarded to the library dean.

The library dean and the librarians talked a little about where they could do more marketing, such as promoting video tutorials they developed. Amy believed that the RAIS students may also be using their hospital clinic libraries instead of the college library. Audrey said, that in spite of reaching out to faculty, some reported that they sent to their students to university libraries instead. She acknowledged needing to do more marketing.

Section Summary. This section provided the findings for Case Study One—Alpha College, located in an urban area. The findings showed that the emerging themes were planning, collaborating, providing information resources, staffing, teaching, and evaluating.

Planning. While planning for the new BAS programs, the library administrator and librarians considered the modality of the program and the information resources the library already had for the associate-level programs. Then they looked for the gap between what they had and what they would need. Everyone in the library had well-

defined roles. The library administrator represented the library on administrative committees and advocated for the library. She also facilitated the connection between the program chairs and the library liaisons to the programs. The collection development librarian worked with the library liaisons to the divisions housing BAS programs to identify and purchase the print and media materials for the library. The technical services/systems librarian worked with the library liaisons and the collection development librarian to provide eBooks. She also worked directly with the BAS programs to provide needed databases. The librarians planned their work together during regular Monday meetings. In general, the librarians felt that they played a reactive role in response to the planning of the college and the programs, although the library administrator did “invite herself in” to the conversations outside the library. The library administrator reported that the library did not look at collections in other libraries but did consider specialized accreditation standards for the library for the BAS in Interior Design.

Collaborating. Collaboration emerged as a strong theme during the interviews, and the librarians felt that building on prior relationships was important in making the collaboration work. They cited the challenge of communication especially when program faculty were practitioners in their field and not present on campus. The library faculty commented about their efforts to connect with program faculty to identify what library materials, both online and in print, the students would need to be successful in the program.

Providing information resources. While talking about providing information resources, the subthemes of budget, policies, and procedures, access, the type of

information resources, and the challenges encountered emerged. The library received \$25,000 to acquire additional information resources for the first BAS in RAIS. The librarians were concerned about funding for future BAS programs and ongoing funding to support subscriptions to online databases and future print materials. The library administrator discussed her goals to address these concerns by acquiring a permanent allocation from total BAS revenues.

Policies and procedures emerged as another subtheme under providing information resources. The library revised its collection development guidelines to address new instructional programs. The library administrator and librarians stated that the goal was to leverage existing materials that work for both associate and baccalaureate levels and provide new materials that cut across the disciplines and served upper and lower level programs. The Technical Services/Systems Librarian streamlined procedures for selecting eBooks to enable other librarians to have access to the EBSCOhost Collection Manager. The library also changed the retention period for Interior Design print periodicals and changed the library policy to allow mailing of materials to BAS students.

Access to information resources was another subtheme identified. The librarians matched the format of the resource to the modality of the program. They also provided access to information through various means. These included agreements with external hospital and health sciences libraries or providing individual documents either through interlibrary loan or purchasing them outright.

The subtheme, information resources, addressed the selection of library materials. Library liaisons contacted the program chair and instructors to learn what was needed to

support the curriculum and determine the format needed to match the modality of instruction. The librarians considered the level of the target audience and sought to provide materials that would serve both upper and lower level programs, knowing that the bulk of the students were in the lower division. To some extent, the librarians took the professional development needs of the program instructors into consideration when determining the usefulness of a particular database or journal. The librarians were challenged sometimes by the technological aspects of providing specialized e-resources to online students. They were also concerned about balancing the needs of the few baccalaureate level students against the needs of the lower level and pre-college students.

Staffing. Workload and subject expertise emerged as subthemes under the theme of staffing. The library administrator used part-time money to pay for additional work to develop online tutorials and instructional modules. She also paid a part-time librarian to audit an introductory class for the RAIS program. The library administrator successfully advocated for the addition of a baccalaureate librarian for a pilot period to help relieve the workload.

Teaching. The librarians developed new online tutorials and teaching modules to support the online RAIS and Interior Design programs. They had to consider the varying abilities of the incoming cohort to conduct library research. They also worked with program faculty to infuse information literacy throughout the program as much as possible.

Evaluating. In order to evaluate library support of the baccalaureate programs, the library looked at usage statistics of print and online information resources. In 2009, a formal satisfaction survey was distributed to all faculty. The library added questions

specifically for the baccalaureate programs and learned that the BAS faculty were happy with the library in general but often used information resources with which they were familiar outside the library. In May 2013, the library conducted a much smaller survey (N=5, 2 of which were BAS faculty) and learned that faculty responding believed (a) Research Guides provided consistent information, (b) students needed help with writing reference citations, and (c) students still needed help with research. The librarians used anecdotal feedback from students and faculty and noted gaps in the collections when working with students. The library had not developed rubrics or other tools to measure student learning outcomes at this point. Specialized and regional accreditation evaluative reports were positive.

Case Two—Beta College

This section describes Beta College and the research findings based on interviews of three librarians including the administrator. Following the description of the college and interviewees, the section explores themes that emerged from the interviews.

Beta College was chosen because (a) it met the criteria that the college had successfully implemented one or more community college baccalaureate programs (defined as acquiring approval from the Washington SBCTC and achieving regional accreditation as a baccalaureate-offering institution); (b) the community college was located in Washington; and (c) the researcher had access to library personnel.

Background. Up until 2010, Beta College was classified as a public, two-year college granting college-level certificates and Associate degrees. As of 2011, after implementing the BAS program, College B was granted accreditation as a four-year, baccalaureate institution. The college is considered a medium-sized, public, urban,

college, in the community and technical college system, serving approximately 5,000 state-funded, full-time equivalent (FTE) students. The college is located in a densely-populated urban core. Similar to other Washington State community colleges, Beta College saw an increase in enrollment during the economic recession with nearly a 15% increase in FTE between 2006 and 2010. In 2008, the college accepted students seeking a BAS in Applied Behavioral Science (ABS), drawing students from its Health and Social Services program and those working in the field that needed or desired a Bachelor's Degree to advance in their profession.

On the morning of the site visit, the library was very busy, with nearly every table occupied. The library created study areas in alcoves away from the busy service points making quiet study possible. The library was zoned by noise level, and students seemed to respect the quiet signs. The Circulation and the Reference Desks were located near the entrance to the library, and there was a constant flurry of activity around those two service points. Lack of sufficient space was an issue for the library.

According to the biennial Academic Library Survey, the library gate count increased nearly 53% from 2006 to 2012 with the biggest gain (over 31%) from 2010 to 2012. At the same time, the number of hours per week the library was open decreased from 67 to 61. General circulation of physical materials decreased sharply between 2010 and 2012 by more than 70%, but the circulation of the Reserves Collection increased by nearly 70% between 2008 and 2010. The average number of items circulated per FTE Student increased from 11 to 13 between 2006 and 2010 and dropped to 8 in 2012. Between 2006 and 2012, the number of workshops presented by librarians decreased by approximately 4%.

Interviews. Three librarians were interviewed for this case, including the administrator. The interviews took place on a single day in the library. Each interview was conducted separately in a private room and was recorded and transcribed. The interviews lasted between 30 and 53 minutes. Each interviewee was given an alias to protect her privacy. The interviewees were asked about their experiences planning and implementing services for the BAS program.

Findings. The data and narrative presented reflected the experiences of the librarians involved with the changes in the library. The following themes emerged from the recorded interviews: planning, collaborating, providing information resources, staffing, teaching, and evaluating.

The library administrator, “Beth,” remembered being involved in the college’s decision-making process from the beginning. She said that Beta College was encouraged by the SBCTC to submit a proposal for the second cohort of pilot colleges to be granted permission to develop a BAS. The college developed a process in which interested programs within the college submitted proposals to a committee chaired by an Executive Dean. Beth served on the committee. Once the college decided on the program to submit, Beth was asked to serve on a small team consisting of one faculty member and three administrators to guide the proposal through the approval process. At that time, the approval process included proposals to the SBCTC and the Higher Education Coordinating (HEC) Board, as well as a substantive change prospectus to the NWCCU, the regional accrediting body.

Theme One--Planning. Beth’s role in the planning process included representing the library’s interests on the small team, as well as input on the proposals to the SBCTC,

the HEC Board, and the substantive change prospectus to the NWCCU. However, her role in the planning process was broader than the library's interests. Because she had led the accreditation process at the college for a number of years, one of her roles was quality control over the completed proposals and the prospectus.

Barbara was the library liaison to the Health and Social Services Division, which housed the new BAS program. She was invited by the library administrator to participate in the library preparations. At that point, Barbara said that the librarians took it upon themselves to get involved with the planning. She worked with the faculty member who led the program design throughout the process as well as other involved faculty members in the Health and Social Services program.

As the Social Sciences liaison for the Humanities and Social Sciences Division, Brenda was also asked to work on developing the library collection. Some of the faculty in the Social Sciences programs often taught a class for students in the Health and Social Services program. Brenda saw her role as "secondary" to the college's planning process.

The library faculty members did not seem aware how the decision-making process for selecting the BAS program occurred. One librarian initially heard a rumor about a possible baccalaureate program. Another librarian thought she had learned about the proposal via email. However, she said the library administrator kept them informed about their roles in planning collection development and services.

As one of the BAS pilot colleges, Beta College received a \$225,000 grant from the State Board for start-up costs. From that, the library received \$30,000 for collection development and librarian time. In subsequent years, the library received \$15,000 for information resources and a one-quarter time librarian position to support the BAS.

The librarians began identifying materials a year before the program began.

The librarians shared their challenges with planning for the new program. One challenge encountered was a lack of knowledge about the curriculum for the new program. Brenda thought the lead program faculty initially saw the BAS program as an extension of the Health and Social Services program. She felt that she had not really grasped the instructor's vision for the program and wished there had been a "deeper orientation to it."

Experience was cited as a factor by Brenda when asked how she determined what changes were needed. She cited her years of experience at several colleges and said she studied the proposed curriculum and spoke with the program faculty. She also said that she may have "looked at other libraries and may have talked with other librarians."

Barbara said that the library planning process was not linear but described it as a combination of ongoing efforts. She said she looked online to see what other community colleges and universities were doing for similar programs without a lot of success. She also contacted a social work librarian at another college. She talked with the BAS program lead instructor to learn more about the curriculum. She said she tried to become familiar with the program as early as she could so she could identify additional subject areas needed in the collection. She described the communication process with faculty as challenging, because she did not always get a response to her inquiries. She felt that the combination of efforts made a difference but expressed frustration at the lack of involvement by the program faculty. At the same time, she acknowledged that the program faculty members were in the process of designing the program themselves. Many were part-time juggling their teaching loads and did not have time to think about

participating in developing the library collection. She said that the instructors “sort of depend upon us to guide them.”

Brenda also expressed frustration over communicating with part-time faculty. She shared that some part-time faculty held full-time jobs off-campus. This limited the opportunities to meet the faculty members and Brenda suspected they did not check their campus e-mail.

Theme Two--Collaborating. Beth thought that one factor in the library’s success on campus was the involvement by librarians in multiple committees and initiatives on campus. That visibility and respect for the library was evident when committees were formed and librarians were included.

Two librarians were assigned to work on the project. They collaborated with the faculty in the Health and Social Services and the related Social Sciences programs to develop the print collection and identify new online databases. Both librarians noted that they mostly knew the faculty members who would be teaching in the program and already had relationships established. Brenda thought it helped that the librarians had already worked with the faculty.

The librarians tended to downplay the challenges they encountered except for communication. Brenda mentioned that communication with faculty was sometimes challenging saying she occasionally had to track them down. Another challenge noted by Brenda was that there was no full-time faculty member in the new program. Other full-time faculty in the Social Sciences programs would occasionally teach a class in the BAS program, but that was not their primary assignment. The college later added adjunct faculty who also worked in social services agencies and could bring their knowledge into

the program. However, in the beginning, it was difficult to identify new faculty who would be teaching in the program and their contact information. Since they had not taught for the program before, they did not necessarily know what library materials would be needed to support their classes. Brenda said that the librarians collected as much feedback as they could under the limited faculty availability and then relied on their own experience developing the collection for the program.

Barbara also identified communication between the library faculty and the program faculty as the biggest challenge. She stated that even though faculty members on campus knew each other and liked each other there were still challenges professionally. The lead faculty on the BAS had not been a library user in the past so the challenge was engaging him in the library's efforts to build the collection and find materials and databases that would support the new program. Eventually he did become a library user. She said the library ran trials of the databases to solicit feedback from the faculty who would be teaching in the program. She stated that it was especially challenging, but they called faculty, emailed them, and visited their offices to get feedback. She also acknowledged that the faculty members were busy planning the new program and drafting curricula, as well as handling their teaching responsibilities. She attributed the lack of communication more to the faculty being busy and perhaps feeling a bit overwhelmed.

Theme Three—Providing Information Resources. The librarians said they did not consider the modality of the program when choosing library materials. Both librarians stated if the program had not been taught face-to-face, they might have purchased more online materials. Later Brenda shared that the program was taught

entirely in the evening. She said they ordered a lot of online encyclopedias, partly because most of the students were working during the day and needed access when the library was closed. However, she thought the decision to strengthen the resources offered through Gale Virtual Reference was unrelated to the modality of the program.

The library received \$30,000 initially. In subsequent years, the library received \$15,000 annually to maintain the collection and the databases. According to Beth, the Vice President for Instruction decided on the amount allocated to the library. The initial allocation included developing the collection and librarian time to do the work. Beth stated the amount of money allocated was currently not sufficient to meet the needs of the program, and the library was supplementing the expenditures out of the library's regular allocation for library materials. Brenda made a similar observation indicating that a lot of the annual allocation supported the single database subscription to SocINDEX. Beth expected, however, that money allocated for future BAS programs would help the library improve the quality of the information resources overall. She noted that she did not have to lobby for additional dollars for the future programs. She shared that the administration had already increased the number of librarian hours being funded in plans for future BAS programs. She said that building the groundwork to demonstrate the importance of library support for instruction yielded benefits for the library. The campus accepted that the library was integral to new programs. Barbara also reported that she and Brenda had attended the Curriculum Committee together to ensure the library was included in the curriculum for the new program.

One challenge for the librarians was anticipating how different faculty might approach teaching a particular class. The approach impacted the materials needed by the

class. Sometimes librarians were surprised by assignment requirements. Brenda said, “Once we saw what and how they were teaching we had a better idea of what was needed.”

Another challenge involved identifying new audio/visual materials to purchase. Barbara reported that it was difficult to select films that would be useful without previewing them. Later, the library added a video streaming service to provide a large number of educational videos for use in the classroom.

Brenda understood that students entering the program had hopes of entering the social services professions and some wanted to enter graduate school. They could become counselors or work in social services agencies. Based on her understanding, Brenda knew the students would need information resources on ethics and social problems. They would need to know how communities provided social services and how to assess social programs. She knew they would need more information in social issues, social services, psychology, counseling, and sociology. To identify library materials, Brenda reported visiting the webpage for the American Psychological Association to find more professional-level materials and looking for reference works from publishers in the field, such as Sage. Brenda also updated her profile in Choice Reviews Online to retrieve reviews of new works intended for *upper-division* or *all-levels*, instead of only *lower-division*. She said she knew that the BAS students would need deeper and broader information resources and other students could use them too.

Barbara shared that she started by assessing what the library already had in its collection and what it would need to have. She said the faculty knew they needed more academic content. The librarians asked faculty to identify items to purchase from

publishers' catalogs. Barbara thought one of the challenges in this process was in not understanding yet what was going to be taught.

Beth suggested that the library's perspective on collection development changed in the sense that the new materials needed to serve more than just the BAS program. She reported that there were significant general education requirements and that the library wanted to support general education especially with the databases. She went on to say that Beta College would be adding other BAS programs and that the college wanted some consistency by offering the same general education courses for multiple BAS programs.

The librarians looked at several specialized databases. The librarians believed that two databases were needed to meet the breadth and depth that would adequately serve the program, though the budget would only support one. They asked the faculty to choose which one they wanted. The faculty chose SocINDEX, which was an addition to an existing vendor platform and a more familiar interface. The library also added Credo Reference for a time but discontinued it to focus on building their Gale Virtual Reference collection. The library lost two databases due to budget cutbacks. However, they added Films on Demand to provide streaming educational video for instruction.

Theme Four--Staffing. The allocation for the library included initial funding for five hours per week of librarian time to prepare for the BAS. Barbara was reassigned for three hours per week and Brenda for two hours per week. After implementation of the BAS, the allocation provided for one-quarter of a full-time equivalent librarian. Beth reported that they had not used all the allocation for librarian time post-implementation because it was not necessary on an ongoing basis. Time spent conducting workshops and covering the reference desk was considered part of the librarians' regular load and that

time was not charged to the allocation. The allocation was used to hire adjuncts to backfill the full-time librarians' coverage at the Reference Desk. Beth did not believe there was very much of an impact on library services.

None of the librarians saw professional development needs as greater for either the library employees or the faculty in the program. Beth noted that the librarians, both full-time and part-time, were very strong in their fields. She acknowledged that the students may be asking higher-level questions but did not think there had been much impact. Brenda pointed out that there were only about 25 students for the first year in the program. She also noted that the four year program required no policy changes in the library. She thought that the BAS students needed "roughly the same services."

Brenda stated that she was always thinking about professional development for program faculty. In her role as liaison to the Social Sciences programs, she purchased materials for the education area, including materials that would support the pedagogical needs of faculty. She said the librarians also conducted workshops designed for faculty. Since most of the faculty members who taught in the program were already employed by the college, they had ongoing professional development opportunities. She said the library offered one or two workshops per quarter to all faculty members to keep them informed about information resources available to them and their students. Workshops also included topics such as information literacy and avoiding plagiarism. Barbara mentioned that the librarians provided ongoing support to faculty by helping them develop their own understanding of the information resources available.

When asked about impact on paraprofessional staff, Beth thought the impact to the Circulation Desk staff was probably minimal. Brenda pointed out that the impact to

the Acquisitions staff was greater because of the amount of new materials ordered.

Overall, however, Brenda thought the impact to the library was minimal, because full-time professional librarians had release time to work on the project and there were “lots of part-time people who always want more hours.”

Theme Five--Teaching. An information literacy class was created for the BAS cohort. Beth explained that initially the class was developed and taught by program faculty. At one point, Beth suggested to the Program Dean that a very experienced, highly-regarded, part-time librarian should teach the course. The suggestion was accepted. Beth shared that the students recognized the applicability of the course to other classes and “demanded” that the course be taught in fall and winter quarters for each new cohort.

Beth shared that she carefully monitored the success of the information literacy class. She ensured the class was taught by the right librarian and checked how the students were doing. She said the class was important to the library so she would tactfully suggest the names of librarians to teach the class. However, the decision was always the program dean’s.

Beth explained how the information literacy class was designed to demonstrate student success. Each student worked on a research project step-by-step. By the end of the quarter, what they had developed served as a portfolio-like assessment of their accomplishment. Students eventually understood that they were learning information literacy.

Brenda was not sure how the information literacy course came to be included but knew it was a required class for first-year BAS students (entering juniors). According to

her understanding, the program offered the class and paid the teaching librarian out of BAS funds. She understood that an external adjunct faculty member helped develop the outcomes and curriculum for the course and an adjunct librarian taught it for several quarters. How the librarian was chosen to teach the class was unclear to Brenda. However, when she heard the librarian teaching the class was no longer able to teach it, Brenda approached the program dean, with Beth's recommendation, and offered to teach it. She taught the class for two quarters as part of her regular work load.

The librarians had ample opportunity to get to know the BAS students. Not only did all students take the information literacy course, other courses in the program required research papers with annotated bibliographies formatted according to the *Publication Manual of the American Psychological Association (2009)*. Librarians offered workshops to provide additional support. Brenda stated that she did not think students at the junior level were "any better at library research in general than many freshmen just coming in." However, she said, "people forget and as they do new topics, they also need to get acquainted with new tools."

After the first cohort entered the program, the librarians discovered a lack of academic preparation on the part of the students. According to Brenda some of the students had trouble reading. She said, "They were asked to do library research by faculty and some students couldn't read an encyclopedia article." The college changed the program over time and raised the standards to address the gap. She said she was teaching workshops to address the learning outcomes of the instructor in the class. When asked how she adapted to the students' levels, Brenda admitted she "had no idea how bad it was."

Barbara also noted the challenges some of the students in the program faced. She said that sometimes students going into social services have problems of their own. Not all of them were ready for two additional years of study. In addition to demonstrating lower skills in reading and writing, some brought an attitude to class that was not conducive to a learning environment and were especially challenging for the instructors and librarians. However, Barbara reported that the librarians got to know the students and they became like “family.” After working with them, the students became very dependent upon the librarians for help.

When Beth was asked about challenges faced by the library, she responded that she would guess that librarians thought some of the students were underprepared. She said that those students required a bit more assistance but that the librarians had to meet students at their level. She added that might be true for any program. When the students were underprepared, then more help was offered. However, the program itself addressed the issue of underprepared students and made changes.

One of the librarians and the administrator did not think that technology was much of an issue for this program. It was not a technology-focused program, and Brenda said that students had access to the computer lab just as any student would have. However, when it came to technology, Barbara noted that these students seemed to need more assistance.

Theme Six--Evaluating. As the leader for Beta College’s regional accreditation efforts, Beth was closely involved in the self-evaluation process. Sometimes she would work with the program advisory groups. She was involved in setting up and participating in student focus groups and even visited a class to talk with students. During a focus

group session, she learned that students thought the information literacy class needed to be offered in the cohorts' first quarter.

At the time the BAS was implemented, the NWCCU required a comprehensive accreditation review whenever a college applied to become a baccalaureate-granting institution. The Commission required the college to complete a full self-study and have a comprehensive site visit within a year of graduating the first cohort, which created an additional workload for the college.

Informally, Brenda reported she received immediate feedback from faculty when she conducted workshops for classes. She also took note when the students were not finding needed information. One example was difficulty finding legislative information at the federal, state, county, or city level. The instructor had surprised the librarians with the direction she had taken with the learning outcomes. The legislative information at the local level was an unfamiliar realm for the librarians, and Brenda stated there was a learning curve. She said they discovered holes in information resources they had not anticipated and worked to fill the gaps.

Both Barbara and Brenda agreed that more could be done in the area of assessment, such as establishing criteria and benchmarks. However, Barbara said that they knew the students were using the library. The librarians could see that the students were using the new database. She thought that the information literacy class saved the librarians' time because it gave the students a jump start on library research.

They have their own personal librarian, you know. There are five of us and they use us all. We all know them. You're so busy doing the work that you do not do the assessment of the work. We're making progress, I think.

Nevertheless, while the library had not conducted surveys focused specifically on library services for the BAS students, Beth reported the library conducted regular surveys of students and faculty in general to gather input. She also said the librarians were very “in tune” to what faculty needed. In addition, Beth cited the information literacy class that allowed for authentic assessment of student portfolios and demonstrated their mastery of research. College data indicated that almost a third of the graduates from the first two BAS cohorts went to graduate school.

Beth talked about assessment of the collection in terms of meeting broader needs than just the BAS. In the broader assessment, she said they considered collection quality for the associate degree leading to the BAS and the general education requirements. However, database and collection usage by just the BAS students could not be isolated. For privacy reasons, there was not a mechanism for identifying individual students or programs and tracking their usage of library materials or online resources. The library looked at overall usage.

Section summary. This section provided the findings for Case Study Two—Beta College. The findings indicated that the emerging themes were planning, collaborating, providing information resources, staffing, teaching, and evaluating.

Planning. The library administrator played roles in both the decision-making process to choose which program to propose to the SBCTC and in the small team that guided the chosen program through the state approval process. As the college leader for accreditation, she shaped the proposals submitted to the SBCTC, the HEC Board, and the NWCCU. She also represented the library’s interests on the small team.

Two full-time librarians were asked to develop the print and electronic information resources needed to support the new degree. One librarian served as the liaison to the Health and Social Services program, within which the BAS degree was developed. The other librarian served as the liaison to the Social Sciences programs, a related academic area. Once invited, the librarians worked with faculty to identify information resources faculty members and students would need to be successful.

The college allocated \$30,000 to the library for planning and purchasing new information resources during the implementation period, and \$15,000 per year subsequently for continuing costs to maintain subscriptions to the electronic databases and purchase new materials.

In order to make decisions on what information resources would need to be purchased by the library, the librarians reported studying the proposed curriculum, talking with the faculty, looking at the collections of other libraries, and relying on experience. Although none of the librarians interviewed thought the modality of teaching was a factor in the decision-making, Brenda mentioned that because the classes were taught in the evening to accommodate working students, the library added more electronic encyclopedias to aid access to information.

Collaborating. The librarians had a history of participating on campus-wide committees and initiatives that the library administrator believed fostered good relations across campus. The two librarians who developed the new print and electronic resources collection for the BAS program served as liaisons to the divisions whose faculty taught in the new BAS program. The librarians believed that knowing the faculty in advance helped them make connections and work with the faculty. However, they also believed

their greatest challenge was lack of communication with faculty. Faculty did not always respond to the librarians' requests for feedback on print materials or electronic databases. The librarians also noted that they had trouble identifying new adjunct faculty in the program. Compounding the challenge, the new faculty did not always know what information resources were needed for their classes. One librarian reported being surprised occasionally with the approach taken by an instructor to meet course learning outcomes and needing to purchase additional materials.

Providing information resources. The librarians developing the collection and online resources approached the collection development challenge differently. One considered what she understood to be the goals of the students and the curriculum. She considered materials in social issues, social services, psychology, counseling, and sociology. She looked at the publications from the American Psychological Association, read reviews in *Choice*, and looked for publications from known publishers in the field.

The other librarian started by assessing their library collection and looking for areas where they needed more academic content. The administrator said the library began to look at how the new materials could serve more than one program. She said that general education courses would be shared among future BAS programs and they wanted library materials that could meet those needs at the upper division level.

Staffing. The initial allocation for the library included funding for two librarians to spend a total of five hours per week released from their reference duties to focus on adding information resources for the BAS. The subsequent annual allocation for 25% release time for a librarian to teach workshops and purchase new materials was not fully utilized, because these were duties the librarian would do in any case. The two librarians

and the administrator did not believe there had been any impact to the librarians, because there was a ready supply of adjunct librarians to assist. However, one librarian thought there had been an impact on the acquisitions paraprofessional who placed the orders for the new materials.

The librarians and the administrator agreed there had been little impact on professional development. The librarians had always provided workshops to faculty in general on topics such as plagiarism and how to use new databases. Brenda said she had always purchased new materials on pedagogy for faculty.

Teaching. A class on conducting library research was included in the BAS program. Initially, the class was developed and taught by program faculty, but at Beth's suggestion, a librarian was asked to teach the class. The class was designed to build step-by-step the skills of the student to conduct research. By the end of the quarter, the student's project served as a portfolio to demonstrate their mastery of library research. The students asked that the course be taught in the first quarter of the program to give students the skills they needed to be successful in subsequent classes.

Librarians identified the lack of academic preparation on the part of the students as one challenge. The program noted the gap in preparation as well and subsequently raised the standards for incoming students. All the interviewees remarked that the BAS students were well-known by the librarians. The students made heavy use of the library and the librarians. The librarians provided students extra help when needed. The program did not present any special technological challenges for the library. However, one librarian noted that though the students had the same expectations and opportunities to access technology, the students appeared to need more hands-on help.

Evaluating. Beth's leadership in regional accreditation at the college helped the library focus on assessment. No specialized accreditation was needed for the new program. Beth was closely involved with program advisory committees and surveys of faculty and students. She also participated in student focus groups.

In evaluating her instruction, Brenda shared that she considered feedback from faculty in workshops she conducted. She also observed when students could not find needed information and worked to fill the gaps in the library collection.

The librarians thought the library could be doing more to set assessment criteria and benchmarks. The library had conducted satisfaction surveys of faculty and students in general without targeting the specific program. The library also looked at usage data, but disaggregating collection and database usage statistics by instructional program was impossible due to the way in which data is collected in libraries. In addition, collecting usage data on such a small number of students would risk violating their privacy, a foundational principle among librarians. Beth pointed out that when they considered the quality of the collection, they were looking at how well the collection served the BAS program, the associate-level program, and the general education requirements. They considered the quality of the collection more broadly than the BAS program alone.

The college looked at student outcomes. Of the first two cohorts, almost one-third advanced to graduate school.

Case Three— Charlie College

This section describes Charlie College and the research findings based on interviews of two librarians. Following the description of the college and interviewees, the section explores themes that emerged from the interviews.

Charlie College was chosen because (a) it met the criteria that the college had successfully implemented one or more community college baccalaureate programs (defined as acquiring approval from the Washington SBCTC and achieving regional accreditation as a baccalaureate-offering institution); (b) the community college was located in Washington; and (c) the researcher had access to library personnel.

Background. Charlie College is a medium-sized community college serving two counties with three campuses. The main campus is situated in a densely-populated, urban area that includes multiple military sites. The district's service area is geographically isolated and also serves a scattered rural population. According to a feasibility study, the counties were deficient in registered nurses, both at the associate and bachelor degree levels, and there were no public entities that offered nursing baccalaureates within the college's service district. At the time, the college offered only an Associate Degree in Nursing (ADN), which granted a Registered Nurse (RN) credential.

In 2012, Charlie College served approximately 5,700 Full-Time-Equivalent (FTE) students. Typical of other Washington State community and technical colleges during this time period, Charlie College saw an increase in the number of its FTE students by 8.79% from 2006 to 2012.

Libraries capture data on their expenditures for library materials, the number of physical items or databases owned or licensed, the circulation or usage of information resources in all formats, and the number of clients entering the library. This information is reported to the National Center for Education Statistics through the biennial Academic Library Survey. Total library expenditures for Charlie College (including salaries and benefits) decreased by nearly 30% between 2006 and 2012. This reduction can be

attributed to the economic downturn. Funding for print and other physical materials increased 41% between 2006 and 2008 during the time the Bachelor of Science in Nursing (BSN) program was implemented. This reflects a one-time allocation of \$34,000 for the BSN program. The library increased expenditures for electronic materials and electronic periodicals (databases) by 406% and 118% respectively between 2006 and 2012. The increase in spending for electronic resources was attributed to a decision to focus spending in those areas. The library also tapped the proceeds of a trust fund for one-time purchases. In its self-study for regional accreditation, the library reported that ongoing funding for the BSN program off-set some of the budget reductions due to the economic downturn.

The number of total circulation transactions (physical items checked out) fell by 9.6% between 2006 and 2012 during a time of increased enrollment. This represented a 33% reduction per FTE student. By contrast, during this same period, the usage of electronic resources increased. For instance, the number of full-text documents accessed through Academic Search Premier increased by 450% between 2007 and 2012. The number of full-text documents accessed through CINAHL increased nearly 475%. The number of full-text documents accessed through JSTOR increased over 2800% between 2008 and 2012. The library added additional journal collections to their JSTOR subscription during this time.

The number of workshops presented by library faculty went down 37.5% between 2006 and 2012, and the gate-count went down 61% between 2006 and 2010. The drop in the gate-count was attributed to the opening of a new building across from the library

containing a new open computer lab. Up to that point, the library had the only open computer lab for students.

The library on the main campus was built in 2000. Its reference area was furnished with upholstered chairs that were placed to encourage visitors to gaze out of the two-story, floor-to-ceiling windows. The shelving area upstairs overlooked the reference area. The cherry wood end panels and trim contributed to a peaceful, academic library atmosphere. The library was very quiet the morning of the interviews.

Interviews. Two librarians were interviewed for this case, including the administrator. The participants were asked about their experiences with the establishment of the BSN program. The two interviews took place at the library on a single day. Each interview was conducted separately in a private room. The interviews were recorded and lasted 65 and 40 minutes respectively. Both participants were given aliases to protect their privacy.

Each of the participants was asked to review the transcript of his or her interview and to correct or clarify comments made during the interview. The participants were later asked to provide feedback on the accuracy of a draft of the case study. These steps were taken to ensure that the case study accurately reflected the participants' experience and to guard against researcher bias.

Findings. The data and narrative presented reflect the experience of the librarians involved with the changes in the library. The following themes emerged from the recorded interviews: planning, collaborating, providing information resources, staffing, teaching, and evaluating.

Theme One—Planning. “Catherine,” the library administrator, served as chair of Instructional Program Planning. The purpose of the committee was to look for ways to meet the needs of the community, in particular for new programs and disciplines. She said that when the legislature passed legislation enabling community college baccalaureates, the committee began discussions about applying. She said that because of her role on the Instructional Program Planning committee, the library was informed of the potential change and could begin exploring service needs of the baccalaureate before the college received approval from the State Board.

According to the proposal submitted to the SBCTC the college decided on the discipline for the first baccalaureate based on a feasibility study. Catherine said that once the discipline was chosen, the nursing faculty took full charge of the process. The first challenge was to resolve the type of degree. The nursing faculty insisted that in order to receive specialized accreditation the degree had to be a BSN, not an applied baccalaureate. In the end, SBCTC approved the program as a BSN.

Catherine said that the chosen program made the planning very easy. Charlie College partnered with a BSN-offering university to guide Charlie College through the planning and implementation process that would lead them to national specialized accreditation. The mentoring institution laid out a plan, which was followed conscientiously by the nursing faculty. The library followed their lead and worked with the librarians at the mentoring institution. Catherine reported the library was told, “Here is what you need. This is what we expect you to have. This is what we want to see.”

Catherine reported that the president and the vice president included her in the planning. She praised the president for his leadership and support of the library. Having

served as a commissioner with the NWCCU, he understood that the library would need to change to meet the standards for a baccalaureate-granting institution. When asked whom she included in the planning and the roles people played, the administrator responded that, with only three full-time and a few part-time librarians, pretty much everyone was involved on some level. There was one full-time librarian who took the lead and a part-time librarian assisted.

Librarian “Curt” knew about the possibility of a BSN program early in the process because of the feasibility study. He remembered being included in the first year of the planning process. One of his first actions was to contact a librarian who was the nursing subject specialist at the mentoring university.

When asked if the type of program selected made a difference in how the library planned for the changes, Catherine said the program chosen made the work in the library “way easier.” She explained that the nursing program, “hired faculty with strong backgrounds and they basically were the sort of structured people that understood what they were doing, had been meeting accreditation for years, [and] were firmly entrenched in the external needs of the program.” She continued by saying that the commitment on the part of the program faculty made a huge difference. She also thought having a mentoring institution that was open and willing to answer questions made the process much easier. She said, “It wasn’t mine to plan so much as mine to serve and follow along.”

Catherine was asked how the library identified changes that were needed to serve an upper-division program. She said they read *The Community College Baccalaureate* (Floyd et al., 2005). Librarians also searched on the Internet for baccalaureate-serving

libraries and those serving nursing programs specifically looking for needed materials and how they structured their baccalaureate program. After that, she said the library followed the nursing faculty lead “because if there was one program that was more demanding than nursing I don’t know what it would be when it comes to new program accreditation.”

Theme Two—Collaborating. The library collaborated closely with the nursing program throughout the planning and implementation of the BSN. Catherine remembered that once the library was allocated funds, the library purchased several databases and purchased hardcopy materials. She said they worked directly with the nursing faculty with meetings approximately every other week. The process involved the mentoring institution setting the curriculum and teaching the courses the first year in order to model the teaching. During the second year, Charlie College faculty members were supervised as they taught the classes. Catherine said that after the first cohort graduated, the program achieved both regional and specialized accreditation. Throughout the process, Charlie College and the mentoring institution had librarians on the planning committee.

Curt reported that initially he spent “at least half a day” with the mentoring-university nursing librarian. He said that he did not have a planned agenda for that first meeting, but the conversation reassured him that he had the necessary skill set. He said, “So that really just built confidence in myself that yeah, I’m a librarian, I can do this.” Throughout the process, he talked frequently with the librarian at the mentoring institution.

Curt had previously worked in a hospital library for a year and trained in using medical databases. When Charlie College proceeded with implementing the BSN, he joined the Medical Library Association (MLA) and the National Network of Libraries of Medicine (NN/LM) Pacific Northwest Region sponsored by the National Library of Medicine (NLM). By joining the local NN/LM, he had access to a group of librarians who were very active in sharing information and providing continuing education. He said that since he did not feel his skill level using medical databases, such as MEDLINE, was as high as he wanted, he was glad to have a support group in case he needed help.

Collaboration also occurred within the library at Charlie College. As an example, Curt took an American Library Association (ALA) continuing education class on collection development and wrote a plan specifically for the nursing collection. While writing the plan he sought input from the library faculty and administrator as well as the program faculty.

Theme Three—Providing Information Resources. To meet the needs of the new BSN, the library closely followed the advice from the mentoring institution. Catherine remembered they were told to purchase specific materials and databases such as CINAHL. She remembered it being fairly easy. She said the library at Charlie College purchased several databases and had money for print materials.

Facilities. At the time, the ADN program was located at a branch campus 16 miles away from the main campus. However, the BSN program was planned for the main campus because (a) the location of the targeted student population worked at the nearby hospital and (b) there was a stronger emphasis on library research in the upper-

level program. One year later, the ADN program was moved to the main campus, and the physical library collection for nursing was united in the main campus library.

Collection development. While the library was working on developing the collection for the BSN, they were also considering how best to support the upper-division general education courses that were being added. Upper-division general education classes were minimal—limited to anthropology, genetics, and Shakespeare—but the library looked for databases that would work for the instructors of those courses. Catherine reported that the library contacted the faculty teaching upper-division and asked what the library could do to improve the collection, especially databases, to support the research component of their courses.

Online resources. When asked about the role technology played in the development of information resources, Catherine responded, “It drove the addition of databases like crazy.” Catherine said, “It meant that these community college students have access to things that they would never have had any other way.” The library added a few major databases, such as CINAHL. She said that the library subscribed to *CINAHL Complete* as a result of the BSN. She said they tried several additional databases (ie. Access Science) and replaced them based on usage.

Curt said that the nursing department wanted as many online information resources as possible, because the students only met on campus one day per week. Since most of the students also worked full-time, they needed remote access to the library resources. In addition to CINAHL Complete, the library provided a link on their website to HEAL-WA, described on its website as providing “authoritative, current, evidence-based information for healthcare providers in Washington State” (University of

Washington Health Sciences Library, n.d.). Many of the databases linked on the site are password protected. Along with other healthcare providers, registered nurses and licensed practical nurses are eligible to obtain a login and password to access the site.

That concern for online information resources carried over to the general education classes. Curt was concerned that students would need more than EBSCO Academic Search Premier and ProQuest for classes in Anthropology, Genetics, and Shakespeare. He said that he tried to identify upper division databases that were more multidisciplinary, such as JSTOR. He did not feel that the two databases they had provided a deep enough level of research materials.

The library also looked at the level of eBooks they were buying. They realized that the bundled eBooks they had previously purchased targeted the lower-division community college level. They began to buy eBook bundles geared for upper-division undergraduates. Both upper- and lower-division students benefitted from the shift in emphasis.

Print resources. Catherine reported that the nursing program seemed very oriented towards electronic resources, but Curt also wanted to add print journals. Curt shared that he felt the students should be able to touch the original journals, but the mentoring institution strongly advised the library to rely on electronic resources. Catherine said, “There wasn’t a lot of room for making esoteric arguments about what a student might learn from a physical hard copy thing versus an electronic thing in space.” Curt piloted 20 new print subscriptions for one year. Catherine stated that the usage data did not support continuation, while Curt suggested that budget cuts were the reason. He

pointed out that these titles were not available online and were highly germane to the program. A one-year trial had not been long enough to build usage.

Curt reported that he spent money on hard copy books that served the needs of upper division nursing. He reported that he also found a lot of overlap with social work and psychology so those were the main areas for which he purchased materials. He also shared his frustration with changing budget amounts during the process that made it hard to plan.

Theme Four—Staffing. Professional development for librarians emerged as a subtheme under staffing for Charlie College. A number of the databases were new for the librarians. Catherine said that the databases were not typical: they functioned and were structured differently. She said it took a while for the librarians to figure out how to use the new databases effectively and understand individual nuances. However, she said that two of the librarians had backgrounds in health sciences libraries so they handled the challenge well.

Curt reported that he provided “a couple of training sessions [for librarians] at the end of the quarter using MEDLINE.” Curt was troubled that unlike university libraries, where they employ subject specialists, the librarians at Charlie College were all generalists. Each of the librarians selected materials, cataloged, and taught students. Nobody had the opportunity to develop an area of expertise, especially in a subject area. He was concerned about keeping his own skills current. He reported that he had taken a medical terminology class so that he would understand medical terms better and could spell them correctly. However, he felt that he could use additional training on using the MEDLINE database. He said that because MEDLINE was always changing, one needed

to keep up to date with it. Curt reached out for support by joining the Medical Library Association and the Pacific Northwest group of the National Network of Libraries of Medicine. Though the funding was not there for additional staffing, he felt the college needed a dedicated subject specialist for the BSN program.

Catherine reported that the library received a little increase towards staffing. She added it to other money and hired a fourth full-time librarian to allow Curt and the adjunct librarian time to work with the BSN program. The full-time librarian was placed at the branch campus library. However, the concurrence of a retirement and the economic downturn reduced the number of full-time librarians back to three. Catherine said that the librarian hired to support the branch campus then took over the duties of the retiring Systems Librarian. Curt and the adjunct librarian shouldered more of the teaching and reference responsibilities and had less time for the BSN program.

Theme Five—Teaching. The library worked to infuse information literacy skills into the BSN program. The adjunct librarian created a 100-level course on database searching skills aimed to meet the needs of students in the program. Curt said he encouraged her to teach the two-credit online information literacy class. The course was taught once a year. However, Curt said that he noticed the BSN students were not the ones registering for the course. The students in the Associate Degree in Nursing (ADN), seeking a registered nursing credential, were taking the course. He suspected that once the BSN program began, the nursing faculty realized that their ADN students were not prepared well enough for research and writing in the upper division classes.

However, Curt had not seen a difference yet in the information literacy skills of the incoming BSN students. He reported that he saw students who were struggling with

simple technology such as using MS Word or even logging into the network. He also noticed some reluctance about technology on the part of the faculty and that the faculty members were only beginning to incorporate a Learning Management System as ancillary to their courses but not for delivering content.

Catherine also reported that many BSN students were not prepared for work at the upper level. She said, in some cases, the students had been out of school as long as 20 years and, in order to advance into supervisory positions, the demand for a BSN credential was driving them back to school. However their writing experience had been in charting, not research. She related that the nursing faculty were struggling with their students' lack of research experience and writing skills. As a result, the Nursing Department made arrangements for a former English instructor to tutor the students.

Catherine also reported that the librarians encountered students who did not understand the relevance of nursing research in their current work. Their early work experience in a stratified healthcare culture taught them to follow orders and not question procedures. The nursing faculty members tried to instill in the students the importance of research in the nursing profession. A 400-level course in the nursing program taught students how to set up a research project. The librarians worked to be included in developing the students' information literacy skills within the course.

Theme Six—Evaluating. The main driver in evaluating the BSN program was achieving both specialized and regional accreditation. The library administrator, Catherine, shared that she had been chair of the college's regional accreditation work for a few years. She said that she had 25 years of experience working with accreditation and recognized that the nursing specialized accreditation was the higher standard to attain. If

they could win accreditation from the Commission on Collegiate Nursing Education, they knew they would easily achieve accreditation from the NWCCU.

Assessment consisted largely of studying the usage of the information resources. In the beginning, the library had sufficient money to experiment with different databases. They measured the usage of databases and switched them to gauge the best ones for the program. Curt pointed out that there was really no way to parse the type of student using a particular database so knowing whether the BSN students were specifically using a particular resource was impossible. Catherine said that one frustration was that the various database vendors counted usage differently. The lack of consistency among databases in how usage was counted (i.e. counting sessions, searches, articles retrieved or viewed) made comparisons difficult. The librarians also assessed the usage of the print materials.

Another assessment was working directly with students and faculty so that the librarians received immediate feedback. Catherine said the library worked hard to ensure that the program was happy with the library information resources and services. However, other than a few questions on an alumni survey, they had not done any student satisfaction surveys nor set any measurement criteria for determining how successfully the library met the students' needs. Catherine also said that they never knew how well students met the information literacy learning outcomes of the 400-level research class taught by nursing faculty, because the librarians were not sufficiently embedded into the course. Curt reported that the librarians conducted learning assessments in the 100-level library research class. He also said that with current staffing levels, they did not have much time to do a good job with assessment. Curt shared that he occasionally polled

nursing faculty about information resources but did not always hear back from them so he did the best he could at meeting program needs.

Usage data can be affected by how well the information resources are marketed to students and faculty. One of the ways students hear about the library is during the program orientation. Curt participated in those orientations.

Section Summary. This section provided the findings for Case Study Three—Charlie College. The findings showed that the emerging themes were planning, collaborating, providing information resources, staffing, teaching, and evaluating.

Planning. For Charlie College, the decision to offer a BSN degree was made after the college conducted a feasibility study and had evidence of a need for BSNs in the college district. The library administrator was chair of the Instructional Program Planning Committee whose responsibility was identifying unmet needs in the community. She was involved in the early stages of planning and was able to involve the library before the college won approval from the Washington State Board for Community and Technical Colleges.

Achieving specialized accreditation from the Commission on Collegiate Nursing Education was critical so Charlie College contacted a nearby university to establish a mentoring relationship. The university laid out the plan for implementing the program and winning accreditation. The nursing faculty members at Charlie College were experienced with meeting external accreditation standards for the RN Associate Degree and embraced the mentoring relationship provided by the university. According to the library administrator, the focus on external standards on the part of the nursing faculty made the planning much easier for the library.

Collaborating. Collaboration was also a major theme for this case. The librarian at Charlie College initiated the first meeting with his counterpart at the university library. They were both included in the weekly planning meetings between Charlie College and the mentoring institution. Curt also joined the Medical Librarians Association and the Pacific Northwest Group of the National Network of Libraries of Medicine in order to have the support that he needed from colleagues. Within the library, the librarians provided input on a collection development plan for the BSN.

Providing information resources. The administrator of the library believed the relationship with the mentoring institution made providing information resources much easier than it might have been. The university told the library what information resources to provide, and the library mostly followed suit. The program was offered one day per week to working professionals, so the mentoring college and the BSN faculty strongly advocated for online information resources. The library needed to adjust their collection development focus to include materials intended for upper division nursing. The library at Charlie College experimented with various databases and made final decisions based on usage. They also briefly tried some print journals without success.

Staffing. The library planned on having a fourth full-time, tenured librarian as a result of the new BSN program. However, due to the economic downturn, the library lost a full-time position.

Curt brushed up on his MEDLINE searching skills, joined nearby professional associations to participate with other medical librarians. He took a class in the writing collection development plans and an introductory class for the nursing program to learn

the terminology. Other librarians needed to spend time working with new unfamiliar databases, and Curt provided a two workshops to the librarians on searching MEDLINE.

Teaching. The librarians created a 100-level information literacy online course for the BSN program. The librarians also supported a 400-level research class offered by the Nursing program. The students in the BSN program exhibited rusty writing and research skills. It appeared to Curt that the Nursing program was directing their Associate Degree students into the information literacy class in hopes that future cohorts in the BSN program would be better skilled.

Evaluating. The main focus of assessment was achieving both specialized and regional accreditation. The library administrator said that they aimed for the higher standards of the specialized accreditation knowing that if they met those standards, they would also win the regional accreditation. The librarians watched the usage of both the databases and print materials and made adjustments as necessary. The librarians conducted some learning assessments, but the library administrator did not feel they were sufficiently embedded into the BSN classes to see how well students were meeting the learning outcomes for information literacy. The librarians collected informal feedback from working directly with program faculty and students.

Cross-Case Analysis

This section examines where the cases were similar and where they were unique. Each emergent theme is examined. I created a table to organize the findings and aid in their presentation. See Table 4-1 Cross-Case Analysis at the end of the chapter.

Planning. Planning included how the library organized itself to understand and accomplish the changes that were needed to meet information resource and service needs

of the baccalaureate programs. Among all the cases, the library administrator acted as the library's advocate. The administrators saw their role as ensuring the library was included in the campus planning and facilitated the relationship between the library and the program. At all three colleges, the librarians served as liaisons to assigned program areas. They worked to build relationships between the library and the program, to ensure that information resources met the needs of the curriculum, and that information literacy was encouraged and, where possible, infused into the curriculum. The libraries identified an initial budget for increasing the available information resources and temporary staffing.

Colleges Beta and Charlie had administrators that served as the lead for college regional accreditation efforts and this broadened their sphere of influence. Colleges Beta and Charlie examined library collections at colleges with similar programs.

College Alpha was unique because in addition to serving as liaisons to instructional divisions, the librarians had functional responsibilities. One librarian was responsible for collection development; another had responsibility for systems that included cataloging as well as maintaining the integrated library system and online databases. The librarians with liaison responsibilities for divisions that included the BAS programs worked with the Collection Development and Technical Services/Systems Librarians to identify appropriate information resources. This was also the only college reporting that the librarians conducted an initial analysis of the collection.

Colleges Beta and Charlie contacted a librarian at another college that offered a similar program for advice. The librarians were directly responsible for collection development in their liaison areas.

Charlie College was unique in having a mentoring relationship with another college. The librarian and program faculty worked closely with their counterparts at the mentoring institution and were guided at every step. The library was told what they would need in order to achieve special accreditation and selected materials within those guidelines. Charlie College was the only case where the liaison librarian both selected and cataloged the library materials purchased. The librarians at Charlie College were also unique in conducting a literature search to learn more about the community college baccalaureate movement.

Collaboration. Librarians at all three colleges built on existing relationships with program faculty and reported the importance of these relationships during planning and implementation. They also reported that maintaining lines of communication with program faculty was important and that getting feedback from faculty was challenging.

Librarians at Colleges Alpha, Beta, and Charlie worked directly with program faculty to select print and online materials. However, College Alpha was unique in that the liaison librarians worked not only with program faculty but also the Collection Librarian and the Technical Services/Systems Librarian to select information resources to support the BAS curriculum.

Charlie College was unique in establishing bi-weekly meetings with the mentoring university. The meeting ensured that the college librarian knew the implementation process and the needs of the curriculum. The librarian also had frequent informal communication with the mentoring institution librarian and joined two special-interest librarian associations for further support.

Information resources. All of the cases started with supplemental start-up funding to enhance the library collection to meet the needs of an upper division program. All of them worked to secure ongoing funding to maintain subscriptions to the online databases and purchase additional information resources. They all sought input from program faculty on information resources needed by the program. All libraries modified their collection development policies to address the upper division program. All added online as well as print resources to specifically support their upper division programs.

Colleges Alpha and Charlie reported consideration of the modality of the classes in deciding how to provide information resources. College Alpha had two programs, one taught entirely online and one taught entirely on campus. The online program was targeted at those students already working in the healthcare field with limited time to come to campus. The information resources needed to be accessible 24 hours a day so the focus was online materials. The program taught on campus relied heavily on printed images. Charlie College's program was also targeted at nurses already working in the field. The classes were taught one day per week on campus so students needed access when they were not on campus.

At Colleges Beta and Charlie, librarians serving as liaisons to the programs made the final decisions on purchases for the collection. Both colleges reported considering the needs of the upper division general education classes in selecting materials for the collection.

College Alpha was unique in that their second program, Interior Design, did not have start-up or ongoing funding for the library. The library's budget had been increased over several years and was considered sufficient to meet program needs. The library had

promised the RAIS program faculty that when the library collection did not meet their needs, it would purchase requested individual articles. The library formalized agreements with nearby health sciences libraries to allow students and faculty on-site access to print and electronic library materials. They also assumed that general education requirements were fulfilled at the Associate Degree level and did not consider additional materials for upper-division general education. Due to the proximity of a specialized bookstore, the librarians took the Interior Design faculty to the bookstore to select materials together. The library modified its circulation policies to allow mailing of library materials to students in the RAIS program.

Staffing. All three libraries received some supplemental funding for librarian hours to work with program faculty to identify additional information resources and develop information literacy instruction. All three attempted to have ongoing funding for librarians. College Alpha eventually piloted a full-time librarian dedicated to serving BAS programs. College Beta had additional librarian funding built into their ongoing budget, but found it difficult to identify reference or instruction that was unique from librarians' regular assignments and rarely charged the BAS funding for staffing. Charlie College initially had ongoing partial funding for an additional full-time librarian, but lost the position during the recession.

Colleges Alpha and Charlie were concerned about the additional workload on librarians. The administrators and librarians at both colleges expressed concern about placing additional responsibilities on the librarians without expanding the available funding.

Both colleges Alpha and Charlie expressed a need for subject expertise among the librarians. While librarians at both colleges relied on the program faculty for guidance on what would be needed to support the programs, the librarians talked about needing to understand the terminology and the scope of information resources needed.

Due to two partial-year sabbaticals among the librarians, Alpha College increased the hours of two adjunct librarians. Part of their assignments included working with the BAS programs, developing assignments, and updating instructional modules.

Beta College reported providing workshops for all faculty members on the topics of available information resources, information literacy, and avoiding plagiarism. Charlie College reported providing a workshop to librarians on searching the medical databases.

Teaching. All three libraries reported that students were underprepared to conduct library research. Alpha College librarians believed that the associate level program had not sufficiently prepared students for subsequent education. Beta College librarians attributed this to students' being out of school and new, unfamiliar information resource packages. They also believed that entrance criteria did not adequately address the skills students would need to be successful in the program, and they reported that librarians provided extra assistance to the BAS students because they lacked the necessary information literacy and technology skills. Charlie College also attributed the lack of students' research skills to being out of school, but added that the students' work experience had not fostered a value for research.

All three libraries reported that the librarians reached out to program faculty to infuse information literacy throughout the program. Charlie College reported that they tried to infuse information literacy into the 400-level research in nursing course.

Colleges Alpha and Charlie reported that they created Research Guides specifically for the Baccalaureate programs. Alpha College posted online tutorials created for RAIS through their Research Guides. These online tutorials were developed because the program was taught entirely online and on-site workshops would have been difficult to arrange. Alpha College was also the only case study that stated that the modality of the program was a major factor in designing library services and the provision of information resources.

Beta College created a credit-bearing 300-level class that was required for incoming BAS students. Charlie College designed a credit-bearing 100-level class that they hoped would serve the BAS students. Instead the program directed their associate-level students into the class and the librarian believed it was an attempt to remedy a lack of information literacy skills before advancing into the BSN program.

Evaluating. All the libraries reported that their primary measurement of success for the library program was a positive evaluation from a regional accreditation visit.

All the libraries monitored the use of the information resources, including databases, to determine how well the information resources were being used. Though the usage could not be limited to those students enrolled in the baccalaureate programs, print and online resources in the relevant subject areas were monitored.

All the libraries considered informal assessments such as feedback from instructors and students, either in-person, via email, or handwritten notes. The feedback

included both information resources and information literacy instruction. While helping students, the librarians noted shortcomings in the collection when students struggled to find information.

Colleges Alpha and Charlie had baccalaureate programs that also needed to meet specialized accreditation standards. The administrator for Charlie College said that the specialized accreditation was the higher standard and a good report from evaluators became their goal.

The library administrator of both Colleges Beta and Charlie had responsibility for leading their colleges' regional accreditation efforts. This additional responsibility may have contributed to the administrators' influence on campus and may have been a factor in completing formal assessments of the library. Both Colleges Beta and Charlie conducted surveys of students in general that included questions about satisfaction with the library.

Alpha College worked with students on their capstone projects in both programs. Though this work was not a formal learning outcomes assessment, librarians reported anecdotally that the projects indicated that students retained little of what they had learned about information literacy in earlier classes.

The library administrator of Beta College worked with the institutional researcher to conduct qualitative assessments of the BAS program. She met with the program advisory committee and with student focus groups to gather feedback on the library. As a result, the 300-level library research class was required the first quarter for incoming juniors.

Charlie College reported that learning assessments were conducted in the 100-level information literacy classes to determine how well the students were learning, but had limited feedback from the 400-level Nursing Research class.

Section summary. The Cross-Case Analysis revealed a number of similarities among libraries. In planning, all the administrators functioned as advocates for the libraries. All the librarians served as liaisons with the program faculty. Each college identified a supplemental budget to assist with upgrading the collection. Libraries were different in how they approached the challenge. Two administrators served as their colleges' regional accreditation leaders. Two colleges needed to meet specialized accreditation standards. One college established a mentorship relationship with a nearby university.

In terms of collaborating, all colleges developed or built on existing relationships with the program faculty. The librarians cited communication with program faculty as challenging. The librarians worked with program faculty to identify appropriate print and digital information resources. One librarian cited the support received from special-interest librarian organization as especially helpful.

As for information resources, supplemental start-up funding was utilized by all the college libraries to build the collection. They all sought input from program faculty. They all secured ongoing funding to ensure subscriptions to online resources. They revised collection development policies and provided access or purchased online and print materials. Two of the three considered the modality of instruction when making decisions on the format of information resources. Two considered the professional development needs of program faculty and two considered upper-division general

education requirements when selecting new information resources. The librarians at two colleges were directly responsible for selecting new materials for the library collection. The collection development librarian made the final decisions for library materials at one college with input from the liaison librarians. The library also established agreements with area health sciences libraries, revised circulation guidelines, and promised to purchase requested articles not found within the library's information resources.

In terms of staffing, all the libraries had funding for additional librarian hours. Ongoing funding for librarians varied, with one college piloting a librarian position dedicated to the BAS programs, one not using all available staff funding, and one library losing funding during the recession. Two of the three libraries were concerned about subject expertise among the librarians and two libraries were concerned about workload.

As for teaching, all the librarians cited underprepared students as a challenge. All libraries reached out to faculty to infuse information literacy into the program. The librarians at two libraries reported they created research guides including posting online tutorials at one college. Two libraries reported they created credit-bearing classes in response to the new program.

In terms of evaluation, a positive report from regional accreditation evaluators was cited by all colleges as their measurement of success. They all reported measuring the usage of information resources and considering informal feedback from faculty and students. Two programs required specialized accreditation and one library cited specialized accreditation as a higher bar than regional accreditation. Two colleges conducted formal surveys of students but not specifically of the baccalaureate students.

One library conducted satisfaction surveys of faculty in general and also gathered qualitative feedback from students. One library conducted learning outcomes assessment in their credit-bearing course.

Chapter Summary

This chapter presented the findings from three case studies and a cross-case analysis. The case studies revealed themes that centered on planning, collaborating, providing information resources, staffing, teaching, and evaluating. The chapter began with a discussion on the soundness of the data.

Evidence of soundness of data. I took steps to ensure the trustworthiness of the study by addressing internal validity, external validity, and reliability. In order to assure internal validity of the data, I followed a protocol, collected multiple interviews for each site, talked with participants with firsthand knowledge, and conducted multiple case studies. External validity within a constructivist paradigm using a hermeneutic approach places more responsibility on the reader to integrate the findings with prior knowledge to determine how the information might be used in similar situations. I strengthened the reliability of the data by keeping a journal that documented the protocol followed. The journal also helped me reflect on any potential bias.

Alpha College. Alpha College was a large college in an urban area serving surrounding suburban communities. It offered an applied baccalaureate degree first in RAIS and then in Interior Design. The RAIS program was taught entirely online and Interior Design was taught face-to-face on campus during the day. In planning how to provide information resources and information literacy instruction to these programs, the librarians took the instructional modalities in consideration. The two programs required

specialized accreditation and one librarian reported reviewing the library standards for Interior Design. All general education requirements were considered fulfilled within the lower division feeder program.

Under the theme of Planning, the roles played by the participants were clearly defined. The administrator represented the library to constituents, especially administrators, outside the library. She advocated for resources and facilitated communication. One librarian was responsible for collection development including books, periodicals, and multi-media. One librarian was responsible for technical services of the library, including cataloging of materials and systems management. Systems management included identifying online databases, arranging for trial periods, soliciting feedback from faculty and librarians, negotiating the price of contracts, placing the database link on the library website, and setting up patron authentication. In addition, librarians were liaisons to the instructional divisions in order to facilitate communications and respond to the information and instructional needs of the programs.

Collaboration emerged as a theme as the librarians worked together and with the program faculty. The librarians reported that communication was a challenge because the RAIS faculty members were largely adjunct, worked off-campus in their fields, taught online, and the librarians did not know them personally. They contrasted that with the Interior Design faculty who worked on campus and were, therefore, more accessible and known to the librarians. Collaboration, though, was a key element in developing the library collection and online databases.

Within the theme, Providing Information Resources, budget was an important subtheme that covered not only the initial start-up money, but also ongoing costs for

subscription databases and new materials. Print materials were important for the Interior Design program, which was dependent upon images. Online resources were more important for the wholly online RAIS program. The collection development guidelines were revised to articulate goals of leveraging existing materials, serving upper and lower divisions as well as multiple disciplines. Access to the information resources was also important with the formalization of agreements with nearby large hospital and health sciences libraries and the decision to purchase needed articles on demand rather than subscribe to expensive journal titles.

The theme of Staffing revealed some concern about subject specialization among the librarians. An adjunct librarian took the introductory class to RAIS to become more familiar with vocabulary and how the program was taught. Workload was also an issue for the library. Additional salary dollars were used to develop online video tutorials and other teaching materials.

Under the theme of Teaching, the librarians needed to take into account the information literacy skills of the incoming juniors. Program faculty told faculty that students' research skills might not be very strong. The librarians worked with program faculty to infuse information literacy throughout the program and they became involved with the programs' capstone projects.

An examination of the Evaluating theme revealed that librarians followed usage data closely to determine how successfully the collection met the needs of students. Formal assessments of faculty indicated that they were happy with the information resources and believed that students needed help with research and citations. Informal feedback from students and faculty was helpful, but undocumented for evaluative

purposes. Assisting students with projects, including capstone projects provided evidence of where there were gaps in the collection and where students needed more help with research skills.

Beta College. Beta College was classified as a medium-sized college, located in an urban core, and serving a diverse student population.

As for Planning, the library administrator for Beta College was the leader of the college's accreditation efforts and, therefore, played a more strategic role in the process of establishing a baccalaureate program on campus. She was included in the decision-making process and shaped the proposals that were submitted to the State Board and the Northwest Commission. In addition she served in the role of the library's advocate to the administration and other external stakeholders. Two librarians served as liaisons to the divisions that were either directly or tangentially involved in developing the new BAS program, one to the Social and Human Services Division, the other to the Social Sciences Division. The librarians at Beta College were very involved in the committee structure and with college initiatives and recognized as integral to the educational endeavor.

Collaboration was shown in that the librarians collaborated together and with the program faculty in their divisions. They both reported that the biggest challenge was communication with the faculty. They believed that knowing the faculty in advance helped, but that faculty members were busy teaching their regular loads and writing the new curriculum. They had little time to work with the librarians to review proposed materials and databases. The librarians also noted that they had trouble identifying new faculty and that the new faculty often did not know what materials would be useful for their classes.

In considering what Information Resources would be needed, the librarians considered the goals of the program and students' goals beyond graduation, such as graduate school. The librarians added online encyclopedias in part because the program was taught at night to accommodate working students. To aid in the selection of new materials, librarians read reviews in library journals, such as *Choice*, and searched publishers' catalogs. They considered the general education requirements for the program. The librarians assessed their current collection and looked for gaps between what they had and what they needed. They worked to find materials that would serve several programs and serve both upper and lower divisions.

Staffing was provided through start-up funding that included some dollars for librarian time. The librarians and administrator agreed that there had been little impact to their workload since there had been release time and they had a ready supply of adjunct librarians. They also agreed that professional development for the librarians and the program faculty was not an important factor. The librarians provided workshops to all faculty members on a regular basis and no additional workshops were needed.

Teaching emerged through a new credit-bearing information literacy-focused class was developed for the program and taught by a librarian. The students requested that the class be required in the first quarter for each incoming cohort. The librarians reported that the students were not prepared for college-level research papers. They said the students needed extra help and were heavy users of the library. The librarians created Research guides and conducted workshops for individual classes to help students improve their research skills.

As for Assessment, the library administered regular formal surveys of all faculty and students. The library administrator met with a BAS advisory committee and met with students in order to gather feedback. Other informal assessments included feedback from faculty and students heard by librarians. The librarians noticed when gaps existed in the collection. They also studied usage data on the databases.

Charlie College. Charlie College was a medium-sized college that served an urban area with a main campus and a two-county rural area with two smaller branch campuses. Its service area included multiple military installations.

In terms of Planning, the library administrator at Charlie College was the leader for regional accreditation efforts for the college. She was also chair of the Instructional Program Planning Committee. She played a significant role in the college's planning for the new bachelor's degree. One of the librarians was assigned to lead the library's planning efforts. He met with his librarian counterpart at the mentoring institution and worked with program faculty to develop the information resources needed by the library.

Collaboration was an important theme for Charlie College. The librarian participated on the planning committee with the mentoring institution on a bi-weekly basis. He also collaborated with library faculty. An adjunct librarian worked with him on the implementation. The library administrator believed that the focus by the nursing department on achieving specialized accreditation and the guidance by a mentoring institution made the planning process much easier.

When selecting information resources, the mentoring university and program faculty strongly advised the library to add electronic resources. Due to the availability of start-up dollars, the library was able to experiment with various databases to find the best

fit. The librarian wrote a library collection development policy for the BSN program to articulate the goals for the collection. Three upper division classes were created to complete the general education requirements. The library added JSTOR for better access to full-text journal articles.

In the area of teaching, the library created a 100-level credit-bearing library research class intended for the BSN program. However, it became clear that the students were not prepared for writing research papers at the BSN level. The program hired a writing tutor for the students and began directing their lower division Associate Degree Registered Nursing students into the library research class instead.

As for staffing, the library administrator mentioned the additional workload. The library was briefly able to add a new full-time position, but with the retirement of a librarian and the economic down-turn, the position was lost. As a result there was less time to devote to the new program. For professional development, the librarian worked on developing his research skills on MEDLINE. He joined two medical librarian organizations to develop a cadre of colleagues to whom he could turn for help.

As for Evaluation, the library and the BSN program focused on achieving specialized accreditation rather regional accreditation. The college believed it was the tougher standard to meet. The librarians followed the usage data for the online databases closely. They discontinued poorly used databases and added new ones. The library collected some learning assessments, but the administrator did not believe the librarians were sufficiently embedded into the classes to conduct a meaningful assessment. The librarians collected informal feedback by working directly with students and program faculty.

Cross-case analysis. The Cross-case analysis found similarities among the three libraries in the theme areas of planning, collaborating, information resources, teaching, staffing, and evaluating. The library administrators advocated for their libraries and the librarians worked as liaisons to the program faculty. All the libraries received supplemental funding for the planning period.

The librarians established or relied on existing relationships with program faculty in order to collaborate on developing the digital and print information resources. All librarians cited challenges in communicating with program faculty.

The libraries used supplemental funding to build print collections and establish subscriptions to online article databases. They all revised their collection development policies. When selecting the information resources, two libraries considered the modality of program instruction, two libraries considered upper-division general education needs, and two libraries considered the professional development needs of faculty. The liaison librarians at two of the colleges made the final decisions on the information resources purchased.

The libraries had funding for additional librarian hours, but had varying funding for ongoing staffing. One library piloted a BAS librarian, one library had ongoing funding but did not utilize all of it, and one library lost staff funding during the economic downturn. Two libraries reported a need for subject expertise among the librarians. Two libraries cited concern over workload.

All librarians expressed concern that the students were underprepared for upper-division library research. The librarians met this need with research guides, online tutorials, and credit-bearing classes.

The libraries reported one measurement of success was a positive report from regional accreditation evaluators. Two colleges also needed specialized accreditation and one library administrator stated that the specialized accreditation was more challenging and their main focus. Libraries cited informal feedback and their primary method of evaluation. Two libraries conducted general satisfaction surveys of students. One library surveyed the faculty in general and collected qualitative feedback from BAS students.

The findings revealed a number of similarities among the libraries in the areas of planning, collaborating, information resources, teaching, staffing, and evaluating. There were also differences due to college structures, the programs offered, and the modality of instruction.

Table 4.1 Cross-Case Analysis

	Alpha College		Beta College	Charlie College
Program:	Radiation and Imaging Sciences	Interior Design	Applied Behavioral Science	Nursing
Planning	<ul style="list-style-type: none"> • Administrator served as library advocate • Librarians served as liaisons to assigned areas • Identified budget amount • Conducted collection analysis • Librarians identified functional assignments 	<ul style="list-style-type: none"> • Administrator served as library advocate • Librarians served as liaisons to assigned areas • Identified budget amount • Examined specialized accreditation standards • Conducted collection analysis • Librarians identified functional assignments 	<ul style="list-style-type: none"> • Administrator served as library advocate • Librarians served as liaisons to assigned areas • Identified budget amount • Examined library collections serving similar program • Administrator served as campus regional accreditation leader • Contacted librarian at college with similar program 	<ul style="list-style-type: none"> • Administrator served as library advocate • Librarians served as liaisons to assigned areas • Identified budget amount • Administrator served as campus regional accreditation leader • Examined specialized accreditation standards • Examined library collections serving similar program • Established relationship with librarian at mentoring university • Conducted literature search to learn about community college baccalaureates
Collaboration	<ul style="list-style-type: none"> • Developed relationships with program faculty • Established lines of communication • Communication with program faculty was challenging • Librarians functioned as a team to select eBooks • Liaison librarian worked closely with program 	<ul style="list-style-type: none"> • Built on existing relationships with program faculty • Maintained lines of communication • Communication with program faculty was challenging • Librarians functioned as a team to select print materials 	<ul style="list-style-type: none"> • Built on existing relationships with program faculty • Maintained lines of communication • Communication with program faculty was challenging • Librarians worked with program faculty to select materials 	<ul style="list-style-type: none"> • Built on existing relationships with program faculty • Maintained lines of communication • Communication with program faculty was challenging • Librarian worked with program faculty to select materials

Table 4.1 Cross-Case Analysis (Continued)

	faculty and collection development and systems librarians	<ul style="list-style-type: none"> • Liaison librarian worked closely with program faculty and collection development and systems librarians 		<ul style="list-style-type: none"> • Formal meetings every two weeks with program faculty and mentoring university • Frequent informal communications with librarian at mentoring university • Librarian joined special-interest librarian organization for support
Information Resources	<ul style="list-style-type: none"> • Utilized supplemental start-up funding • Secured ongoing funding • Sought input from program faculty • Revised collection development guidelines • Provided access to eBooks and other online resources for online classes • Considered modality of classes when selecting information resources • Considered professional development needs of program faculty when selecting materials • Worked with collection development librarian to select print and eBook materials • Established formal agreements with nearby libraries 	<ul style="list-style-type: none"> • Utilized regular budget • Secured ongoing funding • Sought input from program faculty • Revised collection development guidelines • Purchased print materials for on-campus classes • Considered modality of classes when selecting information resources • Considered professional development needs of program faculty when selecting materials • Worked with collection development librarian to select print and eBook materials • Took program faculty to a subject-specific bookstore to select print materials • Assumed that general 	<ul style="list-style-type: none"> • Utilized supplemental start-up funding • Secured ongoing funding • Sought input from program faculty • Revised collection development guidelines • Provided access to eBooks and other online resources • Purchased print materials for on-campus classes • Librarian directly responsible for collection development in liaison areas • Considered upper-division general education requirements • Considered professional development needs of program faculty when selecting materials 	<ul style="list-style-type: none"> • Utilized supplemental start-up funding • Secured ongoing funding • Sought input from program faculty • Revised collection development guidelines • Provided access to eBooks and other online resources • Purchased print materials for on-campus classes • Considered upper-division general education requirements • Considered modality of classes when selecting information resources • Librarian directly responsible for collection development in liaison areas

Table 4.1 Cross-Case Analysis (Continued)

	<ul style="list-style-type: none"> • Promised to purchase individual journal articles as needed • Revised circulation guidelines to allow mailing to students • Assumed that general education requirements were fulfilled at Associate Degree level 	education courses were fulfilled at Associate Degree level		
Staffing	<ul style="list-style-type: none"> • Funded for additional librarian hours during implementation • Piloted BAS librarian position for ongoing support • Concerned about workload • Concerned about need for subject expertise • Used sabbatical backfill dollars for additional librarian hours 	<ul style="list-style-type: none"> • Piloted BAS librarian position for ongoing support • Concerned about workload • Concerned about need for subject expertise • Used sabbatical backfill dollars for additional librarian hours 	<ul style="list-style-type: none"> • Funded additional librarian hours during implementation • Funded for one-quarter full-time librarian ongoing, but not used regularly • Provided workshops for all faculty 	<ul style="list-style-type: none"> • Funded for additional librarian hours during implementation • Initially had ongoing funding for a librarian • Concerned about workload • Concerned about need for subject expertise • Provided training on use of new database to librarians
Teaching	<ul style="list-style-type: none"> • Students were underprepared for library research • Reached out to faculty to infuse information literacy throughout program • Created research guides • Modality of instruction influenced information literacy instructional design • Designed online tutorials to meet student needs at any 	<ul style="list-style-type: none"> • Students were underprepared for library research • Reached out to faculty to infuse information literacy throughout program • Created research guides • Modality of instruction influenced information literacy instructional design 	<ul style="list-style-type: none"> • Students were underprepared for library research • Reached out to faculty to infuse information literacy throughout program • Created credit-bearing 300-level information literacy class 	<ul style="list-style-type: none"> • Students were underprepared for library research • Reached out to faculty to infuse information literacy into 400-level nursing research course • Created research guides • Created credit-bearing 100-level information literacy class

Table 4.1 Cross-Case Analysis (Continued)

	level			
Evaluating	<ul style="list-style-type: none"> • Regional accreditation feedback was major indicator of success of efforts • Measured usage of information resources • Considered informal assessments • Specialized accreditation feedback was major indicator of success of efforts • Capstone projects indicated students did not retain information literacy instruction 	<ul style="list-style-type: none"> • Regional accreditation feedback was major indicator of success of efforts • Measured usage of information resources • Considered informal assessments • Specialized accreditation feedback was major indicator of success of efforts • Capstone projects indicated students did not retain information literacy instruction 	<ul style="list-style-type: none"> • Regional accreditation feedback was major indicator of success of efforts • Measured usage of information resources • Considered informal assessments • Library administrator led regional accreditation process • Formal surveys of faculty satisfaction with the library, but not specifically of BAS faculty • Formal surveys of student satisfaction with the library, but not specifically of BAS students • Library administrator sought qualitative feedback from BAS constituents 	<ul style="list-style-type: none"> • Regional accreditation feedback was major indicator of success of efforts • Measured usage of information resources • Considered informal assessments • Specialized accreditation feedback was major indicator of success of efforts • Library administrator led regional accreditation process • Formal college surveys of graduating students satisfaction included a few library questions not specifically on BSN • Conducted learning outcomes assessment in 100-level library course

Chapter Five—Summary, Discussion, and Implications

The purpose of this study was to understand how community college libraries enhance information resources and adapt services to support community college baccalaureates (CCB). The central question was, how do community college libraries successfully prepare to meet the needs of a CCB program? This chapter summarizes and discusses the findings of this study, suggests implications for policy-makers, leaders, and practitioners, and makes recommendations for future research.

There is an increasing national interest in the CCB for the following reasons: the CCB (a) meets employer demands for higher credentials (Bemmel et al., 2009; Burning Glass Technologies, 2014; Walker & Floyd, 2005); (b) provides geographical access to education (Burke & Garmon, 1995; Floyd, 2005); (c) costs less than a university education (Walker, 2005); (d) provides a trained workforce to compete in the global economy (Garmon, 2002; Walker & Floyd, 2005); and (e) creates a pathway to the baccalaureate degree for terminal, two-year workforce programs (Walker & Floyd, 2005). The study was significant because (a) there is an increased interest in the CCB; (b) upgrading the library is one of the three most expensive preparations colleges must make for the CCB (Bemmel et al., 2009; Cook, 2000; Essink, 2013; Glennon, 2005; McKee, 2001, 2005; Remington & Remington, 2005; Ross, 2006); (c) other studies reported that faculty mentioned the importance of library resources and services for curriculum development, professional development, and students (Hofland, 2011; Ross, 2006); (d) in order to meet higher accreditation standards, libraries must demonstrate increased breadth and depth in library resources (Essink, 2013; Hofland, 2011); and (e)

there was a single report on a similar experience (Lawless, 2001), but no research studies found in the literature describing how libraries adapted to the implementation of a baccalaureate by a community college. Both Leeder (2013) and Arnold (2010) remarked on the paucity of research on community college libraries. This study contributed to needed new knowledge.

Summary and Discussion

This section discusses the findings of the study in relation to the research questions and relevant literature. Four research questions guided this study. They were:

1. How do libraries identify changes needed to meet the needs of a CCB program?
2. How do libraries plan and implement the changes needed to meet the needs of CCB program?
3. How do libraries manage the challenges encountered while implementing changes?
4. How do libraries evaluate the success of the changes and what additional changes were made as a result of the evaluation?

This study employed a constructivist, hermeneutic approach. The method was a multi-case study in which librarians from three Washington State community colleges offering accredited Bachelor of Applied Science (BAS) or Bachelor of Science in Nursing (BSN) degrees were interviewed. The librarians were asked to review the transcripts from the recorded interviews and correct or clarify them. They were also asked to review, by telephone, the draft case study with the researcher. These steps were taken to ensure accuracy and reduce the likelihood of researcher bias. The summary and discussion is presented by research question.

Research question one: How did libraries determine the changes needed?

This section summarizes and discusses the findings that answered research question one and relates the findings to the literature. This question addressed how the library heard about the college decision to implement a BAS program and the efforts made by the library to learn about the program and position themselves to respond.

The literature documented that community colleges made an investment in their libraries to prepare for new baccalaureate programs (Bemmel et al., 2009; Cook, 2000; Essink, 2013; Glennon, 2005; Hofland, 2011; Lawless, 2001; McKee, 2005; Remington & Remington, 2005; Ross, 2006). This was true for the three libraries in this study. All three libraries had one-time funds awarded for the pilot programs. However, there were no one-time funds allocated for the second program at Alpha College.

Lawless (2001) reported that when Rogers State College, a community college, became a university, the library director was moved up in the organization. This may be because the leap from a community college to a university required structural changes. In Washington State, the community colleges remained within the community and technical college system with the same basic structures and the administrators in this study did not move up in the organization. Two of the three library administrators were involved in the college decision-making process regarding the baccalaureate, perhaps due to their roles as college leaders in accreditation efforts.

When Rogers State College, a community college, was changed through legislative action to Rogers State University, the library revised its strategic plan. The process Lawless (2001) described included a faculty survey and faculty focus groups. None of the libraries in this study discussed creating a new strategic plan.

All the libraries in the study sought guidance in some way on collection development from sources external to the college. Colleges Alpha and Charlie had programs that required specialized accreditation, and the librarians reported looking at accreditation standards for libraries in order to better understand what would be needed. Colleges Beta and Charlie contacted subject specialist librarians and examined the holdings in libraries at institutions with similar programs. The librarian at Charlie College joined two specialized librarian organizations to find needed support. Only Charlie College indicated that they had researched the literature for information on the community college baccalaureate movement. The administrator reported that the librarians read *The Community College Baccalaureate* (Floyd et al., 2005) to better understand the issues surrounding the movement. No one reported finding literature that specifically addressed changes made by libraries. Charlie College was unique in having a mentoring library, one at a neighboring university, to guide the community college library in developing its collection of information resources. According to the library administrator, the mentoring institution told the library what they needed and she felt it was a relatively easy process.

The librarians at all the colleges in this study indicated that they consulted with program faculty to understand what information resources would be needed for students to be successful in the program. Though the literature did not specifically discuss this collaboration in the context of the community college baccalaureate, the literature did cite that collection development in the community college is a shared effort between the librarians and the discipline faculty (Johnson, 2009). Community college librarians tend to be generalists (Arnold, 2010; Leeder, 2013; Silverman & Williams, 2014) and rely on

instructors to be the subject specialists (Johnston, 1994). The librarians in this study reported that they examined the curriculum in order to understand what information resources were needed. Only one librarian (Beta College) mentioned that she considered the goals of the graduating students (which included graduate school and social services professions), what that meant for the curriculum (such as ethics and social problems); and she thought about what information resources would best fit that need. This was also consistent with Johnston (1994).

Several authors, including Bower and Hardy (2004), Reeves and DeArmond (2006), and Roselle (2013), reported that community colleges seek to meet the needs of the non-traditional students by providing alternatives to traditional face-to-face classroom instruction. The colleges in this study structured the instructional modes to fit the needs of working adults. Librarians at Colleges Alpha and Charlie reported that they considered the modality of the program instruction. The RAIS program at College Alpha was taught entirely online. The librarians acquired online licensed materials (article databases, eBooks, and related curricular materials) to support that program. For the Interior Design program, the library purchased primarily print materials because the program was taught face-to-face, onsite, and was heavily reliant on images. Charlie College's program was taught one day a week to accommodate the schedules of working nurses. The librarians at Beta College responded that it was an opportunity to expand their online resources and, therefore, the modality of instruction was not a factor in that decision.

The librarians at Alpha College reported they formalized agreements with nearby hospital and health sciences libraries to ensure their students and faculty had onsite

access to databases at those locations. Alpha College considered it an acknowledgement that the college's library could not provide access to all necessary information resources, but could ensure that the students had nearby access. That perspective is supported by Johnston (1994) who stated, "Since institutional self-sufficiency is not possible, the college's resources and delivery systems are augmented" (p. 65).

The librarians discussed library support of general education classes during the interviews. The librarians at Alpha College reported that the college considered the general education requirements had been completed in the lower division program and therefore did not intentionally add general education materials at the higher level. Librarians at Colleges Beta and Charlie stated that they considered the needs of the ancillary general education classes for the upper division programs. Beta College reported making a decision to support their college's upper-division general education requirements through article databases. The college intended to use the same general education classes for future BAS programs so the library felt comfortable that they could serve several BAS programs in that way. Charlie College had three general education classes and relied on their current subscriptions to EBSCO Academic Search Premier and ProQuest, but added JSTOR for more full-text resources. While no literature was found that specifically addressed how community college libraries added additional materials to support the general education requirements for a CCB, Hofland (2011) did report the positive impact when faculty at Great Basin College rewrote their general education curriculum (including upper-division) in preparation for the CCB programs. She also reported that tripling the holdings of the library benefitted upper- and lower-division

students. One can infer that the library at Great Basin College addressed the information resources needs of upper-division general education.

Research question two: How do libraries plan and implement the changes needed? This section summarizes and discusses the findings that answered research question two. One of the librarians remarked that planning and implementing the changes was not a linear process. Librarians made continual adjustments to their information resources and services during their preparations and after students entered the program. Planning and implementing could not easily be separated in this process.

The librarians played various roles in the planning and implementation of library information resources and instruction. The literature indicated that library administrators advocate for new initiatives in the library on campus (Reed, 2011). This was true in this study. At each of the colleges, the library administrator was an advocate for the library to the broader college community and specifically to other college administrators.

There is abundant literature (Cataldo et al., 2006; Henry, 2012; Johnson, 2009; Johnston, 1994; Thull & Hansen, 2009) describing the liaison work of librarians. The library faculty at all three colleges in this study served as liaisons to college programs that housed or worked closely with the new BAS programs. As described in the literature, the librarians worked to ensure that library information resources and information literacy instruction were meeting program needs.

Collaboration was an important factor in planning and implementation. All the participants responded that having an established relationship with the program faculty was important. These relationships are also cited in the literature as being an important activity for librarians (Caspers, 2013; Roselle, 2013; Tucker, Bullian, & Torrence, 2004).

The librarians at Alpha College noted that of their two programs, the onsite program with faculty the librarians already knew made the process much easier since face-to-face conversations were more likely. All the participants talked about the importance of communication and reaching out to faculty to engage them in the selection of information resources.

The librarians in the case studies relied on the expertise of program faculty in their subject areas and depended on them for information about the curriculum. This was in line with Johnston (1994) and Arnold (2010). Two libraries reported that they had librarians at the time with some medical librarian experience. After implementation of the RAIS BAS program at Alpha College, the library administrator paid an adjunct librarian to take an introductory course in order to build subject expertise in the library. Librarians at two colleges expressed a need for librarians to acquire at least the vocabulary and some basic understanding of concepts and issues in the field. While community college libraries typically do not have subject specialist librarians (Arnold, 2010; Johnson, 2009), the move to baccalaureate degrees at least raises the question about this need.

As indicated in the literature (Johnson, 2009; Johnston, 1994), the librarians worked together within their libraries to revise their collection development policies and select materials for both the BAS program and general education courses. With the colleges' expanding missions, the librarians expressed concern about meeting the information needs of both upper and lower division programs while continuing to meet the needs of developmental and vocational students in other programs. Alpha College addressed these concerns by specifying their intent to provide materials that served both

upper- and lower-division students and cut across multiple programs. Similarly, in her study, Hofland (2011) reported that library information resources purchased at Great Basin College to support the upper-division students proved to be a benefit to the lower-division students as well.

Librarians considered the professional development needs of classroom faculty to some degree, but this did not seem to be a focus among the librarians. In part, this may be attributed to the expectation for instructors to teach rather than conduct research (Arnold, 2010; Johnston, 1994). When higher level discipline-specific information resources were added to support instructors' professional development, the librarians felt the cost needed to be justified by usage statistics. Because usage was important, faculty were encouraged to develop assignments that would introduce those specialized resources to students. Arnold (2010) and Bird, Crumpton, Ozan, and Williams (2012) also discussed the importance of introducing workforce students to the important information resources in their fields. Providing higher level materials appeared to satisfy both faculty professional development and student preparation. Materials that focused on pedagogy were also available to faculty, but served faculty more broadly.

All the libraries added at least one online database to support their pilot programs. The libraries tended to add new databases on familiar vendor platforms. One library stated that this strategy made it easier for students and instructors to learn and easier for the librarians to teach. Another strategy was to start a new database at its basic tier (e.g. fewer full-text articles or narrower subject scope) and increase tiers as the budget allowed. One college started a number of new databases and winnowed the selections based on usage statistics. The libraries considered depth and breadth of the databases and

their ability to serve both upper and lower division students. Serving both upper- and lower-division students with the information resources selected was in keeping the Hofland's (2011) findings.

The libraries addressed information literacy for the new programs through a number of options both synchronous and asynchronous as suggested by the literature (Grassian & Kaplowitz, 2009; Roselle, 2013). These included creating new credit-bearing classes, creating online video tutorials, and developing Research Guides. Librarians still presented traditional "one-shot" (Grassian & Kaplowitz, 2009, p. 13) workshops for specific classes. Alpha College librarians also worked one-on-one with students completing capstone projects for both the RAIS and Interior Design BAS programs. This contact helped the librarians provide individual instruction and monitor the results of their information literacy instruction efforts.

Lawless (2001) reported that the book budget at Rogers State University more than quadrupled "from \$47,586 in FY 1996 to \$205,000 in FY 2000" (p. 22). The library had a 10-year plan to reach 100,000 volumes and added 80 subscriptions to the periodicals collection. They also added electronic databases, computers, and staff to manage the electronic resources and provide additional reference and instruction capacity. The libraries in this study did not see large increases in the book budget similar to Rogers State University. The libraries saw temporary increases in their budgets between \$25,000 to \$34,000 for physical items and a modest increase for ongoing costs of databases and new materials. All libraries received small amounts of money for additional librarian time.

Research Question Three: How do libraries manage the challenges

encountered? This section summarizes and discusses the findings that answer research question three. Each of the librarians cited challenges encountered during planning and implementation.

Librarians in all three cases reported that many students were under-prepared for writing college research papers for upper-division courses. Several factors were posed by the librarians as contributing to this phenomenon: (a) the students may not have had any preparation for library research in their lower-division program; (b) their skills were rusty due to the fact they had been out of college for a number of years; (c) their writing skills were weak. A number of authors (Arnold, 2010; Bird et al., 2012; Crumpton & Bird, 2013; Roselle, 2013) have discussed the diversity of students attending community colleges. They suggested that community college students represent a wide population based on gender, age, race and ethnicity, socio-economic background, educational preparation, and career goals. Many are parents and have full-time jobs. It is this wide diversity of students that contributes to the uniqueness of community colleges.

The colleges addressed the challenge of underprepared students in the BAS programs in various ways. Included among the strategies were raising the entrance requirements, providing more opportunities for writing at the upper-division level, providing information literacy instruction at the lower-division level, and hiring a writing tutor. The librarians also reported providing more hands-on, one-on-one help for the upper-division students. Roselle (2013) suggested that in addition to addressing multiple learning styles, librarians might employ “active and collaborative learning” (p. 55) and findings from brain-based learning research.

Poor communications with instructors was also mentioned as a challenge encountered by the librarians. Even when the librarians had strong prior relationships with the program faculty, such as the relationship with the Interior Design faculty at Alpha College or the relationship with Human Services faculty at Beta College, the librarians reported that they often had to ask several times for feedback. They e-mailed, made phone calls, or visited offices. Roselle (2013) discussed these challenges as well.

Arnold (2010), Roselle (2013), and Shelton (2009) cited the reliance on adjunct faculty by community colleges as challenging for libraries. This was borne out by the study. The librarians often cited the difficulty in communicating with the part-time faculty. The librarians reported that sometimes finding contact information and getting feedback was difficult because faculty members had not yet been hired, were physically remote, or had tenuous relationships with the college due to adjunct status. Arnold (2010) and Bird, et al. (2012) also suggested that faculty in the workforce areas often are hired by community colleges directly from industry and have little previous experience with what libraries offer. However, as recommended by Shelton (2009), the librarians in this study said they made an extra effort to build the relationships. Grassian and Kaplowitz (2009) suggested that faculty status of librarians may be a positive factor in building collaborative relationships in information literacy instruction. The librarians in this study had faculty status.

The librarians at Alpha College reported that it was hard at first, but the faculty came to appreciate them as time went on. They also agreed that the onsite program, Interior Design, was easier because the faculty were physically present for face-to-face meetings as opposed to the strictly online faculty in RAIS. Beta College reported that the

lead program faculty member had not been a library user in the past so they worked to engage him in the library collection development process. Librarians acknowledged that the program faculty members were busy with their teaching load while they were building a new baccalaureate program. The library was not at the top of their priorities. Shelton (2009) suggested ways to reach out to part-time and off-campus faculty. She suggested that the library director should provide leadership and support in the outreach effort. This was true in all three cases of this study.

The relationship Charlie College had with the mentoring university seemed to have had a positive effect on communication. The librarian was present at the mentor/mentee planning table throughout the process. Though getting feedback from program faculty was still a challenge, the guidance received from the mentoring institution helped the process. The library administrator also credited the program faculty with being focused on what was needed to achieve specialized accreditation and understanding the role of the library in that process. I found no literature that discussed a mentoring relationship between a community college library and a university library.

The literature cited the importance of funding upgrades to the libraries for the CCBs (Hofland, 2011; Ross, 2006) and the ongoing funding to maintain subscriptions to licensed databases and periodical subscriptions. The first baccalaureate programs in the Washington State community colleges were pilot projects with start-up money from the State Legislature (Seppanen, 2010). Subsequent programs were built out of the colleges' own resources and an enhanced BAS FTE funding formula (England-Siegerdt & Andreas, 2012). Librarians would do well to monitor this possibility as the community colleges expand their BAS offerings. Another possible risk to funding levels could be

that, at some point, the database vendors could begin charging community college libraries the much higher fees required from four-year colleges.

Technology was an ongoing challenge for the libraries. This area included the challenges of negotiating contracts with the database vendors and authenticating the library users for the vendors (Johnson, 2009). For eBooks, considerations included whether a specific title was available on the platforms used by the college; purchasing, which granted access in perpetuity, versus licensing; the number of simultaneous users; and the ability to download or print. Librarians reported that they negotiated for favorable licensing fees and were concerned that vendors would begin to charge higher university prices.

The libraries reported that not all students possessed the necessary competencies for technology. This corresponded with the literature (Crumpton & Bird, 2013; Grassian & Kaplowitz, 2009; Roselle, 2013). Librarians often had to provide basic instruction on using a computer or send students to another office for more help.

Two of the case studies cited the extra workload as a challenge. The planning, extra meetings, designing Research Guides, creating video tutorials, revising policies, selecting materials, creating information literacy curriculum, and revising the web site were cited as contributing to librarians' workload. Neither the administrator nor the librarians at Beta College, however, thought that the workload was a challenge. They had release time and a ready supply of part-time librarians to help. While these activities were typical for community college librarians (Arnold, 2010; Grassian & Kaplowitz, 2009; Roselle, 2013; Silverman & Williams, 2014), developing higher level information

resources and information literacy curriculum specifically to meet the needs of the programs' instructional modalities was new.

Lawless (2001) reported that the book budget quadrupled and the entire library budget more than doubled in four years at Rogers State University. The libraries in this study experienced modest ongoing funding increases with the highest being \$15,000. All expressed concern about funding to support the rising cost of databases.

Research question four: How do libraries assess the success of changes and make further changes? This section summarizes and discusses the findings that answer research question four. As early adopters of community college baccalaureate programs, each college was required to undergo a full accreditation review as a baccalaureate-granting institution by the NWCCU. All three colleges successfully achieved accreditation as baccalaureate-granting institutions. Two of the colleges had programs that required specialized accreditation. Both colleges were successful in achieving that credential.

For assessment purposes, all the libraries closely monitored usage statistics for the databases and the collection. Alpha College watched the usage of print materials for Interior Design and reported that the materials were used. Charlie College reported using usage data to experiment with databases and print journals to determine what best fit the needs of the program. When the budget was reduced, the print journals that were not used were cancelled. Databases were changed when usage was low. Quantitative assessment such as database use, circulation, and in-house use of the collection is standard practice in libraries (Johnson, 2009). The libraries in this study used their data to make decisions about their collection.

All libraries conducted satisfaction assessments, though not necessarily directed specifically at the baccalaureate programs. The colleges routinely conducted user satisfaction surveys of faculty and students that included questions about the libraries, but not related to the BAS in particular. An exception was Beta College where the library administrator and the institutional researcher gathered feedback from the program advisory committee and convened a BAS student focus group about the BAS program including library services. Librarians readily admitted they could be doing more assessment, but they had little time to do it. The lack of time to conduct assessment is born out in the literature on community college libraries (Silverman & Williams, 2014).

The librarians at each college talked about collecting informal assessments through direct feedback from faculty and students. When they helped students with assignments, they noticed where there were gaps in the collection. Alpha College reported receiving e-mails from faculty and thank you notes from students. Librarians also received comments from faculty on workshops conducted by the librarians. Johnston (1994) stated, "Informal conversations and suggestion box comments provide informal, but haphazard, methods of obtaining user feedback" (p. 153). The libraries in this study seemed to rely heavily on informal assessments.

Roselle (2013) pointed out a number of challenges to learning outcomes assessment that are unique to community colleges. These included the nature of many community college students to attend part-time or drop in-and-out of college as well as the lack of good assessment tools designed for community colleges. The librarians at two college had examples of authentic assessment (Grassian & Kaplowitz, 2009) of information literacy learning outcomes. The librarians at Alpha College met individually

with students completing capstone projects. Seeing the product of the students' work provided some feedback to the librarians of how well the students could conduct library research and cite their sources. Beta College reported that the library research class taught in the cohort's first quarter culminated in a completed project that reflected the students' ability to do research. The librarians also conducted assessments of the individual library workshops presented to classes. Charlie College said that the librarian teaching the 100-level library research class conducted learning assessments of the students. None of the librarians, however, reported doing any analysis or making changes as a result of the assessment of students' work. Libraries could close the loop by documenting how assessment is used to improve information literacy instruction.

It was not the purpose of this study to determine how well the libraries met their collection development or learning outcomes goals. The ultimate measure of success, however, was whether the colleges earned regional and, if necessary, specialized accreditation. All the colleges studied had earned regional accreditation and two of the three had also earned the required specialized accreditation.

Summary

This section discussed the findings of the case studies in relation to the research questions and to the literature in the field. The findings of this study and the literature indicated that the colleges received seed money for the pilot programs, but not for subsequent programs. Alpha College received start-up funding for its RAIS program, but not for the Interior Design program due to overall increases to the library budget in prior years. The other two libraries received start-up funding for their BAS and BSN programs. As suggested in this study and the literature, the librarians looked for guidance

from accreditation standards and other libraries and librarians outside the college.

They also reached out to program faculty in order to align the library information resources to the curriculum and the needs of the program. This was in line with literature on community college library collection development. The colleges structured the programs to meet the needs of working adults and other students. Two of the libraries (Alpha and Charlie) reported that they considered the modality of instruction when selecting information resources to add. This was also in keeping with the literature.

The library administrators reported that they advocated for the library across campus. The librarians capitalized on liaison work and collaborated with instructors within the discipline to identify needed materials and databases. These activities were in keeping with the literature.

All the libraries addressed information literacy in multiple ways. The literature indicated that multiple approaches fulfilled different needs. That appeared to be the case among the case studies. Where asynchronous instruction was needed, the librarians created online streaming videos and Research Guides. Where synchronous instruction was appropriate, they created credit-bearing classes and conducted one-shot workshops. They also provided one-on-one reference assistance and individual conferences for capstone projects.

Librarians reported in every case that students were under-prepared for upper division library research. This lack of preparation on the part of community college students was confirmed in the literature. The colleges and libraries took various steps to help students be more successful by ensuring the students had the skill-sets needed at

entrance to the program or providing the necessary support to help students gain the skills. The librarians reported that they provided extra assistance when needed.

Librarians also reported that getting feedback from faculty was challenging. They cited as factors the common use of part-time faculty in community colleges, the workload of instructors, and the lack of lead-time between developing curriculum and teaching it. The literature confirmed that the reliance by community colleges on part-time faculty makes communication and collaboration with librarians more challenging. The literature also reported that adjunct faculty are often hired right out of industry and have little experience using libraries themselves. The librarians reported making extra efforts to reach out to faculty who may have taught in an online setting or visited campus only to conduct classes.

The librarians were concerned about ongoing funding including support for subscriptions to online databases. Rising prices and especially the fear that vendors would begin pricing the databases at university levels were mentioned. While the literature discussed the costs of information resources, no mention was found regarding changes in pricing by vendors based on college type.

Technology was sometimes mentioned as a challenge. Students in some programs had a very basic knowledge of computers and the librarians either provided extra help or guided students to help. This was in keeping with the literature discussing community college students and technology. Librarians also considered the technology skills of students and faculty with regard to usability of various platforms of online databases.

Library assessment activities related to the baccalaureate programs were considered. One criterion for inclusion in this study was that the program had achieved regional accreditation. The colleges in each case achieved regional accreditation and, when necessary, specialized accreditation as well. The colleges administered user satisfaction surveys usually to the general population of students and faculty and not the BAS population in particular. College-wide surveys usually included a few questions about the libraries. In one of the case studies, the library administrator actively sought feedback from the BAS program advisory committee and a student focus group. The literature cited a number of ways libraries can collect user satisfaction information.

As reported in the literature, libraries in this study employed usage statistics to assess and make decisions about collection development. However, little was reported on measuring student learning outcomes. The credit-bearing classes used formative and summative assessments, but libraries also relied heavily on one-shot workshops and asynchronous information literacy instruction and did not report any formal assessments from those activities. The literature provided many examples of formalized assessments for information literacy. The lack of formalized authentic assessment of student learning with capstone projects and portfolios seemed like missed opportunities.

Implications for Practice

The purpose of this study was to learn how community college libraries changed to meet the needs of a new community college baccalaureate program. A baccalaureate program represents a significant shift in mission for a community college and affects how librarians think about collection development and information literacy instruction.

I became interested in this topic when the community college where I worked began to plan implementation of a baccalaureate program. Research of the literature, requests for information from other librarians, and phone calls with university subject specialist librarians revealed that little was known about how libraries identify and address this mission shift with any granularity.

This section applies the findings of the study to practice. The section is divided into two subsections: implications for policy makers and for college and library leaders.

Implications for policy makers. Policy makers should keep in mind that among start-up costs for new baccalaureate-level programs, the library is one of the three largest costs (Hofland, 2011; McKee, 2001; Ross, 2006). Regional and specialized accreditation evaluators expect to see library collections able to meet the deeper information needs of an upper division program. Policy makers can: (a) assure adequate start-up funding for new programs, and (b) facilitate statewide meetings of BAS stakeholders to encourage sharing of innovative ideas.

Implications for college leaders. Community college leaders can facilitate the planning and implementation of a baccalaureate program by considering the following issues.

Remington and Remington (2005) recommended a college-wide approach to planning that included all stakeholders in an intentional way. Charlie College's establishment of a mentoring relationship with a university that included bi-weekly meetings with stakeholders was an example of that model. The library administrator there reported a smooth process and the fewest problems with communication.

College leaders need to ensure that lower- and upper-division programs are in good alignment to ensure that students have the needed skill-sets, including writing, technology, and information literacy, to be successful at the upper-division. The librarians described students as underprepared in all three case studies and the literature (Godin, 2006; Roselle, 2013) agreed that many community college students were nontraditional and faced challenges including gaps in attendance, part-time status, and demands of work and family. College leaders can take steps to identify and provide remediation for missing skills.

Implications for library leaders. Library leaders can facilitate the process of identifying and implementing changes to the library to meet the needs of a baccalaureate program by considering the following points.

Library leaders need to advocate for initial and ongoing funding for the library. Not only did the literature cite the chronic underfunding of community college libraries (Arnold, 2010; Silverman & Williams, 2014), but also the higher level of information resources needed to meet accreditation standards (McKee, 2001; Remington & Remington, 2005). In addition, the literature described the benefits of the enhanced library holdings for faculty and students (Hofland, 2011). The librarians in this study expressed concern especially about ongoing funding to support the annual costs of databases and keeping the physical collection current.

Library leaders can encourage librarians to consider information literacy instruction models that address the needs of nontraditional students and alternate teaching modalities. For instance, Alpha College responded to a program taught entirely online by creating streaming video tutorials. The literature provides discussions on learning styles,

brain-based learning, and instructional strategies (Grassian & Kaplowitz, 2009; Patterson, 2009; Ragains, 2013; Warren, 2006).

Library leaders can provide the leadership and support to facilitate good communications between program faculty and librarians. The librarians in all three case studies talked about the challenge of connecting with program faculty. The literature cited the importance of collaboration with faculty (Caspers, 2013; Roselle, 2013) and the challenge of working with workforce and adjunct faculty (Arnold, 2010).

Library leaders should consider any needed policy changes. As examples, Colleges Alpha and Charlie added language to its collection development policy to address the new baccalaureate programs. Other possible changes might include cooperative arrangements with other entities, such as Alpha College created, or on-demand purchasing. Though the literature does not address the impact on library policies by the addition of a CCB, it does address the importance of good policies (Burgett, 2006; Crumpton & Bird, 2013; Johnson, 2009).

Library leaders need to do more to formalize assessment beyond user statistics. The library administrator at Beta College met with the program advisory committee and students to gather feedback on the program and the library services. The administrator then worked with the program chair and the librarians to make changes. Libraries need to be intentional about formalizing the assessment process in order to make improvements to library services and information literacy instruction. The literature has a number of suggestions for assessment tools to address learning outcomes such as pre-test/post-test, rubrics, and one-minute papers (Cook & Farmer, 2011; Grassian & Kaplowitz, 2009; Ragains & Emmons, 2013).

Finally, library leaders need to encourage and provide opportunities for librarians to share the work they are doing with colleagues either through publishing or presenting. The lack of literature by and for community college librarians keeps the community college library in the shadows of scholarship. The literature calls for more community college librarians to share their experiences (Arnold, 2010; Leeder, 2013).

Limitations of the Research

The results of this research may not necessarily be generalized. As with any interpretive research, these results might be different from results gathered from other institutions, from other programs, and with the interpretations of a different researcher. The replication logic of designing a multiple-case study helped strengthen the reliability of this study; however, interpretive studies can never be exactly replicated. The reader should consider how these results fit into his or her understanding of the problem and context based on prior knowledge. That is the heuristic nature of case studies.

A number of articles asserted that upgrading the library was one of the three most expensive activities a college undertakes to prepare for a CCB. It was not the purpose of this study to confirm or deny this assertion. No comparisons were made with other institutions, and no data were gathered that would enable the researcher to determine if funds spent represented one of the top three expenses of the subject institutions.

It was also not the purpose of this study to determine how well the libraries were meeting the needs of their students or program faculty. The simple benchmark for the purposes of this study was whether the colleges achieved regional accreditation and specialized accreditation for their BAS program. All colleges in this study met that benchmark.

Recommendations for Future Research

This study examined how community college libraries identified and implemented changes needed to meet the needs of a new community college baccalaureate program within one particular state. The study revealed four areas for future research, and each one of these could be undertaken with a specific state or with all of the institutions in the United States with such programs. They are (a) funding for community college libraries serving baccalaureate programs, (b) collaboration between librarians and discipline faculty in the CCB program, (c) how information literacy instruction is provided in the context of CCB programs, and (d) how assessment efforts in the library related to the CCB programs, especially user satisfaction and information literacy learning outcomes. This study revealed areas for further research in order to better understand how the library is contributing to the success of CCB students.

Funding for community college libraries serving baccalaureate programs.

This study only identified that additional money was allocated for initial upgrades to the library collection. Future research could compare allocations among a group of colleges. This comparison could provide insights into what is considered “adequate funding.” It would be useful to learn how the discipline field was a factor. Considering the difference in the cost of information resources for such fields as the sciences versus social sciences, adequate funding could mean very different amounts of money. It would also be helpful to study ongoing funding to determine if it is sufficient to sustain the information resources.

Collaboration between librarians and discipline faculty in the CCB program.

The literature addressed collaboration between community college librarians and

instructors for the purposes of collection development and information literacy instruction. Collaboration appeared to be a very important theme among the librarians in this study as well. The librarians reported that challenges encountered in soliciting feedback from instructors hampered their work in preparing for the applied baccalaureate programs. It would be helpful to learn what good collaboration models look like and what actions contribute to a productive collaborative relationship.

How information literacy instruction is provided in the context of CCB programs. The study revealed that BAS programs were designed to meet the needs of working adults. That led to a variety of instructional modalities that presented challenges to the librarians designing information literacy instruction for the programs. It would be helpful to know how well the designs served the programs and what insights could be gleaned from the efforts.

Assessment efforts in the library related to the CCB programs. Assessment is still a work in progress for community college libraries. Satisfaction surveys that target specific populations, such as CCB students and faculty would provide valuable feedback for the library. In addition, employing assessment tools for measuring information literacy learning outcomes would be useful for determining how well library instruction is meeting the needs of an upper division program.

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Appendices

Appendix A Letter of Invitation to Library Administrators

December [day], 2013

[Library Administrator]
[Library]
[Name of College]
[Address]
[City, WA Zipcode]

Dear Colleague:

This letter is an invitation to participate in a research study to understand how community college libraries identify and implement changes when a community college expands its mission to offer a baccalaureate program. I am a doctoral candidate in the Community College Leadership Program at Oregon State University and this study will be used to complete my dissertation titled: Libraries and the Community College Baccalaureate: Meeting the Challenge.

You are invited to participate because your college has successfully implemented one or more accredited baccalaureate programs and because of your experience with adapting the library to meet the needs of the program(s). Your participation in this study will help increase our understanding of the implementation process in community college libraries. Site visits are being scheduled for January 2014.

If you agree to participate, you will be asked to supply the Applied Baccalaureate Degree Program Proposal, Form D, submitted to the Washington State Board for Community and Technical Colleges, the Substantive Change Proposal, H. Library and Information Resources, submitted to the Northwest Commission on Colleges and Universities, as well as *either* the ACRL Academic Library Trends and Statistics Survey *or* the Academic Libraries Survey for the National Center for Education Statistics under the U.S. Department of Education for the year before and the year after implementation of the applied baccalaureate.

You will also be asked to allow a site visit with a tour of the library and consent to a recorded face-to-face interview. The interview will last no more than one hour. You will be asked to review the transcript of the interview for accuracy and to provide any needed clarification. The protocol of the study calls for additional contacts with a shorter follow-up recorded telephone interview, review of the transcript, and a review of the findings. This is to ensure that your experience is correctly understood and captured in my study. Your time commitment over the course of the study is estimated to be approximately four to six hours.

I would like to also invite any professional or paraprofessional library staff who contributed by identifying needed changes, implementing the changes, or revising operational policies in the library. They would also need to consent to a face-to-face recorded interview, a follow-up telephone interview, and reviews of the transcripts and findings to ensure accuracy. Their participation is necessary to add more depth to the study. Their time commitment should not be more than three hours each. Please invite appropriate personnel to email me at coslorm@onid.orst.edu by January 8, 2014 to be included in the study.

In this study, the identity of the college and all participants will be protected through the use of aliases. Your name, the names of your library staff, and the name of the college will not be used in my documentation. All transcripts and supplied documents related to the study will be retained for three years under secure conditions and then destroyed. Contact information will be stored in a document secured by password, which will be destroyed at the completion of the project timeline.

There are no anticipated risks associated with participating in this study and you will not be compensated for your time. Before beginning the study, you will be provided with a verbal consent document and asked whether you understand and agree to participate. I encourage you to ask questions about the project so that you are fully informed about your involvement. Please contact me by e-mail (coslorm@onid.orst.edu) or by telephone (home office: 360.856.4487/cell: 360.391.0481) for more information. You may also contact the Principal Investigator on this project, Dr. Darlene Russ-Eft at 301K Furman Hall, Oregon State University, Corvallis, OR 97331 or contact the Institutional Review Board Office at (541) 737-8008 or by email at IRB@oregonstate.edu.

Please respond by Friday, January 3, 2014 so that site visits can be scheduled in January. Thank you for your consideration.

Sincerely yours,

Mindy McCormick Coslor

Appendix B Table B.1 Interview Questions

Research Questions	Primary Interview Questions	Follow-up Questions
How do libraries indentify changes needed to meet the needs of a CCB program?	<ul style="list-style-type: none"> • How did you learn that the college would be adding a CCB program? • How did you learn/identify the changes that would be needed to serve this upper division program? 	<ul style="list-style-type: none"> • How did you learn about changes to the regional and/or specialized accreditation standards for the college or program? • How did you determine the changes needed in library services and information resources for the program and general education? • How did the professional development needs of program faculty and library staff and faculty contribute to your thinking? • How do you think the program itself influenced how you approached the challenge of change?
How do libraries plan and implement the changes needed to meet the needs of a CCB program?	<ul style="list-style-type: none"> • What role did you play in the planning and implementation? • What steps did you take to plan and implement the necessary changes? • How did the implementation process impact the library? 	<ul style="list-style-type: none"> • (for administrators) Whom did you include in the planning process and how did you decide? Who included you? • (for staff) What roles did people play in the planning and implementation and what responsibilities did they have? • How did the library services, procedures, and information resources change as a result of the new program?
How do libraries manage the challenges encountered while implementing changes?	<ul style="list-style-type: none"> • What parts of the implementation were the most challenging? • How did you resolve any challenges? 	<ul style="list-style-type: none"> • Were there internal and external challenges encountered? If so, how were they different or similar?

Table B.1 Interview Questions (Continued)

How do libraries assess the success of the changes and what additional changes were made as a result of assessments?	<ul style="list-style-type: none">• How did you know whether the changes made to the library were successful?• How did the library use assessment to make additional changes?	<ul style="list-style-type: none">• Did the library develop indicators for measuring success? If so, how did you assess for the indicators?• What would you have done differently?
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