ENHANCING EMPLOYABILITY SKILLS IN GRADUATE BUSINESS PROGRAMS: SERVICE-LEARNING IN CAPSTONE COURSES

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Abstract

Situated in a theoretical framework of experiential learning, adult-learning theory, constructivist theory, and the elements of capstones and service-learning, this study examined the alignment between employability skills employers need and employability skills graduate business students gain through service-learning in business capstones. The study also investigated whether reflection enhances the employability skills of graduate business students who participate in service-learning during a capstone. This non-experimental, mixed-methods, comparative, descriptive study examined outcomes of students' development of employability skills through service-learning participation in capstones embedded in MBA programs, and assessed whether the inclusion of service-learning influences students' development of employability skills. Quantitative data explored which employability skills were enhanced by service-learning in business capstones, and whether there were differences in gender and GPA. The top three employability skills enhanced were decision-making, presentation skills, and teamwork. Of these three, presentation skills was statistically significant, meaning capstones that had service-learning enhanced presentation skills more than capstones that did not include service-learning. Exploratory Factor Analysis (EFA) found a four-factor solution and one factor, Collaborative Learning, was statistically significant. Collaborative Learning was enhanced for capstone students who had a service-learning experience more than students whose capstone did not include service-learning. Qualitative data were analyzed through semi-structured interviews from ten MBA graduates. Four themes were revealed: 1) Structure and Deliverables of Capstones; 2) Opportunities to Make Decisions; 3) Opportunities to Build Teamwork Skills; and, 4) Opportunities to Build Presentation Skills. Participants were also asked in what ways reflection enhanced their employability skills. One theme emerged: Reflection Enhanced the Ability to Complete a Project. Limitations of this study include a lack of generalizability because of the non-experimental design; there are not universal definitions of skills; and the employability skills measured were not an exhaustive list. The main findings included: there is alignment in the collaborative learning skills needed by employers and those skills enhanced through service-learning in graduate business capstones; written and oral reflection improves the ability to accomplish a team-based client project; the instructor's role in structuring and facilitating service-learning is a key to learning; and presentation skills are enhanced during client-based business capstone courses that include service-learning.

Table of Contents

List of Tables

List of Figures

CHAPTER I: INTRODUCTION

Business education programs in colleges and universities are tasked with preparing students for the workforce. While other curriculum goals also exist, typically, business curriculums offer coursework in the various technical functions of business such as marketing, management, accounting, and finance, in anticipation that this knowledge will be useful to students' professional lives and provided needed knowledge and skills to organizations who employ business graduates. In addition to learning the technical aspects of business, many business programs aim to teach employability skills that will be useful at all levels of employment in the business industry. Employability skills can be thought of, broadly, being in either the academic, personal management, or teamwork domains. Academic employability skills are, for example, written communication skills. Personal management skills are attributes such as a positive attitude, and teamwork means the ability to work with others to achieve common goals. Employability skills are transferable to any environment, can be learned in multiple ways, and there are ways to improve them over the course of ones' professional and academic lives.

Many employers believe it is the job of colleges/universities to prepare the workforce, and both undergraduate and graduate business degrees continue to have high value in the workforce. There are existing studies where researchers have asked employers in many industries, including business, what skills college graduates should possess. In addition to the technical knowledge found in college business courses, employers want potential workers to have experience, and some even place more weight on experience than academic credentials such as GPA and college major when evaluating graduates for employment ("Chronicle of Higher Education," 2012).

Higher business education faces many criticisms from stakeholders. Business leaders from corporations such as Microsoft, Apple and Cisco have criticized academia for using obsolete educational approaches (Symonds, Schwartz & Ferguson, 2011). Historically, critics have complained that business education does not have the same level of rigor as other content areas, focuses on vocational skills at the expense of research-based concepts, and does not help students learn employability skills (Elsaid & Schermerhorn, 1991). As a response to globalization, which increased industrial competition from other countries, the United States Department of Labor's Secretary's Commission on Achieving Necessary Skills (SCANS) issued a landmark report in 1991, calling for schools to teach both basic skills and workplace competencies ("The Secretary's Commission," 1991). Management experts such as Leavitt (1989) complained that business focused too heavily on profit at the expense of ethical responsibilities to shareholders. In addition to a perceived lack of ethics, industry experts complained that business schools focused on technical skills at the expense of employability skills (Mintzberg, 2005; Rehder, 1982; Williams, 1980). As America decreased its manufacturing base and increased its service industry, business education was called upon to address a growing skills gap between what business education provides and skills employers need ("Chronicle of Higher Education," 2012).

While there are criticisms from the business industry as to how well higher education is preparing its graduates for their eventual careers, a business degree still has value to its stakeholders. For example, the hiring outlook for MBA graduates shows that the demand for MBAs increased from 71 percent in 2012 to 75 percent in 2013 ("Hiring Report," 2013). According to the Georgetown University Center on Education and the

Workforce, the gap in median lifetime earnings between high school and college graduates continues to widen, growing from 75 percent in 1999 to 84 percent in 2009. Moreover, by 2018, 63 percent of all jobs will require at least some college education, and increase from 59 percent in 2011 (Carnevale, Rose & Cheah, 2011). In addition, business employers surveyed in 2012 believed a four-year bachelor's degree was even more valuable than it had been five years before although there were mixed reviews from executives, managers and human resource executives as to the overall preparedness of graduates for the workforce ("Chronicle of Higher Education," 2012).

It can be difficult for business education curriculums to respond to the demands of the workplace by creating authentic learning experiences that bridge a perceived gap between theory and practice. While employers want employees with practical skills, these may be difficult to obtain while sitting in a classroom. One way business education programs have responded is by incorporating a business capstone experience into the curriculum. A capstone is an educational experience that intends to synthesize the content learned in a particular major (Gardner & Van der Veer, 1998).

However, while capstones are widely used by traditional undergraduate business students (Ali, 2008; Bailey, van Acker & Fyffe, 2012; Hartenian, Schellenger & Frederickson, 2001; Wei, Siow, & Burley, 2007), there is less data about business capstones that are modeled around adult learning theory and used by graduate and adult undergraduate business learners. While a few studies surrounding capstones completed by adult business learners exist (Mundell & Pennarola, 1999; Novitzki, 1998), there is less data to support whether business capstones for adult learners are an effective approach for accomplishing the summative goals of the capstone.

Capstones are used in many academic disciplines, and business capstones have been studied, but not to the extent that they have been studied in other academic disciplines such as physiology (Krane, 2005) pharmacy (Wuller, 2010), physical therapy education (Collins & Mowder-Tinney, 2012; Martiz, Thielman & Campolo, 2011) science, technology, engineering and math programs (Eppes, Milanovice & Sweitzer, 2012), nursing (Rains & Fowler, 1999) and agriculture education (Andreasen & Wu, 1999; Fairchild & Taylor, 2000; Rhodus & Hoskins, 1995).

Statement of the Problem

Because experiential learning is a proven way for business students to learn, more needs to be understood about the benefits of using service-learning in graduate business capstones, how employability skills may be enhanced by service-learning, and the connections reflective activities help make between employability skills and learning.

Capstone courses and experiences are increasingly being used in college-level business education as one of the ways to deepen the learning of students (Aupperle & Sarhan, 1995; Gorman, 2010; Payne, Whitfield & Flynn, 2002; Sonner, 1999). Capstone experiences are curricular approaches that are summative in nature. When implemented correctly, they synthesize content learned in a student's major or degree program (Gardner and Van der Veer, 1998a). As a summative experience, capstones should deepen and broaden the cumulative experience students have had in their coursework that is specific to their academic discipline (Boyer Commission, 1998). There are several major goals of capstones in higher education. One goal of capstones is to synthesize discipline-specific learning (Cuseo, 1998). Another goal of capstones is to help students transition from college to career and support students' efforts in making life choices (Levine, 1998). Capstones may also help prepare students for post-graduate education (Levine, 1998), as well as prepare students for their future careers (McGill, 2012).

Another goal of capstones is for students to reflect on their learning, and intentional reflection is one of the ways capstones help students make meaningful connections between theory and practice. The literature confirms that critical and deep reflection is important to any learning methodology that involves experiences (Dewey, 1933; Eyler & Giles, 1999; Hatcher, Bringle, & Muthiah, 2004; Kolb, 1994). Both the amount and quality of reflection have been shown to be predictors of meeting course learning outcomes (Eyler & Giles, 1999), and meeting learning outcomes is another a major goal of capstones. At the same time, research has shown that reflection is a proven method for helping to increase depth of understanding in an experiential course such as a capstone (Lang & McNaught, 2013). Andreasen and Wu's (1999) experiential learning model for capstones includes reflection as one of its five components, and goes so far as to say that reflection distinguishes experiential learning from other types of learning.

There are many experiential pedagogies that can be used to accomplish meaningful reflection in business course content, such as authentic projects (Roach-Duncan, 2010; Slavkin, 2004) and case-studies (Mundell & Pennarola, 1999). Internships are also an experiential learning pedagogy, and, in fact, about 38 percent of all undergraduate senior business majors participate in an internship during their senior year (National Survey of Student Engagement, 2013). Business programs have also implemented experiential learning approaches into their capstones (Lang & McNaught, 2013; Rashford & de Figueiredo, 2011; Robinson, Sherwood & DePaolo, 2010). Capstones that use experiential learning have been found to be effective, as findings have shown that "when learning activities and instructional techniques based upon the principles of experiential learning are applied in the capstone setting, the quality and benefits within these courses are improved" (Andreasen & Wu, 1999, p. 76).

In addition to these experiential pedagogies, service-learning has also been proven to be a useful experiential pedagogy that helps students deepen their understanding of course content, provided reflection is part of the service-learning (Eyler, 2002; Robinson, Sherwood and DePaolo, 2009; Wei, Siow & Burley, 2007; Whittmer, 2004). In fact, Kendall (1990) states that service-learning must include reflection, and defines service-learning programs as educational pedagogies that "combine needed tasks in the community with internal learning goals and with conscious reflection and critical analysis" (p. 20).

Service-learning has been found to have a positive impact on students' academic lives in many academic disciplines in the four broad domains: academic and cognitive development, civic and ethical development, personal and social development, and career and vocational development. Academic outcomes of service-learning include increased content knowledge and skills (Printice & Robinson, 2010) and improved higher order thinking skills (Eyler & Giles, 1999). In addition to academic outcomes, service-learning has been shown to positively affect civic outcomes such as students' sense of social responsibility and citizenship skills (Eyler & Giles, 1999; Eyler, Giles and Braxton, 1997; Prentice & Robinson, 2010) and their commitment to service (Astin, Sax & Avalos, 1999; Eyler & Giles, 1999, Marcus, Howard & King, 1993; Prentice & Robinson, 2010).

In addition, personal and social outcomes have also been proven to impact students, positively affecting students' sense of personal satisfaction (Wittmer, 2004) and various ways they engage with their communities, faculty, and peers (Eyler & Giles, 1999). There are also outcomes related to students' careers that have been shown to be affected by service-learning. For example, service-learning has been shown to provide students with more skills that will be helpful in their careers such as teamwork and leadership skills, (Prentice & Robinson, 2010) and in some cases, even alter their career aspirations (Seider, Gillmor & Rabinowicz, 2011).

Service-learning is increasingly recognized as a legitimate approach to business education, including sub-disciplines such as management information systems (Richmond, Banerjee & White, 2008), accounting (Gujarathi, McQuade and Sarmiento, 2002), business ethics (Whittmer, 2004), management (Aupperle and Sarhan, 1995; Robinson, Sherwood and DePaolo, 2010) and others. However, although proven outcomes of service-learning exist, service-learning experiences are used less in the business discipline than other instructional methods, and the research related to how service-learning impacts the employability skills of business students is scarce. In a study of over 864 capstone courses taught at 707 American colleges and universities that offer upper-division courses, when the course was a business management course, the most frequent instructional component of the capstone (84%) was a major project. These projects, for the most part did not involve any real-world experiences such as service-learning or internships (Henscheid, 2000). Researchers argue that "the value of direct, unsimulated experience cannot be overlooked" (Zlotkowski, 1996, p. 8) and that experiences are essential to successful business education. In a large national study of executives, managers and human resource recruiters from several industries were asked about the employment choices of potential job candidates. Employers said that, when graduates are unable to find work in field of their major, unpaid internships in a related field had a positive impact on 79 percent of the employers, and volunteer work (not service-learning) had a positive impact on 73 percent of employers ("Chronicle of Higher Education," 2012). Since these are both experiential learning methods, more needs to be understood about the benefits of using service-learning in graduate business capstones, how employability skills may be enhanced by service-learning, and the connections reflective activities help make between employability skills and learning.

Purpose of the Study

This study is situated in a broad theoretical framework of experiential learning, adult-learning theory, constructivist theory, the critical elements and methods of capstones, and purposes and goals surrounding service-learning. Interwoven in this framework is research about the important components of reflective activities. This framework will be explored in Chapter II.

The purpose of the study was to examine the alignment between the employability skills employers need and the employability skills that graduate business students gain through service-learning in business capstones. In addition, the study sought to understand whether reflection, a stated requirement of service-learning, enhances the employability skills of graduate business students who participate in service-learning during a capstone.

Research Questions

This study accomplished its stated purposes through the following research questions:

RQ1: Are there differences in employability skills developed between MBA students who participate in capstones that include service-learning and comparable MBA students who participate in capstones that do not include service-learning?

Sub-RQ1: Are there differences among various demographic groups in the extent to how their employability skills were enhanced?

RQ2: Which, if any, essential employability skills, as identified by employers, are enhanced by service-learning experiences in business capstones?

RQ3: Which aspects of service-learning experiences contribute to enhanced employability skills in graduate business students?

RQ4: In what ways did reflection offered through business capstones that included service-learning enhance, in participating students, their employability skills?

Significance of the Study

This study adds to the research that exists on business capstones, service-learning, and reflection. While there are over 500 studies on service-learning (Andrew Furco, personal communication, May 14, 2014), most of these are not in the business area, and of those that are in the business area, most are at the undergraduate, not the graduate, level of business education. In short, there has been little empirical research reported on the value and impact of service-learning on business students (Wittmer, 2004). The landmark Gordon-Howell studies of the late 1950s called on business schools to not only engage in research, but engage in better research. Since that time, business schools have done that, and, while Chapter II will reveal that empirical studies exist about service-learning in business, there are also many non-emperical application papers (Gujarathi & McQuade, 2002; Kohls, 1996), as well as studies that are research-based but may be lacking in rigor (Laing, 2012). Adding another empirical study about service-learning in the business content area will strengthen the body of knowledge in that field and help quiet any criticisms that may exist about a lack of empirical research in business.

With the growing rise in capstones, the findings in this study will help educational policymakers such as business education administrators and faculty better align capstone curriculum with stated needs of managers in the business area who employ business graduates. Colleges and universities have been blamed for failing to educate the future workforce with the skills most needed by employers. Many employers state that graduates are not prepared for the workforce (Tetreault, 1997; Brown, et al., 2003). For example, Candy and Crebert (1991) said, "one of the main criticisms that employers make of their new employees is that they tend to emerge from (the) university with their heads full of theories, principles, and information but are often ill-equipped to deal with aspects of the workplace such as problem-solving, decision-making, working in a team, and learning for themselves" (p. 572). More recently, the U.S. Department of Education's Secretary of Education Commission on the Future of Higher Education wrote, "employers reported repeatedly that many new graduates they hire are not prepared to work, lacking the critical thinking, writing, and problem-solving skills needed in today's workplaces" (U.S. Department of Education, 2006, p. 3).

Chapter II will show that having reflective practice is an important component to high-impact practices such as capstones and service-learning (Kuh, 2008). This study will lend empirical evidence to the body of literature that exists on these high-impact practices. Results of this study will assist those educators who are involved in designing curriculum that help business graduates become more employable in the workplace. The study will be of particular importance to faculty and administrators who are involved with capstones and/or service-learning, although faculty and administrators interested in all aspects of business education and/or service-learning may find relevance in this study.

This study focuses on the use of service-learning as part of andragogy, the art and science of teaching adults (Knowles, 1987), whereas much of the service-learning literature predominately focuses on service-learning as pedagogy, which is “any conscious activity by one person designed to enhance the learning of another” (Watkins & Mortimer, 1999, p. 3), but is not specifically focused on adults. Graduate business schools need to design programs that best meet the needs of adult learners, who bring their own experiences to their learning. Adult learning theory advocates that adult learners learn most effectively by engaging in tasks that are experiential, focus on problem-solving, can integrate new information with their previous knowledge and past experiences, values those past experiences, and allows them to be self-directed (Fisher, 1985; Knowles, 1987). Despite the evidence that service-learning mirrors those characteristics of effective ways adults learn, the impacts of service-learning on adult students are not widely documented (Smith, 2008).

Research Methodology

The research design for this study was a non-experimental, comparative descriptive study. Specifically, it examined outcomes of students’ development of employability skills through their participation in service-learning in capstones that are embedded in MBA programs. In particular, the study assessed whether capstones which include service-learning influence students' development of employability skills in comparison to capstones that do not include service-learning. The methodology was mixed-methods, which incorporates both qualitative and quantitative methods in order to offer various forms of data to address the research questions (Creswell, 2009). The quantitative method used in this study was survey research. Specifically, an existing instrument, described in Chapter 3, was used to test which, if any, of the essential employability skills that were identified by employers through the Chapter II literature review, and previously tested by Tanyel et al. (1999), were enhanced by service-learning experiences. Once those results were obtained, the qualitative part of the study began. The qualitative component focused on evaluating which aspects of service-learning experiences contributed to enhanced employability skills, and it also evaluated the extent reflection enhances employability skills of students who participate in service-learning experiences during their capstone.

The sample sought for this study was MBA alumni or current students who completed a capstone as part of their MBA program within the last five years. The sample was purposeful, and the specific type of purposeful sample was criterion sampling (Patton, 1990). Recruitment was conducted through Google groups and LinkedIn groups, and IRB approval was sought and obtained from two academic institutions plus the University of Minnesota. The complete methodology is explained in Chapter 3.

Definition of Terms

The following definitions are provided to ensure understanding of major terminology as it is used in this study.

Adult students: There can be confusion about different levels of students in higher education. The National Student Clearinghouse defines adult students as those enrolled in a graduate or undergraduate school that are age 25 or older (Newbaker, 2012). Kasworm (2003) classifies adult students into three categories: (1) status of age, which simply means they are over 25; (2) status of maturity and developmental complexity which are gained from life experiences, financial independence, and responsibilities; and (3) status of responsible and often-competing roles, such as college student, work, family and community involvement. While not all adult students are enrolled in a college or university and are degree-seeking, this study focuses on adult students, age 25 or older, who enrolled in a college or university and have the intention to complete a degree.

Capstone: This study uses Gardner and Van der Veer's (1998a) definition, which defines capstone experiences as "summative curricular approaches such as courses synthesizing all of the content to date within a particular major" (p. 15).

Collaborative learning: Colbeck et al. (2000) defines collaborative learning as "a variety of instructional practices that encourage students to work together as they apply course material to answer questions, solve problems, or create a project" (p. 61). In general, in collaborative learning, small groups share the responsibility for outcomes of tasks and projects.

Employability skills: Overtoom (2000) defined employability skills as, "transferable core skill groups that represent essential functional and enabling knowledge, skills, and attitudes required by the twenty-first century workplace. They are necessary for career success at all levels of employment and for all levels of education" (p. 1).

Experiential learning: The most well-known definition of experiential learning was developed by Kolb (1994), who said, “Learning is the process whereby knowledge is created through the transformation of experience” (p. 26). Kolb’s experiential learning model is described in Chapter II.

Reflection: This study uses Hatcher and Bringle’s (1997) definition of reflection, which is “intentional consideration of an experience in light of particular learning objectives” (p. 153).

Service-learning: Bringle and Hatcher (1996) emphasized that service-learning is “a course or competency-based, credit-bearing educational experience in which students (a) participate in mutually identified service activities that benefit the community, and (b) reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of personal values and civic responsibility” (p. 222). Other, related, definitions of service-learning are given in Chapter II.

Team-work: Larson & LaFasto (1989) define a team as two or more people with a specific performance objective or recognizable goal, and activities are coordinated within the team.

Organization of the Study

This dissertation study was organized as follows. Chapter I presents the introduction, statement of the problem, purpose of the study, research question and sub-question, significance of the study, an abbreviated summary of the research approach, and definition of terms. Chapter II contains a review of literature in three broad areas: business education in higher education, theoretical frameworks surrounding experiential learning, and reflection as a cross-cutting aspect of experiential learning. The methodology and procedures for how data were gathered and analyzed are presented in Chapter III. Chapter IV presents the results of the study, and Chapter V contains a discussion of key findings, using related literature to support or refute the findings. Finally, implications of the study for research and business education are examined, limitations of the study are outlined, and recommendations are offered.

CHAPTER II: LITERATURE REVIEW

Chapter I described the purpose of this study, which was to examine the alignment between the employability skills employers need and the employability skills that graduate business students gain through service-learning in business capstones. In addition, the study sought to understand whether reflection, a stated requirement of service-learning, enhances the employability skills of graduate business students who participate in service-learning during a capstone. This chapter reviews the literature that explains the conceptual framework for the studies, and is organized into three major parts. Part I examines the literature on business education at the college and university level. The role, purposes/goals and potential outcomes of business education are reviewed, and the major problems in business education that create the need for this study are discussed. The problems provide support for a review of what employability skills employers are looking for in business graduates, especially at the graduate level. Part II describes two of the major experiential high-impact educational practices that are relevant to business education: capstones and service-learning. The theoretical frameworks surrounding experiential learning are reviewed. Part III discusses reflection as a high-impact practice that cuts across all aspects of experiential learning. Definitions, characteristics, models, and related studies of reflection are presented, especially as they relate to service-learning in higher education.

Part I

Business education in higher education is a very broad discipline. The Policies Commission for Business and Economic Education defines business education as "education for and about business" (PCBEE, 2002, p. 1). This definition suggests that education for business means learning to be economically literate, and education for business means preparing people to be employed in a variety of careers. Business education offerings in higher education are similar for both undergraduate and graduate programs. Among undergraduate students seeking a bachelor's degree, business and marketing are the most common majors (33%), followed by education (15%), healthcare (12%), and engineering and architectural sciences (11%) (Williams, 2012). Common undergraduate business programs in the U.S. include bachelor of arts in business and business administration, bachelor of science in business administration or management that sometimes include concentrations or specializations in sub-areas such as accounting, finance, management, marketing. Other possible degrees include a bachelor's of business administration with or without concentrations or specializations, and a bachelor's of science in business education (Romkema, 2012). While undergraduate business degrees are also career-focused, they include many general education requirements designed to provide a well-rounded business graduate. In contrast, a graduate business degree tends to focus on core business areas such as marketing, economics, finance and accounting, and graduate business students are more focused on a specific set of business coursework.

The National Business Education Association (NBEA) is the United States's largest professional organization serving business education. With representation from K-12 education, higher education, business and government, its mission is, "to ensure that students and adults are afforded equal access to fundamental business knowledge and skills and, therefore, an equal opportunity for success in life" (NBEA, 2013, p. vii). By providing guidance for administrators and other educators who create and teach business curriculum, NBEA promotes several purposes of business education: economic literacy;

understand how personal, societal, corporate and governments function in the economic system; understand how business operates; demonstrate interpersonal, team and leadership skills; develop career awareness; select and apply appropriate technology tools; communicate effectively by writing, listening and speaking; demonstrate knowledge and skills in personal finance; understand principles of personal and business law; value entrepreneurialism; understand systems-thinking; and apply critical-thinking skills (NBEA, 2013).

Both undergraduate and graduate business education have seen substantial growth since the 1950s, when virtually no programs existed. The Ford Foundation reported that in 1958 only 125 U.S. colleges/universities awarded master's degrees in business, and most of those were awarded by Harvard College and New York University (Gordon & Howell, 1959). In terms of enrollment of undergraduate business education, as of 2001, 1,292 accredited colleges and universities (92%) offered an undergraduate major in business (U.S. News and World Report, 2002). While in 1956, only about 4,500 master's degrees in business were awarded in the U.S, (Porter & McKibbin, 1988), by the late 1990s, there were over 102,000 MBA degrees awarded (Zimmerman, 2001). In 2011, the greatest numbers of master's degrees were in the fields of business (187,000), closely followed by education (185,000) ("Digest of Education Statistics", 2012. As of 2001, 23 percent of all graduate degrees awarded was the MBA (AACSB, 2001). The same statistic is not available for more recent graduates, although AACSB reported in 2013 that master's of business degrees that had the AACSB accreditation saw an increase of 3.1 percent in the number of students enrolled from 2008-2013 (Brown, 2013).

Potential Outcomes of Business Education

While business education starts in the elementary years and extends through the secondary and doctoral levels, the focus of the outcomes discussed here on adult learners, especially graduate business students. Adult learners have many reasons why they pursue advanced business degrees. These include potential career advancement, increased income potential, career change, perceived organizational mobility, and increased self-efficacy.

Career advancement. There is evidence that MBA students and/or graduates perceive that their degree will lead to opportunities to advance in their careers. For example, an exploratory study was undertaken in Greece to look at how and whether graduate business education makes better managers (Mihail & Elefterie, 2006). The sample was drawn from alumni of the University of Macedonia's full-time MBA program. One of the three research questions was designed to discover whether completing an MBA program at accredited Greek business schools promoted career advancement, including promotion and better compensation. The alumni were asked whether the MBA contributed to the pace of their promotions. Findings showed that over 40 percent perceived the MBA to contribute to the pace of their promotions at a fast or very fast pace, while about 28 percent perceived the MBA to contribute to the pace of their promotions at a moderate pace. Interestingly, about 20 percent reported that their MBA did not contribute at all to promotion pace. These findings show mixed results on whether the MBA contributed to career advancement. A strength of this study was that one of the criteria for inclusion was that alumni had to have at least three years of work experience after graduation. This gave them time to assess the impact of their MBA on the variables that were being studied. Another strength was a high response rate of 72 percent. Two limitations were a small sample size of 68 completed surveys, which indicates results may not be generalizable to the population of Greek MBA graduates.

As another example, Hawksley (1996) found that an improvement in professional/career advancement is a major reason for seeking a business master's degree. Other studies lend support to this outcome. For example, Buchanan, Kim and Basham (2007) developed a study with the purpose to contrast the educational motivations of graduate social work students and graduate business students, focusing specifically on the two groups' perceived ability to move to different organizations. They hoped to better understand the career motivations for why students pursue graduate degrees. They posited that an MBA might act as more of a credential for possible career advancement than as a way to acquire skills to help organizations solve business problems. They identified a term called careerism, and defined careerists as those who put their own interests ahead of the organization's interests. They then hypothesized that "business master's students will be more oriented toward careerism than social work graduate students" (p. 286).

To test their hypothesis, they developed a sample of adult master's students in both the social work college and business college from one university in the Southwestern part of the United States. From the sample, 336 business students responded to a web-based survey for a response rate of 36 percent, and 173 graduate social work students responded to the same web-based survey for a response rate of 16 percent. The measure used to test the hypothesis was the Education Participation Scale (Boshier 1991), and specifically, both the professional advancement construct and the knowledge construct contained in that measure. Results showed that the hypothesis was not proven; the graduate social workers were actually more oriented toward careerism than the graduate business students. To explain these findings, the researchers found that the business students recognized that they had more job alternatives that would improve their organizational mobility, while the graduate social work students also had numerous job alternatives, but not as likely to be ones that would improve their organizational mobility.

This study had several strengths. From a technical standpoint, the hypotheses were well grounded in the literature, and the results looped back to the hypotheses and were supported by further literature. The web-based survey response rates were consistent with current response rates from web-based surveys. The research represented collaboration between professors from two colleges, social work and business. One limitation is that the study sample was composed of only one institution, so the findings are not necessarily generalizable to the population.

Increased income. Since tuition for earning an MBA can be a major financial investment, ranging from about $11,000 to over $180,000 (Baruch, 2009; Leonhardt, 1996), graduates expect a financial return on that investment. There is evidence that an MBA increases one's income. For instance, graduates earning an MBA from a leading business school in the 1990s would earn a 10% raise each year after finishing school (Leonhardt, 1996). In the career advancement section above, a study of Greek MBA schools was discussed (Mihail & Elefterie, 2006). Another of the three research questions in that study asked MBA alumni to assess whether their MBA had any impact on their pay. Results showed that for managers who participated in this study, both men and women ages 26-34, over 30 percent perceived that their MBA contributed significantly to pay received earned after graduation, and over 18 percent perceived that their MBA contributed quite significantly. Median salaries for MBAs grew about 5.5 percent from 2012 to 2013, with the median salary of a newly hired MBA graduate reported to be $95,000 ("Corporate Recruiters Survey," 2013).

A study by the Graduate Management Admissions Council of people who registered for the Graduate Management Admissions Test (GMAT) found that those who graduated from business school had, seven years later, higher earnings than those who had not finished business school. However, this held true mostly to graduates of prestigious business programs; graduates of unaccredited or less prestigious schools earned incomes similar to those who did not graduate or attend business school (Dugan, Grady, Payne, & Johnson, 1999). Similarly, *The Economist* reported that there were almost no monetary gains from an MBA unless graduates earned their degree from a top-ranked program ("The MBA cost-benefit analysis," 1994).

Career change. Another potential outcome is career change. For example, a study was undertaken where researchers hypothesized that MBA students' interest in career success factors such as promotions and compensation would be positively associated with career shift to a different industry after completion of the MBA. They also hypothesized that females would be more likely than males to change industries after graduation. The Graduate Management Admissions Council allowed access to data sets from the Global MBA Graduate Survey Dataset and MBA Alumni Perspectives Survey Datasets from 2003-2005. There were 5,299 respondents from a sample of 16,167 in the data sets, most (70.2 percent) of who were enrolled in full-time MBA programs, although part-time programs, executive programs and other models such as distance learning programs were also represented.

Findings showed that career success factors such as promotions and compensation were significant predictors with a shift to a different industry after completion of an MBA. A finding that surprised the researchers was that graduates who had been part-time MBA students were more likely to change industries than graduates from full-time and other types of MBA programs. The authors posited that graduates of full-time MBA programs did pursue career changes, but stayed in their same industry. Another finding was that the most likely predictor of career shift was gender, with females more likely than males to shift industries upon completion of an MBA.

A strength of the study was that it included a national sample, thus making it quite generalizable to the population of MBA graduates. A limitation was that a variable of income was not included in the study, so the researchers were not able to determine whether educational financing offered by employers had any effect on the likelihood to shift industries.   Some employers require employees to stay at their jobs for a certain period of time after graduation.

Organizational mobility. Another potential outcome is perceived organizational mobility. Buchanan, Kim and Basham (2007) hypothesized, in relation to perceived organizational mobility, "the business students' desire for professional advancement is more influential than a desire for additional knowledge" (p. 288). Using the same sample of graduate social work and graduate business students as described above to test the hypothesis, the researchers used the Employment Opportunity Index (EOI) that was developed by Griffeth et al. (2005). The two groups of graduate students were found to be significantly different in their perceptions of organizational mobility. While the social work students perceived that organizational mobility was influenced by a desire to gain knowledge, the business students perceived that organizational mobility was influenced by wanting to increase the number of job alternatives they would gain as a result of their education.

Self-efficacy. There is evidence that an MBA, and/or education leading to an MBA, increases the self-efficacy of its graduates. Self-efficacy is the self-confidence in one's skills and abilities in a given domain. It is based on individuals' beliefs that they have the abilities needed to perform certain tasks, and that they can affect the outcome of their performance (Bandura, 1997, 1989). Individuals are motivated by their perceived self-efficacy, and this, perhaps more than actual abilities, affects behaviors (Markham, Balkin & Baron, 1992). Self-efficacy and performance has been studied, and there is a high degree of correlation between self-efficacy and an individual's job performance (Gist, 1987).

Self-efficacy appears to be task and domain specific (Bandura, 1997, 1989); in other words, individuals may have high self-efficacy in one area and low self-efficacy in another. Those with high self-efficacy on a given task are more likely to pursue and achieve that task (Bandura, 1997). In one study, managers with MBAs and managers without MBAs in four business organizations in the UK were compared. Researchers found that the MBA graduates had significantly higher perceived self-efficacy than the non-MBA graduates on 11 of 18 workplace skills and competencies, including oral presentations, time management, and decision-making (Baruch & Peiperl, 2000).

A quantitative study was conducted to measure entrepreneurial self-efficacy, or the belief that one has the ability to succeed in creating a business. Researchers sampled 1,132 MBA students from seven different MBA programs in the U.S. in the areas of problem-solving, money management, creativity, leadership, decision-making, and ability to gain agreement from others. Results showed that entrepreneurial education increased the self-efficacy of women, and that females pursuing an MBA had lower entrepreneurial self-efficacy than men (Wilson, Kickul & Marlino, 2007).

Employability skills. Another potential outcome in business education are the skills gained by students, as long as they are the skills needed by employers. Skills needed by employers are called employability skills, and there are many definitions of this type of skill. Knight and Yorke (2006) define employability as, "a set of achievements – skills, understandings and personal attributes – that make graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy (p. 3)." A similar definition comes from Overtoom (2000), who defined employability skills as, "transferable core skill groups that represent essential functional and enabling knowledge, skills, and attitudes required by the twenty-first century workplace. They are necessary for career success at all levels of employment and for all levels of education" (p. 1). Employability skills are sometimes called career capital (Bloom & Kitagawa, 1999). Bloom & Kitagawa (1999) placed employability skills into three broad categories of academic, personal management, or teamwork. Examples of attributes of academic skills are the ability to communicate, think, and learn. Attributes of personal management skills are responsibility, adaptability, and having a positive attitude. Attributes of teamwork are the ability to work with others to achieve common goals.

There are other features of employability skills. They can either be generic or specific. Generic skills are “attributes of a person who actively and positively contributes to their own work experiences and quality of life and to the well-being of society” (Bloom & Kitagawa, 1999, p. 9). Generic skills are not job-specific, but are instead transferable to any environment. Characteristics of employability skills are that they are developable, learnable and transferable. Developable means they can be developed in multiple ways over a person’s lifetime. Learnable means skills can be improved and/or developed by doing the skill, observing others do the skill, reflecting on the experiences that happened while doing and/or observing the skill, assessing skill performance and goal-setting for skill improvement, and practicing the skill repeatedly.

History and Problems in Business Education

The graduate business education program that is most common worldwide is the Master in Business Administration (MBA). Historically, MBA programs have been widely respected both in academic circles and in business as a way to prepare leaders, instill ethical values, and teach useful skills. Mintzberg (2004) described the MBA as the ultimate academic achievement to prepare graduates for the profit-sector. However, MBA programs are increasingly facing criticism from employers, academia, and students (Bennis & o’Toole, 2005; Gosling & Mintzberg, 2004; Schlegelmilch and Thomas, 201; Segon & Booth, 2012). A brief history of higher business education is now outlined, followed by a literature review of the problems facing business education.

Historical context. While Harvard College was America's first college, opening in 1636, it did not open the first business school. Instead, Joseph Wharton of the University of Pennsylvania donated $100,000 to found the world's first school of business. His vision was to "provide liberal education in all matters concerning finance and commerce" (Rehder, 1982, p. 66). Growth in higher business education happened after World War II, when business schools were able to respond to enrollment growth by adding new majors and programs. Business departments, compared to their counterparts, often enjoy higher enrollments and revenues than the rest of the college or university (Rehder, 1982).

In the 1980s, there became growing recognition from business school faculty, college/university administrators, and business leaders that there were problems with American higher business education. One of the reasons for this recognition was a sense that American business and industry was losing its dominance in the global marketplace (Rehder, 1982). Another reason for the disenchantment with business education was the growing realization that business schools seemed to be focusing primarily on technical skills in accounting, marketing, and finance exclusively with for-profit, capitalistic motivations, at the expense of soft skills such as leadership, interpersonal, communication, and business ethics. The skills taught were helping to create American business managers with the knowledge and skills to create short-term financial goals, but ignore long-term strategy and human resource development (Rehder, 1982; Williams, 1980).

Problems in business education. This problem was not conceived in the 1980s; however, it came out of two large studies done in the late 1950s, one sponsored by the

Carnegie Foundation (Pierson, 1959) and the other sponsored by the Ford Foundation (Gordon & Howell, 1959). What became known as the *Foundation studies* are now considered landmark studies that had a major impact on changes later made in higher business education (Elsaid & Schermerhorn, 1991). There were three major concerns that came out of these studies. Regarding undergraduate business courses, the first was that the curriculum in business education did not have the same level of rigor as other content areas. Critics complained that business education focused on teaching a trade at the expense of teaching research-based principals and concepts. The Ford report went so far as to recommend the types of courses that should be excluded from core business curriculums. Specifically, technical subject areas such as business English, letter-writing, and business mathematics were mentioned, as were specific business content areas such as insurance and transportation (Gordon & Howell, 1959). Gordon and Howell recommended limiting specializations, except for accounting, and focusing on broad aspects of management education. A second and related concern was that business students were not as intellectually competent as students in other fields of study (Elsaid & Schermerhorn, 1991). The third major concern was that business education was educating students only for their first job, instead of thinking of education as vital for one's whole career. The Pierson report called for a greater degree of problem-solving skills, analytical abilities, organizational skills, change management skills, and organizational skills.

The Foundation studies also had recommendations for graduate business programs. They recommended that a strong core of business courses be implemented in programs and increase in the level of rigor, emphasize managerial problem-solving, business policy, and limit the amount of specialization courses offered (Gordon &Howell, 1959). In short, the recommendations made for graduate business programs were very similar to recommendations made for undergraduate business programs.

In 1984, another landmark study began, this time by Lyman Porter and Lawrence McKibbin (1998), and commissioned by the most prestigious business accreditation agency, the American Assembly of Collegiate Schools of Business (AACSB). In this three-year study, Porter & McKibbin (1998) had three overall objectives: (1) evaluate the current condition of management education; (2) report on what the future of management education would be if major changes were not made; and, (3) make recommendations about the future of management education. The research design of this study was both quantitative and qualitative. The sampling frame was AACSB member institutions, and approximately 10% of all AACSB institutions (about 60 four-year colleges/universities), were chosen as the sample. Also, 50 medium to large-sized companies were chosen to be part of the sample. Interviews were conducted with multiple officers and managers at each company. A survey was sent to all 620 AACSB institutions. Questionnaires were also sent to selected undergraduate and graduate business students, alumni from business schools, and owners of small businesses.

There were many findings specifically related to MBA curriculums, the focus of this dissertation study. About 45% of business school deans believed that both international business and management information systems needed more emphasis in business programs. Faculty also agreed that these two curriculum areas needed more emphasis. MBA alumni who were sampled did not overwhelmingly indicate that more international emphasis was needed, but did agree that more management information systems emphasis was needed (Porter & McKibbin, 1988).

Other, more general findings by Porter and McKibbin (1998) were also made. They reaffirmed the need for business schools to emphasize a long term, broad view of management, instead of offering only specialized training for the first job out of college. They recommended that business faculty spend time interacting with industry, and the managers of those industries, and accused business faculty of having too little relevant business experience. They called on business schools to emphasize the external environment of government, society, the legal climate, and international concerns, and they called for continued overall quality improvements in business programs.

During this time in history, other suggestions were also made for improving business education. Consistent with Porter and McKibbin's (1998) views on business faculty, others called on business schools to increase their faculty development. This included offering internships of sabbaticals for faculty in the business world to refresh their knowledge and skills, creating interdisciplinary units with liberal arts and humanities departments, and hiring business faculty with different educational backgrounds such as philosophers and sociologists (Gaff, 1989; Jaedicke, 1989; Ouchi, 1987).

Also during this time period, the Secretary of Labor appointed the Secretary's Commission on Achieving Necessary Skills (SCANS) to study what skills students needed to develop skills that would help them in an economy that that was becoming more global, knowledge-based, and service-based, and less industrial and based on manufacturing jobs. The SCANS issued their report, called *What Work Requires of Schools,* in 1991, for what they hoped students would be able to achieve by the year

2000. The report contained two parts: basic skills and workplace competencies. The basic skills identified were reading, writing, mathematics, listening, speaking, creative thinking, decision-making, problem-solving, organization, knowing how to learn, reasoning, responsibility, self-esteem, sociability, self-management and integrity/honesty. The five workplace competencies were resources (time, money, material and facilities, and human resources); interpersonal (teamwork, teaching, service, leadership, negotiation skills, and works well with others from diverse backgrounds), information (acquires and evaluates information, organizes and maintains information, interprets and communicates information, and uses computers to process information); understanding of complex systems; and technology (can select and apply the right technologies, and can maintain and troubleshoot equipment) ("The Secretary's Commission," 1991). Schools at all levels, from primary to post-secondary, began refocusing their curriculum on achieving the SCANS skills, and many textbook publishers aligned their curriculums with the SCANS skills.

Professor Henry Mintzberg, a top North American management and strategy thinker, added to the concerns of this time period by offering a scathing and controversial critique of MBA programs in the widely reviewed-book *Managers, Not MBAs: A Hard Look at the Soft Practice of Managing and Management Development* (2004). Mintzberg thought MBAs were too theory-laden and lacking in practical management applications. He called on MBA programs to recruit students with several years of management experience so they would be better able to apply management theory to practice using their own experiences instead of relying on case studies, which are non-experiential in nature. He called management a blend of craft (experience), art and science, and said management could not be learned in a classroom without management experience and classmates with management experience. In addition to focusing on students' experiences, he called on MBA programs to have students reflect on their experiences in the light of the management ideas and theories they were learning.

Mintzberg also opined that business schools that wanted students to have an undergraduate degree in a technical area were misguided, saying, "the assumption behind this—that one cannot be a proper manager without mathematical ability—would come as a great surprise to the legions of managers who have succeeded without that ability" (p. 40). Instead, he proposed that an undergraduate degree in the arts might be more useful to an MBA student. This view contrasted with the Gordon-Howell and Pierson reports, which recommended that business schools focus on three functional areas of study: economics, applied mathematics, and behavioral science (Gordon & Howell, 1959; Pierson, 1959).

In 2006, the National Center on Education and the Economy, a group funded by foundations such as the Bill and Melinda Gates Foundation, issued a new report. They acknowledged the good work The Secretary's Commission (1991) had done in identifying that the United States needed highly skilled workforce. But, they said the economic environment had changed due to globalization, and other countries such as India and China were now producing workers that were highly educated and highly skilled but whose wages were much lower than wages in America. Thus, American companies were outsourcing routine work that was easy to automate to other countries. The concern was that this would result in a loss of jobs and opportunities for American workers. The New Commission called on successful American workers to be creative and innovative, able to learn quickly, and achieve high academic performance ("Tough Choices or Tough Times," 2006).

Another criticism of business education is that it has become less relevant to all stakeholders involved. Bennis and o'Toole (2005), business professors at the University of Southern California, are harshly critical of today's top-tier business schools that are housed in research-oriented universities, believing that business schools have shifted from measuring themselves in terms on the success of their graduates, to measuring themselves on the strength of their scientific research. This is problematic because solving a hypothetical problem through the scientific research process can, and often is, done without actually talking with business managers or setting foot into a business. While the research might be strong, its basis in hypothetical problems means it may not reflect the real world of business.

Another criticism of business education is levied directly at research universities. Of top-tier business schools that are located in research-oriented universities, business professors are evaluated partly on the number of articles they publish in research journals. The criticism is that while the articles might be scientifically rigorous and interesting, they may lack value to the average business manager. Facing a seeming lack of value from reading peer-reviewed business journals, business managers may turn to other sources of information to help them make business decisions. Moreover, write Bennis and o'Toole (2005), administrators of business schools publically deny that this emphasis on scientific research exists, and instead publically focus on the practicality and relevance of their curriculum. One example of this is the promotion and tenure process, which often rewards journal publications of scientific-oriented business articles instead of time spent learning what is currently happening in the world of business, or articles published in practitioner-scholar journals, or high teaching evaluations from business students. The authors link the rise of for-profit business schools and in-house corporate training as evidence that businesses are seeing less value from highly-ranked MBA programs that lack a practitioner-scholar model, and more value from instructors who bring current experiences to their teaching.

The answer to this problem, according to Bennis and o'Toole (2005), is that business schools need to begin having their students practice business instead of just learn about business. They mention experiential activities such as internships, action research, consulting and starting and running a business as methods that will help business students learn how to make business decisions. They argue that business schools must return to a healthy balance of scientific research and practical professional training that includes classical liberal arts areas such as humanities, literature, politics, and philosophy. In addition to a strong liberal arts focus, business skills should also teach the soft skills employers want graduates to have.

Another potential problem that was identified by the *Foundation Studies* (Gordon & Howell, 1959; Pierson, 1959) was that there was a lack of synthesis, or integration of the various functional areas of business, especially in undergraduate business curriculums. Additionally, there was a lack of integration between technical skills and how they could be used to address real-world business problems. Thus, the studies recommended some type of capstone course in business policy and strategy that would address this curriculum need. The AACSB later wrote into their standards that some kind of synthesizing/integrating approach had to be built into business programs (Porter & McKibbins, 1988).

Another potential problem for business education is a growing skills gap. The gap between what workers are skilled to do and the jobs required by today's knowledge workers is growing, and there seems to be a mismatch between the kind of workers employers need and the skills obtained by managerial, professional and technical workers. For example, a knowledge worker is someone that knows "how to access, interpret, and apply new knowledge and information to add value to an organization" (Waks, 2003, p. 398). In a National Association of Manufacturer's Skills Gap Report, over 80 percent of respondents said they were experiencing a shortage of qualified workers (National Association of Manufacturers, 2005). American manufacturers are automating their production processes and laying off low-skilled workers. At the same time, these manufacturers are having difficulty finding the highly-skilled workers they need, and are saying they will "never bring back many of the lower-skilled jobs, and that training is not yet delivering the skilled employees they need" (Rich, 2010, p. A1). There is a need for business education to provide the workforce with the skills necessary to close the gap created by this skills shortage.

Still another potential problem faced by business education is one that is not new. For over two decades, management experts have been lamenting that business education focuses too much on the corporate bottom line of profit at the expense of two other concepts: how business fits into society, and the role of ethics in business. The AACSP even revised its accreditation standards to contain an emphasis on the teaching of social responsibility (AACSP International, 2004), but few business program are accredited by

AACSP, so its reach was limited. Management expert Harold Leavitt (1989) complained about business education's lack of attention to ethics, when he wrote the field turned out MBAs who were like "critters with lopsided brains, icy hearts, and shrunken souls" (p. 39). Ethics scandals in the 2000s in large corporations such as Enron and WorldCom, who reportedly put profit ahead of responsibility to shareholders and other stakeholders, called attention to the need for business to engage in ethical decision-making, and for business education to prepare students to lead those efforts (Steiner & Watson, 2006).

Employability Skills Needed by Business

John Dewey believed that students should learn a variety of skills to have the maximum opportunity at employability, and that "technological change can make them unemployable at any time, regardless of their level of competence in any one specific skill" (Drost, 1977, p. 29). Dewey used the example of how full-service gas station attendants, trained in the early 1970s to do only that job, found their jobs obsolete because of new technologies associated with self-service gas stations (Drost, 1977). In today's knowledge economy, when 90 percent of well-paying jobs require post-secondary education or training (U.S. Department of Labor, 2006), it is critical that business education prepares students for the workforce by fostering skills needed by employers.

There is healthy debate in business education about what skills employers most need from business school graduates. One skill both education and business seem to agree needs to exist in business education is critical thinking. Paul and Binker (1990) define critical thinking as, "disciplined, self-directed thinking which exemplifies the perfections of thinking appropriate to a particular mode or domain of thought." They believe there are seven traits people need to have in order to become critical thinkers: intellectual humility; intellectual courage; intellectual empathy; intellectual integrity; intellectual perseverance; faith in reason; and intellectual sense of justice.

The U.S. Department of Labor's Secretary's Commission on Achieving Necessary Skills called for the importance of making critical thinking skills a requirement for competing in a global economy ("What Work Requires," 1991). *Forbes* recently reported that critical thinking is the number one job skill employers are looking for (Casserly, 2012). The American Management Association recently surveyed 768 managers and other business employees about critical thinking, communication, collaboration, and creativity. Over 67% said critical thinking is measured during an annual performance review, and over 69% said critical thinking is assessed during the hiring process. Over 74% of the managers said critical thinking will become even more important over the next three to five years (AMA, 2012). Wagner (2008) interviewed a large cross-section of business and industry leaders and concluded that there are seven survival skills every competitive employee must bring to the table: critical thinking and problem solving skills were at the top of the list.

One of the main characteristics found in the literature about critical thinking is that it needs to be contextual in order for learning to take place. This includes learning in real-world settings when possible rather than artificial academic settings, and includes posing and solving problems that are authentic in nature (Lipman, 1988; McPeck, 1990; Resnick, 1987a; Yinger, 1980; Young, 1980). Brookfield (1987) argued that critical thinking is a "context-embedded skill" (p. 160), more likely to be used if it is practiced in the context where it will be applied, such as the workplace. One study of high school business teachers sought to find the strategies they believe are effective in teaching and evaluating critical thinking. The sample consisted of 67 teachers from North Carolina. Results showed that teachers believed that having students complete practical tasks was the most effective way to teach critical thinking. Using case studies was also effective, while true/false tests were the least effective. Making projects related to needs in the community was also mentioned by teachers as a way to teach critical thinking (McEwen, 1994). This makes an argument for experiential learning, specifically service-learning, which is the form of experiential learning that focuses on addressing needs of the community.

Other skills are also important to employers. For example, according to a nationwide survey of 400 employers, the most important skills that graduates from high school and both two and four-year postsecondary institutions need are professionalism/work ethic, oral and written communication skills, teamwork and collaboration, and critical thinking and problem solving ("Are they really ready for work," 2006). Jack Welch, former CEO of GE, gave a speech at MIT's Sloan School of Management in 2005. He told the students that networking was the most important skill they should be learning in business school, and that everything else they would learn on the job. MBA programs such as Wharton, Tuck, and Berkeley's Hass School listened to Mr. Welch, and followed-up with discussions at their schools about including soft skill coursework into their curriculums (Solomon Reid, 2003).

Another important skill needed by employers is in the area of information technology. Many information technology jobs require post-secondary education but do not require a bachelor's degree. Information technology jobs are a growing part of the

U.S. economy, as about 20% of all jobs in the U.S. are currently information technology-related jobs. Computer technician jobs and computer support specialists are two of the fastest growing information technology occupations, and they generally do not require a four-year college degree (Chapple and Zook, 2002). While some information technology jobs do not require a bachelor's degree, many do, and routine tasks that human use to do, especially in manufacturing plants, are being replaced by technology.

Technology skills have a positive effect on earnings, which is one of the reasons why they should be emphasized in business education. A 12-year longitudinal study in the United States found that computer courses had a large effect on earnings, even up to eight years after graduation, regardless of whether the students pursued post-secondary education (Bishop and Mane, 2004). Appelbaum, Bailey, Berg and Kalleberg (2000) found that in companies where workers had high skills in gathering and analyzing information, workers in those companies earned significantly more than workers who did not have those skills.

Skills in information technology are even more important than education in that academic discipline, according to some employers. A study with companies that were either IT-related firms or had a concentration of IT occupations was conducted in the San Francisco Bay, California, area. One respondent said, "we don't care about a college degree for IT positions. With these positions, we are looking for a very specific set of skills…With the information technology-related positions we relax many of our historical requirements. We are looking for skills sets, not education" (Chapple and Zook, 2002, p. 67). Drost (1977) states that "Americans believe that schooling should be able to demonstrate its usefulness" (p. 19). As part of that preparation, business education at all levels should continue to emphasize information technology skills in order to give the workforce the best opportunity to compete in today's information-driven economy.

A world-wide study of corporate recruiters was commissioned by the Graduate Management Admission Council, a respected accreditation body based in the United States. The purpose of the study was to identify the knowledge, skills and abilities employers were looking for in MBA graduates. In this quantitative study, the sample contained over 1,500 recruiters who represented over 900 companies from over 51 countries. The knowledge, skills and abilities found to be most desired by recruiters were communication skills (86%), strategic skills (67%), the ability to perform and achieve goals (66%), core business knowledge (63%), and change-management abilities (61%) ("Corporate recruiters survey," 2011). Clearly, employers want both hard skills such as business knowledge, skills and abilities as well as soft skills such as communication skills, with a high preference of communications skills over business knowledge.

A regional study of corporations and business schools was done in the late 1990s by Tanyel et. al. (1999). The study sought to answer three questions: the skills and abilities prospective employers of entry-level business graduates desired; the skills and abilities faculty believed prospective employers desired of business graduates; and was there agreement between the prospective employers and faculty on the skills needed of new graduates. Human resource managers or directors from a five-county area in the Southeastern part of the United States were surveyed with the same instrument given to selected faculty at two southwestern U.S. regional universities. While the instrument used in this study is detailed in Chapter 3, because this dissertation study will use a modified form of this instrument, for now we focus on the findings of the study.

The instrument contained 16 managerial skills/attributes had been taken from previous literature. In answer to the first and second research questions, findings showed that employers ranked (in order) interpersonal skills, ethical values, and responsibility and accountability as the top three skills needed for success by new business school graduates. Similarly, the faculty's rankings (in order) were interpersonal skills, a tie between ethical values and responsibility and accountability, and decision-making and analytical ability. Differences between employer and faculty perceptions of the most important skills needed were found in 7 of the 16 skills/attributes measured. Strengths of this study include the degree to which the instrument was tested before it was implemented. A limitation was its regional emphasis, which could potential limit generalization to the larger United States population.

A recent study conducted by Shuayto (2013) was undertaken to see whether business leaders believed MBA programs prepared students. A secondary goal was to explore relationships between business school leaders and business managers and see how they each believed MBA programs prepared students in the skills the managers desired. Survey research was undertaken, both by mailing questionnaires to employers, and conducting telephone interviews with business school leaders. Findings of the study showed that the top three skills prospective employers said needed to be obtained by business graduates were responsibility and accountability, interpersonal skills, and oral communication skills. These differed from the top three skills business school leaders believed were most important: oral communication skills, written communication skills, and interpersonal skills. A limitation of this study is a very low response rate, 3.4%, from the business managers. In contrast, the response rate from the business school leaders was 78%. The low response rate of business managers makes it difficult to generalize the findings to a larger population of business managers.

A study sought to find out what gaps existed between MBA programs and actual managerial practice, as perceived by business managers. One-hundred business managers, 83 percent of who made hiring decisions, were given a list of ten skills, broken into three categories called functional, quantitative or analytical, and interpersonal. Examples of functional skills were marketing, information technology and strategy; examples of quantitative or analytical skills were finance, economics and statistics; and examples of interpersonal skills were ethics, emotional intelligence, change management and communication. Results showed that the top three skills the managers believed graduates were lacking were emotional intelligence, communication skills, and interpersonal skills/dealing with others, all of which are in the interpersonal skills category. This suggests there is a gap between what MBA programs are teaching and what employers want in MBA graduates (Segon & Booth, 2012).

A strength of the study was that the respondents represented a cross-section of business industries, including the consulting and business services industry sector, the finance and insurance sector and the public sector. A limitation was that the way the researchers identified that the business managers were in middle to senior-level management positions was by identifying their age. Since a majority of the respondents was age 40 or over, the researchers took that as evidence that they were in middle to senior-level management positions, but is possible that some of them were not in management positions.

The large Porter & McKibbins (1988) study done in the 1980s asked deans and faculty which skills should be in their MBA programs. The list of skills given were analytical, computer, decision making, initiative, leadership/interpersonal, oral communication, planning/organizing, risk taking, and written communication. Of this list, the number one skill deans felt should be in their curriculums was written communication (85%), followed closely by decision making (81%), and oral communication (78%). Also of note, the deans, many times, did not feel these skills were currently being addressed in their curriculums. Faculty views were a little different. Faculty felt that the number one skill that should be emphasized was analytical (80%), followed by written communication (81%) and decision making.

In this same study, corporate perspectives were sought, and respondents were from five categories of employers: CEOs, human resource vice-presidents, the director of college recruiting, the director of management development, and managers who were supervisors with recent business school graduates. Corporate college recruiters listed leadership/interpersonal skills, business knowledge, and high motivation to work as the top three attributes they were looking for when recruiting MBAs. This study illustrates a potential gap between what deans and faculty believed were important and what the corporate recruiters believed were important.

The National Association of Colleges and Employers recently issued their Job Outlook 2015 (“National Association of Colleges,” 2014). Employers from various industries such as manufacturing, finance, professional services, and retail trade, were surveyed about employment-related issues. Of the 250 employers surveyed, 78.2% said they would be hiring master’s-level graduates in 2014-2015, and business is the category of employees that would be in highest demand. Employers were asked which attributes they would be seeking on job candidates' resumes. The top attribute was a tie between leadership and ability to work in a team, with 77.8% of employers saying they would seek those two attributes. The third attribute most sought was written communication skills (73.4%).

In this same study, employers were also asked to rate the importance of certain job candidates' skills/qualities. A Likert scale from 1 (not at all important) to 5 (extremely important) was used. Results showed that employers rated teamwork, the ability to make decisions, the ability to solve problems, and the ability to verbally communicate as the most important skills. Something surprising about this study is that the second-lowest skill employers rated was the abililty to create and/or edit written reports, since so many other studies have pointed to written communication skills as important skills needed by employers.

In summary, employers want business graduates to have a wide variety of employability skills, and there is not clear agreement as to what those skills should be. Popular business magazine *Businessweek* is calling for change in how MBAs are trained, saying current education has lost its relevance (Linkner, 2014). Business education has responded to criticism that it is not adequately preparing future graduates with the appropriate skills, but critics still exist. This makes it difficult for business education to respond to the needs of employers, prioritize curriculum goals, and respond to criticism that it is not adequately preparing future graduates with the skills that are most needed. Table 1 summarizes the literature, presented in Chapter 2, about which employability skills employers want from business graduates.

Table 1

Summary of literature about which employability skills employers want from business graduates

Employability skills (sorted by alphabetical order)	Supporting Research
Ability to interview for a job	Rosenbaum, 2002
Adaptability/managing multiple priorities	"Chronicle of higher education," 2012
Accountability	Shuayto, 2013 Tanyel, et. al., 1999
Analytical ability	Tanyel et. al., 1999
Business ethics	Rehder, 1982 Tanyel, et. al., 1999 Williams, 1980
Change-management abilities	"Corporate Recruiters Survey," 2001 Gordon & Howell, 1959
Creativity	Linkner, 2014
Critical thinking	American Management Association, 2012 "Are they really ready for work," 2006 Billing, 2003 Brookfield, 1987 Casserly, 2012 Wagner, 2008
Decision-making	"Chronicle of higher education," 2012 "National Association of Colleges and Employers," 2015 Tanyel et. al., 1999
Emotional intelligence	Segon & Booth, 2012
High motivation to work	Porter & McKibbin, 1988
Innovation	"Tough Choices or Tough Times," 2007
Interpersonal skills/working with others	Porter & McKibbin, 1988 Rehder, 1982 Segon & Booth, 2012 Shuayto, 2013 Tanyel et. al., 1999 Williams, 1980
Leadership	Linkner, 2014 Porter & McKibbin, 1988 Rehder, 1982 Williams, 1980
Oral communication skills	"Are they really ready for work," 2006 "Chronicle of higher education," 2012 "Corporate recruiters survey," 2011 "National Association of Colleges and Employers," 2015

	Segon & Booth, 2012 Rehder, 1982 Shuayto, 2013 Williams, 1980 Billing, 2003
Problem solving	"Are they really ready for work," 2006 Billing, 2003 "Chronicle of higher education," 2012 Linkner, 2014 Gordon & Howell, 1959 "National Association of Colleges and Employers," 2015 Wagner, 2008
Professionalism, work ethic, attendance, timeliness	Barton, 2006
Responsibility	Shuayto, 2013 Tanyel, et. al., 1999
Strategic skills	"Corporate Recruiters Survey," 2001
Teamwork/ability to collaborate	Solomon Reid, 2003 Billing, 2003 "National Association of Colleges and Employers," 2015
Technology literacy (related: technology skills, digital skills, information-technology skills, gathering/analyzing information)	Appelbaum, Bailey, Berg and Kalleberg (2000) Bishop and Mane, 2004 Bottoms, 2003 Chapple & Zook, 2002 Waks, 2003
Written communication skills	"Chronicle of higher education," 2012 Rehder, 1982 Williams, 1980 Billing, 2003

Part II

Part I outlined the skills employers need from business graduates. Business education, then, should foster the skills employers need. Kuh (2008) outlines several high-impact educational practices higher education does and should use. Many of them are found in business education. Kuh (2008) also suggests that more information is needed about these high-impact practices, specifically about their features, how students benefit from the practices, and which students are more likely to benefit from them. Part II describes two of the major experiential high-impact educational practices that are relevant to business education: capstones and service-learning, and the theoretical frameworks surrounding experiential learning are reviewed.

The five high-impact practices identified by Kuh (2008) are: 1) learning communities; 2) undergraduate research with a faculty member; 3) service-learning and community-based learning, 4) internships; and 5) capstone projects and culminating experiences. In a learning community, students take two or more courses that have a common topic or focus. Thus, learning is integrated across courses. Undergraduate research with a faculty member gives students opportunities to work with a mentor on important problems. The Boyer Commission Report on Educating Undergraduates in the Research University recommended research-based learning as the standard model for educating undergraduate students ("Reinventing Undergraduate Education," 1998).

In service-learning and community-based learning, Kuh (2008) states that the key elements are the opportunities students have to reflect on their experiences in the classroom and apply what they are learning to the service-learning experience. Internships allow students to gain real-work experience by working, paid or unpaid, in a field related to their coursework. The key element to a capstone is that students must be able to apply and integrate what they have learned.

Theoretical frameworks

Many of Kuh's (2008) high-impact educational practices are experiential in nature. Dewey (1938) was a strong advocate for experiential learning and felt learning occurs best when learners solve authentic problems and then reflect on their experiences

(Harkavy & Benson, 1998). There are three primary conceptual frameworks that define experientially-oriented approaches and that also relate to this study: experiential learning theory, constructivist theory, and andragogy. The essence and history of all three will now be reviewed.

History of experiential learning. John Dewey's (1938) contribution to the field of education laid the groundwork for integrating experiences into curriculum. Dewey believed that genuine learning came through experience; in fact, experience was the starting point of the educational process, but not all experience could be considered a learning experience. He proposed two principles to argue how experiences could be learning experiences. The Principle of Continuity said that experience occurs along a continuum called the experiential continuum. Experiences build on each other, and it is the role of the teacher/facilitator to shape those experiences by setting them up so they have a purpose and way of increasing students' knowledge. The second principle Dewey proposed was The Principle of Interaction. Learning happens as a result of a transaction between the student and the environment (Dewey, 1938). As Lave & Wenger (1991) would later outline in their theory of situated learning, Dewey believed learning had to be acquired in a situation otherwise it would not be remembered and could not be transferred into other contexts.

Another major concept Dewey contributed to education is his pattern of inquiry, which is also known as the scientific method (Dewey, 1938). This method consists of several steps which help us investigate and solve problems: identify the problem, plan for how to solve the problem, form a hypothesis, test the hypothesis, reflect on the solution, and apply the solution to the problem or retest if the solution does not work. His ideas influenced both the methods of problem-based learning and inquiry-based learning, both of which have strong ties to experiential learning.

Experiential learning theory. Kolb's (1994) experiential learning model is a conceptual model that describes the process of experiential learning. Kolb writes, "learning is the process whereby knowledge is created through the transformation of experience" (p. 26). The model consists of a four-step cycle that is partially based the writings of Dewey (Dewey, 1938; Jacoby, 1996). Dewey advocated for education that allowed learners to engage in real-world problem-solving. In 1938, he said, "there is…no point in the philosophy of progressive education which is sounder than the emphasis upon the importance of the participation of the learner in the formation of the purpose which directs his activities in the learning process" (Nicholls & Hazzard, 1995, p. 115).

Kolb's experiential learning cycle consists of four stages (Figure 1.1): concrete experience, reflection on the experience, synthesis and abstract conceptualization, and active experimentation. Students can start the service-learning experience at any point in this cycle, but all four parts of the cycle must be completed for service-learning to occur (Jacoby, 1996; Kolb, 1984). Moreover, learning is most likely to be effective when service-learning is sequenced so that a concrete experience occurs first, followed by reflection, and then abstract conceptualization (Jacoby, 2015). This experiential learning cycle helps us understand how learning happens through serving.

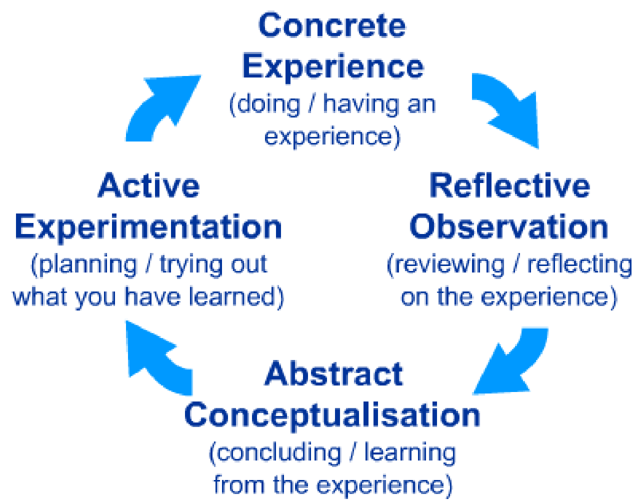

Figure 1.1. Kolb's (1984) model of experiential learning

A concrete experience, the first stage of the model, is where assignments are intentionally designed to promote learning, and the learner completes some kind of action or activity such as field work, lab work, or service. Reciprocity, the idea that both the students and the people being served are both teachers and learners, is a critical component.

Reflection, the second stage of the experiential learning cycle, means there must be some kind of self-analysis of the experience after it occurs, and the reflection should include learning about the political, economic, cultural, sociological and historical contexts that make up the needs the students are serving (Jacoby, 1996; Kendall, 1990). Dewey (1933) described reflection as having three characteristics: open mindedness, responsibility, and wholeheartedness. Reflection is such a key component of experiential learning that Part III will be devoted to it.

The third and fourth stages in Kolb's model are the abstract conceptualization stage and the active experimentation stage. In the abstract conceptualization stage, the learner analyzes ideas and tries to conceptualize a model or theory of what he/she observed during the service-learning experience. In the active experimentation stage, what the learner has learned is acted out in some way. For example, learning about what a particular organization does for the community might cause a learner to change career directions or get involved in his or her own community.

Kolb held several propositions that underlie the theoretical basis for the learning cycle that he created. First, learning is a process and it never ends. Ideas are continually reformed through experience. Second, learning is holistic in that it involves thinking, feeling, perceiving and behaving. Third, learning involves both the person and their environment. The environment is needed for the learning to occur. Last, learning is the process of creating knowledge. This process happens through life and cultural experiences (Kolb, 1994).

Several scholars have criticized Kolb's model. Brookfield (1995) cautions educators in using accumulated experience as a defining characteristic of adult learning. Experiences are culturally framed. Adults decide which experiences they choose to have and what they do and do not do in them. Besides being culturally framed, experiences are often done within the ideologies that adults hold. Adults may choose, while not even knowing they are choosing, to forgo certain experiences in exchange for others because of their own cultural and ideologies.

Vince (1998) also has criticisms of Kolb's learning cycle. While Kolb says experiences are essential to learning, Vince suggests that there are some things that are best learned by not experiencing them. For example, we can learn about terminal illness, torture and pain without experiencing them. We can study racial or sexual harassment without experiencing it.

Miettinen (2000), a professor at the University of Helsinki, is highly critical of Kolb's experiential model. He characterizes it as both "consultancy literature" (p. 55) and a "marketing promotion" (p. 55) for a Learning Style Inventory that Kolb developed in the 1960s. He calls Kolb's theory "eclectic" (p. 56) because he takes concepts and terms from a variety of historical sources and uses them for his own needs, instead of first studying the literature to see what it says and then developing his model from it.

Although Kolb's Learning Style Inventory has been criticized, educators, service-learning researchers and others have widely used it to tailor service-learning to suit various students' needs. The four learning styles in the Learning Style Inventory are converger, accommodator, diverger, and assimilator, and these styles correspond to each phase of the experiential learning style. Convergers prefer the abstract conceptualization and active experimentation phases of the cycle because they like to apply ideas to specific problems. Accommodators prefer the active experimentation and concrete experience phases of the cycle because they enjoy working with people to solve problems. Divergers also like working with people, but have an imaginative bent. Assimilators enjoy working with abstract concepts or theories more than people, and prefer the reflective observation and abstract conceptualization phases of the cycle (Jacoby, 2015; McEwen, 1996).

Miettinen (2000) posits that Kolb initially called his model a *Lewinian Experiential Learning Model* but yet does not refer to Lewin in a presentation he made in 1976. In this same presentation, Kolb quotes Dewey just once, but says that his model is based both on Dewey's book *Experience and Education* (1938) and Dewey's model of reflective thought and action. Yet, none of the phases of this model show up in Kolb's model. While Dewey's model is about experimental thought, Kolb's model is about experiential learning, and these terms are not the same. Miettinen fears that because of Kolb's model, adult education "is at risk of remaining a quasi-scientific academic field without connection to the philosophical, anthropological, sociological and psychological studies of learning and thought" (p. 71).

Sheckley and Keeton (1997) also criticize Kolb's model by saying that it is too simplistic and assumes learners will easily flow from one part of the cycle to the next. Kolb's model ignores how individuals' culture influences how they make meaning from experience. Sheckley and Keeton proposed a new theoretical model for experiential learning. Without specifying a new name for it, the model consists of three effects: the conduit effect, the accordion effect, and the cultural effect. Without reflection, Sheckley and Keeton propose that there will be a conduit effect, which leads to a collapse of the experiential learning cycle. In the conduit effect, an individual's pre-suppositions of what they expect the experience to be like actual shape what the experience becomes. We naturally try to make our experiences match our expectations.

A better way to make meaning of the experience is what is proposed to be called the accordion effect. Here, using reflection, individuals are better able to see how their prior experiences and presuppositions are influencing the new meanings they are making from the experiences. Both the conduit effect and the accordion effect may happen during various phases of a service-learning experience. The way the instructor designs the experience can help the learner have more of an accordion effect and less of a conduit effect. For instance, it is important to help students understand their presuppositions. The instructor can then encourage students to consider alternative viewpoints that challenge the presuppositions. Sheckley and Keeton (1991) argued that their model better shows the more complex path individuals need to process their experience into learning and it includes culture as a necessary part of that learning. It recognizes the importance of the instructor in setting up the experience so that reflection is used to maximize the accordion effect and minimize the conduit effect.

Despite these criticisms, Kolb's (1984) theory has significant value for experiential learning, which is why it is being used in this study. The process of engaging in a concrete experience, reflecting, learning from the experience, and trying out what has been learned will be used by participants in this study to measure the research questions.

Authentic learning. Related to experiential learning, authentic learning is an important educational practice that connects student learning to real-world problems (Slavkin, 2004). Based on constructivist theory, students who engage in authentic learning connect their prior knowledge to new knowledge. When implemented correctly, authentic learning has the potential to help students think critically, solve problems, and apply skills to real-life situations (Ormrod, 2000). It should be noted that authentic learning is not necessarily experiential, and not all experiential learning is authentic. Authentic learning can comprise setting up a real-life problem to solve without actually engaging students to solve it. Similarly, an experiential learning activity may not necessarily be authentic, if the activity is hypothetical and/or does not engage students in solving a real or actual problem. Also, authentic learning encompasses the use of authentic assessments to determine students' ability to solve real world issues.

Constructivist theory. The dominant modern educational approach to designing instruction is based on the theory of constructivism (Bruner, 1966; Dewey, 1929; Piaget, 1952; Vygotsky, 1978), which is also called both an epistemology and pedagogy (Howe & Berv, 2000). Constructivism informs experiential learning theory. Constructivism is a learning theory that states that individuals construct new knowledge from their experiences by interacting with other people and the environment (Fosnot, 1996; Gagnon and Collay, 2001; Grennon-Brooks and Brooks, 1999). Constructivism was a paradigm shift that replaced the theory of behaviorism (Skinner, 1938), which focused on rewards for good and bad behavior and repetition as the desired way of learning. With behaviorism, the teacher is the expert in the classroom and decides what information is taught and how learning is evaluated. Self-reflection is not a valued component of learning in the behaviorism theory. As Kolb (1994) said, "In the overeager embrace of the rational, scientific and technological, our concept of the learning process itself was distorted first by rationalism and later by behaviorism. We lost touch with our own experience as the source of personal learning and development" (p. 2). Learning methods based on behaviorism have their place in modern education. The method known as drill and practice is appropriate when there is one correct answer to a question, and when information needs to be memorized, understood and applied. Drill and practice is also a very cost-effective method of instruction, as well as a useful method when time is short (Fletcher, 2009).

Unlike instructional methods based on behaviorism, constructivism is a completely different way at looking at teaching and learning. The focus is on constructing meaning, not memorizing facts. In practicality, the way this works for educators is that they become guides rather than sages, the focus is on learning instead of teaching, and teachers are responsible for organizing learning activities for students.

Educators expect students to think critically, solve problems and communicate effectively, all skills that are not best learned through memorization. Instructors who use constructivism to teach will pose problems that are relevant to students' lives or professions, allow learners to work together to solve problems, help build on prior knowledge, create authentic, real-world and hands-on learning experiences, and have students reflect on their learning (Grennon-Brooks & Brooks, 1999).

Gagnon and Collay (2001) have built a constructivist learning design that consists of six elements: situation, groups, bridge, questions, exhibit, and reflection. The situational element draws on Dewey (1897), who said, "The only true education comes through the stimulation of the child's powers by the demands of the social situations in which he finds himself" (p. 77). Learning should be organized in social situations that simulate real-world learning and help students accomplish an open-ended task. The bridge element uncovers the prior knowledge of students so teachers can know what the students already know about a subject. A bridge also helps connect a new concept with something a student already knows. The questions element is asking questions. When teachers ask good questions, students have to think. Questions should be open-ended, have more than one possible answer, and engage students to think about possible answers.

The fifth element is the exhibit. An exhibit is something a student creates to demonstrate their learning. Teachers evaluate the exhibit to determine what learning has taken place. Students should also self-evaluate on their exhibit to help demonstrate their learning. The sixth and last element is reflection. Reflection can be teacher-led or student-led. In teacher-led reflection, the teacher reviews the learning with students to help process what new knowledge has been learned. In student-led reflection, students may write or in other ways reflect about what they have been thinking. Whether it is teacher or student-led, reflecting on experiences is a key component of the learning (Gagnon & Collay, 2001).

History of constructivism. Vygotsky (1978) was a Soviet and Russian cognitive psychologist whose theory of social constructivism emphasized the social context of learning. Vygotsky was interested in how children learn, and believed that learning was social. In addition to believing learning was social, he believed that learning was embedded in social communities and situations. Learning takes place in a context, and that context impacts what is learned. Learning cannot be separated from the environment in which it takes place.

As pedagogy, constructivism has two premises. When considering instruction, teachers must consider the interests, the knowledge and the attitudes students bring to their learning. Secondly, instruction needs to be designed so that students may have experiences that will help them construct understandings that will lead to development of their knowledge. Within constructivist pedagogy there is room for non-constructivist teaching techniques. There is some knowledge that can and should be imparted to students by teachers and other resources that will help them form their own understandings (Howe & Berv, 2000).

There are three major forms of constructivism. Social constructivism says that learning is a social process that takes place in groups, and happens when individuals are engaged in social activities. Groups collaborate to construct knowledge from meaning. Each society develops its own culture, and individuals learn within that society. Each society develops its own reality, and reality is not known until the group discovers it. Vygotsky (1978) is the major theorist of social constructivism and is perhaps best known for his zone of proximal development, which is “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance or in collaboration with more capable peers” (Vygotsky, 1994b, p. 352). In essence, there is a gap between what individuals know and what they need to know, and the social context helps close that gap (Bredo, 2000).

Within social constructivism, there is an extreme form called radical social constructivism that was developed by a group of sociologists called the Edinburgh School. Founders of this school included David Bloor and Barry Barnes, and they called their view the Strong Program. This view holds that knowledge can be fully explained in sociological terms such as religion, group dynamics and human interests. Knowledge is not a reflection of the external world. An example of this view is the General Assembly of the State of Indiana, which in 1987 decided to define pi as the numeral 4, instead of as its actual value of 3.14159 (Phillips, 2000). As this example demonstrates, this view was radical, and is not the predominant form of constructivism in use by educators today.

The second major form of constructivism is psychological constructivism. Here, the focus is on how individuals learn, rather than how groups learn. As with social constructivism, “knowledge is made, not acquired” (Phillips, 2000, p. 7), and learners actively construct their own meaning from their experiences. Two individuals might find different meanings from the same experiences.

The third major form of constructivism is radical constructivism. As its name implies, this is an extreme form of psychological constructivism. Earnst von Glaserfeld (1995) is the most prominent proponent of radical constructivism. In contrast to radical social constructivism, this view states that individuals construct meaning, not from the social or external environment, but is built on the premise that individuals form their own versions of reality. The external environment is not needed to corroborate these realities. There do not have to be meanings that are shared; each individual is allowed to have their own, individual, meanings (Howe & Bery, 2000).

Andragogy. Given that this study focuses on graduate business students, who are adult learners, andragogy is an important theoretical framework to review. Andragogy is the art and science of helping adults learn (Knowles, 1984). Andragogy is based on six premises. The first is the need to know. Adults have a need to know why they need to learn something, and facilitators of learning have to help students find their need to know. Paolo Freire (1970) called this consciousness-raising in *The Pedagogy of the Oppressed.* While Freire's ideas originated in Brazil with his work with the poor, they have spread to the western world and have wide-spread use in adult theory literature. Freire says adult education should try to promote a critical consciousness, which is "a process in which learners develop the ability to analyze, pose questions, and take action on the social, political, cultural, and economic contexts that influence and shape their lives" (Dirkx, 1998, p. 3). Through this process, adults are able to make sense of their world.

The second premise is the learners' self-concept. Adults do not like when others impose their own wills on them but instead want to think they are responsible for their own decisions. Dewey said the teacher of adults is not a dictator but a leader of group activities (Dewey, 1938). Adult learners are engaged participants in their learning, constructing what they learn as they learn it (Dirkx, 1998).

The third premise of andragogy is the role of the learners' experiences. Adults have their own experiences, and a group of adults has a wide range of experiences. Learning should be individualized so that these many experiences can be used. Experiential techniques such as group discussions, simulations, problem solving activities, cases, and laboratory methods allow for this individualization. This individualization is important because it makes a case for using different kinds of teaching methods to help adult learners achieve academic outcomes.

The fourth premise is that learners are self-directed. While teaching methods based on behaviorism were teacher-centered and passive, self-directed learning, is based on adults' need to have input into their own learning (Knowles, 1973, 1994). Rogers (1969) defined a teacher as a "facilitator of learning" (p. 104). The facilitator's role is to design learning experiences that help students engage in self-directed learning by using methods such as discussion, role play, and other active methods (Knowles, 1970). Knowles (1973) said, "we have finally really begun to absorb into our culture the ancient insight that the heart of education is learning, not teaching, and so our focus has started to shift from what the teacher does to what happens to the learners" (p. 41). The fifth premise is an orientation to learning. Adults learn new knowledge most effectively when it is presented in the context of real-life situations. The sixth premise is motivation. Internal motivators like self-esteem and quality of life are more likely motivators for adults than external motivators such as a higher salary or a promotion (Knowles, 1994; Knowles, Holton & Swanson, 2011; Lindeman, 1926; Wlodkowski, 1985). Motivation is linked to the other premises; for example, individualizing learning experiences and making them relevant may increase motivation (Knowles, 1994; Wlodkowski, 1985).

History of andragogy. Pedagogy, the art and science of teaching children, was historically the philosophy of education that was the basis of the U.S. educational system. In short, pedagogy gives the teacher responsibility for all decisions about how students will learn, what will be learned, and to measure whether learning has occurred. It has only been since the end of World War 1, in the 1920s, that educators started thinking about how educating adults might be different from educating children. Dusan Savicevic was an adult educator from Yugoslavia who first introduced the label andragogy to the U.S. in 1967, and Knowles wrote an article, "Andragogy [Sic], Not Pedagogy", in April 1968 (Knowles, Holton & Swanson, 2005).

To further the theory of andragogy, Eduard C. Lindeman wrote "The Meaning of Adult Education" in 1926. This book was strongly influenced by the philosophies of Dewey. In this book, Lindeman wrote the "resource of highest value in adult education is the learner's experience" (Lindeman, 1926, p. 9). Methods used in adult education should be small groups of adults who use their experiences to discuss situations that have to do with their content areas. The teacher has a different function than in pedagogy; he/she is not the oracle but is instead a guide who participates in the learning.

While educational theorists like Knowles and Lindeman have helped us understand adult learning theory, researchers need to keep building the research base on how adults learn (Hodgson & Kambouri, 1999). Brookfield (1987), another adult learning scholar, is critical of what we know about adult learning and cautions us against thinking that we have come up with a universal understanding of it. Areas of research he suggests include cross-cultural studies about adult learning that are different from the Eurocentric research that currently exists. Variables such as class, ethnicity, culture and gender need to be studied, instead of thinking that the classification of age is the variable that differentiates how people learn.

Instructional Approaches

Two primary constructivist and experiential instructional approaches that are commonly used in graduate business education, which is based on an andragogical approach, are capstones and service-learning.

Definitions and History of Capstones in Higher Education

There are many definitions of capstones. Gardner and Van der Veer (1998a) define capstone experiences as "summative curricular approaches such as courses synthesizing all of the content to date within a particular major" (p. 15). The words *senior seminars* and *capstones* are used interchangeably throughout much of the literature (Henscheid, 2000), and Henscheid also calls capstones the *Senior Experience Movement*. More specific to this dissertation study, capstones are sometimes called a "bridge to business" (Gorman, 2010, p. 432). Kuh (2008) identifies capstones as one of several high-impact practices all undergraduate college students should consider during their college experience.

The capstone as a culminating experience has its history in Europe in medieval times. For example, education students at the University of Paris wrote and defended a thesis, took a final exam, and became an apprentice teacher, studying under a master teacher. The first college founded in the United States, Harvard College, began requiring a graduation examination in 1646. Students had to "read from and translate from Latin editions of the Old and New Testaments" (p. 53) and these exams were open to the public. German research universities are credited with introducing the concept of a senior thesis to American universities, with Johns Hopkins University beginning its thesis requirement in 1876.

The history of the senior seminar as another form of culminating experience is traced to the end of the 1700s, and the president of Williams College taught a senior seminar course for 40 years. Levine (1991) noted that in 1991, one in twenty colleges offered a senior seminar, one of several forms of a capstone. He also noted that colleges and universities were increasingly studying the senior year and sensing that it needed to be different and as special as the freshman year. One of the ways colleges began doing that was by establishing a capstone experience (Levine, 1998).

Access to and Participation in Capstones

It is important to understand who has access to capstones. In higher education, capstones are found at all levels of the Carnegie Basic Classification System (Carnegie Classification of Institutions of Higher Education, n.d.). Within this classification system are eight levels of colleges and universities. From highest to lowest, they are: Research Universities (very high research activity); Research Universities (high research activity); Doctoral/Research Universities; Master's Colleges and Universities (larger programs); Master's Colleges and Universities (medium programs); Master's Colleges and Universities (smaller programs); Baccalaureate Colleges-Arts & Sciences; and Baccalaureate Colleges-Diverse Fields. The National Survey of Student Engagement uses these classifications when surveying and reporting results about student achievement, and maintains that the distribution of the Carnegie Basic Classification

System mirrors the distribution of the participating academic institutions (National Survey of Student Engagement, 2013).

Within a college or university, capstones can be located in various departments, and they vary in length. Capstone courses are almost always housed within the academic discipline, with a minority housed in other departments such as general education departments, career services, or honors programs (Henscheid, 2000). The Carnegie Council on Policy Studies in Higher Education studied 270 college catalogs for the 1975 academic year, and found that 3 percent had senior seminars that were connected to both general education and discipline-specific programs (Henscheid, 2000). Levine (1998) noted that the popularity of capstones changes over the history of American education and at that time found that capstones were offered at about five percent of institutions nationwide (as cited in Henscheid, 2000). Capstones in American public and private colleges and universities that have upper-division credits are almost always one semester in length, with a minority of capstones in a different time frame such as a certain number of weeks or a quarter. Capstones are almost always a required course in the discipline (70 percent) and not a general education requirement, and are almost always credit-bearing courses (Henscheid, 2000; Lang & McNaught, 2013). Gardner & Van der Veer (1998b) report that undergraduate capstones should be taught by the students' advisor or a faculty member who knows the skills the students have learned in their major.

It is also important to understand who participates in capstones. In the 2012 National Survey of Student Engagement, undergraduate seniors were asked about their plans for participating in a practicum, internship, field experience, co-op experience, or clinical assignment. The sample for this national survey was 546 U.S. colleges and universities who granted at least a baccalaureate degree, there were163,609 respondents who were census-administered or randomly sampled. Out of the 163,609 seniors, 49 percent reported that they had done a culminating senior experience, 26 percent reported they planned to do one, 16 percent reported that they did not plan to do one, and 9 percent reported that they had not decided (National Survey of Student Engagement, 2013). Results from the 2013 National Survey of Student Engagement were similar. Thirty-three percent reported that they had participated in a culminating senior experience, 33 percent reported they planned to do one, 22 percent reported they do not plan to do one, and 11 percent reported that they have not decided (National Survey of Student Engagement, 2013). Kuh (2008) recommends that academic institutions work towards having their students participate in at least two high-impact practices during their undergraduate time, one during their first year and one during their major. In 2013, nearly four of five seniors met this goal, with 60 percent participating in two or more high-impact practices, and 24 percent participating in one high-impact practice (National Survey of Student Engagement, 2013).

Purposes and Goals of Capstones

The literature reveals that there are common major purposes and goals of capstones in institutions of higher education. This section provides a literature review of these purposes and goals, which include synthesizing learning of students' specific discipline, transitions, career preparation, allowing students opportunities to reflect, assessment, accreditation, and assessing whether discipline-specific learning has taken place.

Synthesize discipline-specific learning. One of the major goals of a capstone is to synthesize learning that happened within the specific academic discipline (Cuseo, 1998). In a survey of 864 senior seminar or capstone courses, the number one goal was found to be to cap or synthesize learning from students' academic disciplines (Henscheid, 2000). The Association of American Colleges and Universities (AACU), through its Liberal Education and America's Promise (LEAP) initiative, created a set of student learning outcomes that, through its research, found that almost all colleges and universities find to be essential. The outcomes are: 1) knowledge of human cultures and the physical and natural world; 2) intellectual and practical skills; 3) personal and social responsibility, and 4) integrative and applied learning (Greater Expectations, 2002). This fourth learning outcome focuses on synthesis of information learned in both students' general studies and specific academic discipline.

Not all capstones connect general education requirements to the specific academic discipline, and in a survey of 864 senior seminar or capstone courses, only a little more than 3 percent said that providing a link between general education requirements and a student's academic discipline was of primary importance (Henscheid, 2000).

Career preparation. The second and third most frequently cited goals of capstones, according to Henscheid (2000), are related to career preparation and connecting learning from the academic discipline to the world of work, and this is also another of Cuseo's (1998) key capstone goals. There are several ways academic institutions can help students make these connections. Employers and alumni from various careers may serve as classroom guest speakers. Student research can be conducted jointly with business professionals and faculty on various business topics. Business professionals can be asked to serve on college advisory boards, and faculty can serve on corporate advisory boards. Academic experiences such as internships or service-learning can be tied to senior-year courses.

Levine (1998) believed the capstone's major purpose should be to help students transition from college to career and support students' efforts in making life choices about family, work and involvement in the community. He believed the capstone should consist of two parts: a senior seminar and a senior project. The senior seminar should help students learn about different careers through a variety of instructional methods such as field experiences and guest speakers. He then called for the senior project to be experiential in nature, using students' knowledge and skills to solve a real-world problem either in the classroom, through an internship, or in a field experience.

As an example of a study about capstones and career preparation, McGill (2012), undertook a mixed-methods case study designed to measure students' voices of their capstone experience. The researcher gathered syllabi from all capstone courses for each major in three of the colleges at California State University Monterey Bay, conducted a faculty focus group, and surveyed students both before and after they completed the capstone. The study showed that students valued the capstone as a way to prepare them for their future careers. They described the capstone as a practical way to prepare them for the real world, and they felt the capstone was important to their future job success and/or preparedness for graduate school

Opportunities for reflection. Another goal of capstones is for students to reflect on their learning. One study examined a business capstone in the School of Business at the University of Notre Dame Australia, Fremantle campus, and specifically, its reflective writing practice (Lang & McNaught, 2013). This required capstone has three phases. In

Phase 1, students write a professional resume and attend workshops on career development. This phase helps prepare students to find their internship placement. In Phase 2, students hear guest speakers from industry and write a reflection that helps them capture the insights learned from those speakers. In Phase 3, students work as interns for 150 hours under the guidance of a professional from industry. Their final assessment, worth 50 percent of their overall course grade, is a written critical reflection of their internship experience.

The coordinator of the business internship hired a reflective writing expert to improve the quality of the written reflective assessments of 41 students from one cohort of this business capstone. The cohort consisted of both domestic, native English-speakers as well as international students from several different countries. The coordinator perceived that students were rushing to complete the written reflections, and perhaps did not understand the importance of the reflective nature of the assignments. Some students found the 150 hour internship requirement to be burdensome. The institution added two reflective writing workshops to Phase 1 of the capstone. In the workshop, several concepts such as Bloom's (Anderson & Krathwohl, 2001) taxonomy were explained, as was the importance of correct grammar and writing mechanics (spelling and punctuation) and the importance of not using business jargon in reflective writing. In the second workshop, students worked with their peers in a small group to view reflective writing samples. Also in this workshop, students wrote a piece of reflective writing and received feedback from the workshop presenter.

This study used a mixed methods design and a practitioner researcher model. Ex post facto research was used to examine the two writing workshops to see if scores on the

Phase 3 assignment increased from before the workshops were implemented into the curriculum.   Results were mixed. Before the reflective writing intervention, 15 percent of students had achieved a grade of *distinction*, and after the intervention, 20 percent achieved a grade of *distinction*. While this was positive, results for English Language Learners was poor, with a 20 percent failure rate, a fact the researchers noted was probably due to the fact that 70 percent of the international students had said they had a lack of prior experience with reflective writing, in contrast with 45 percent of the domestic students. This study showed that many business students were inexperienced in the reflective writing genre and needed to learn reflective writing skills before being asked to complete reflective writing assignments. Besides being a tool for assessment, reflection is often a component of a capstone, and because of its importance to experiential learning, is reviewed in a separate section of this literature review, Part III.

Assessment. Academic institutions and their colleges, departments and programs use senior capstones as a main element of their overall assessment plan (Schilling & Schilling, 1998). Activities included in the capstone can both help students self-assess their learning, measure student preparedness, and provide critical information needed for institutional assessment. Students nearing the end of their time at an institution have valuable insights institutions can use to strengthen, and reevaluate curriculum and student services. Integration and reflection can both be used to help students self-assess their learning, bring closure to their college experience, and help them transition to work and life after college (Schilling & Schilling, 1998).

Capstones can be used as a feedback loop to other courses in the business program that precede the capstone, and having a feedback loop is essential to quality assessment. Feedback should be “extensive and continuing” (Payne, Flynn & Whitfield, 2008, p. 145) between capstone and core business faculty. The loop should contain ways to change business content and instructional methods and then continually assess those changes. Faculty readiness and willingness of core business faculty to make changes is also necessary in closing the feedback loop. As mentioned in a previous section, one of the purposes of portfolios in business capstones is as an assessment tool, and a Strategic Marketing business capstone recommended programmatic/curricular changes in math and marketing research after studying how an e-portfolio was integrated into the capstone course (Mummalaneni, 2014).

The heart of a capstone course is that students bring skills and knowledge from previous courses when they enter the capstone. Expectations from all stakeholders, including core business faculty, capstone business faculty, administrators, and students, are high that students have been well-prepared. Student preparedness in capstones has been studied. An exploratory study was undertaken that focused on whether students were ready to take their senior-level business capstone was conducted by Payne, Flynn and Whitfield (2008). The investigators wondered if students retained knowledge from prior coursework that was expected to be used to complete the capstone. To test this, 80 undergraduate business students in three core business courses were given tests as a normal part of the course, and then retested with the same questions at the end of the course. Students were not told they would be retested. Results showed that students answered an average of 70 percent of the test questions correctly the second time they were given the same test. This concerned the investigators, who felt that knowledge retention should have been higher in order for students to be prepared for the capstone.

As another example of student preparedness, a longitudinal study of capstone business students was conducted from 2000-2008. In the study, researchers were interested in assessing students' perceptions toward their upcoming capstone and in particular, student perceptions about their learning goals, obstacles to learning, and how faculty could help minimize those obstacles. Data collection included in-depth interviews with 12 students who were about to take a business capstone. Data analyses consisted of voluntary in-depth interviews conducted with a capstone faculty member, although it was not the same faculty member who students would have for their capstone. The data were analyzed using qualitative methods, and showed that 8 out of the 12 students interviewed highlighted "learning knowledge and skills necessary for success in future work settings as a primary goals for all course work, including work in the capstone course" (Payne, Flynn & Whitfield, 2008, p. 143).

When asked to rate their perceptions about how much knowledge they retained during their degree coursework that could then be used in the capstone, participants felt they retained less knowledge in economics, accounting and finance, while retaining more knowledge in management and marketing. Overall, the data that were collected and analyzed about students experiences with this capstone over a period of several years allowed faculty to look at curriculum and see how it could be improved to help students better prepare for the synthesize that was intended to take place in the capstone (Payne, Flynn & Whitfield, 2008).

As a result of this study, the researchers had several questions and concerns about business capstones. They wondered whether students are adequately prepared to participate in capstones. While faculty who teach capstones hope students bring core content-related knowledge skills to the capstone, the researchers suggested that, “the literature on learning and knowledge retention and our own experiences in the classroom suggest that this degree of confidence in student readiness for certain capstone-learning challenges might not be justified and should be assessed” (Payne, Flynn & Whitfield, 2008, p. 144) to see what business skills and experiences students are bringing to the capstone and which ones are they leaving behind as they enter the capstone. These researchers recommended better communication between business content faculty and capstone faculty so that capstone faculty could have confidence that core business knowledge and skills are taught and reinforced in content business courses.

Accreditation

Because institutional assessment is often tied to accreditation, institutions are increasingly referencing accreditation bodies such as the AACSP (2003), as well as other accrediting agencies, when building and maintaining their assessment processes in business programs. Business schools plan curriculum goals in part based on requirements of their accreditation. The role of accreditation then, plays an important part in determining the course offerings of business schools and programs. For business programs, there are three primary accreditation options: the American Assembly of Collegiate Schools of Business (AACSB), Accreditation Council for Business Schools and Programs (ACBSP), and the International Assembly for Collegiate Business Education (IACBE). Differences in accreditations include costs, philosophies, curriculum requirements and ongoing requirements.

AACSB, headquartered in Florida, is widely considered to be the premier accrediting body for undergraduate and graduate business colleges and schools. Founded in 1916, it provides accreditation for bachelors, masters, and doctoral business and accounting programs. Currently, 180 academic institutions hold AACSB accreditation in accounting, and there are 711 business schools in 47 countries that have earned AACSB accreditation ("Accredited Institutions", n.d.). Once accredited, institutions must engage in a continuous improvement review every five years. The review includes, but is not limited to, a report, site visit and peer review process. ACBSP, headquartered in Kansas, U.S.A., was founded in 1988 and also provides accreditation to undergraduate and graduate business and accounting programs. Levels of programs eligible for accreditation are associate, baccalaureate, masters and doctoral business degrees, and there are currently approximately 1,009 accredited programs ("Accredited Programs," n.d.). Accreditation is granted for ten years, and a quality assurance report filed every two years.

The least prominent business accreditation, but still well-established, is from the IACBE, which was founded in 1997 and accredits undergraduate and graduate business programs. The primary difference between IACBE and the other accrediting bodies is that IACBE is designed for teaching business programs instead of research-based business programs. There are over 1,000 associate, bachelor's master's and doctoral-level business programs worldwide that have been accredited by the IACBE. The IACBE does not accredit business programs at colleges that only offer associate degrees in business ("A brief history of the IACBE," n.d.).

The role of accreditation in business has been studied. For example, two Australian business professors from Royal Melbourne Institute of Technology based in Melbourne, Australia, posed a research question asking what criteria do Australian business managers use to differentiate MBA programs, and what is the basis for their differentiation. Specifically, they wanted to know whether the basis for differentiation was on the MBA program's accreditation, quality, structure, content, or a combination of those.

In a quantitative research design, they were able to survey 100 business managers, 83 percent of who made hiring decisions, and most of who were in middle to senior-level management positions. Findings showed several factors that were related to the research questions. As to what criteria employers use to differentiate MBA programs, 37 percent said they look for an MBA graduate that has both the criteria they are hiring for and come from an MBA program that has international accreditation. Another survey question asked the managers how they would recommend an MBA program to their friends or colleagues. The largest category of responses indicated that 48% of the managers said they would recommend an MBA program that had international accreditation, 26 percent said they would not recommend any MBA program, and 23 percent said they would base their recommendation of an MBA program based on the capabilities they saw in the colleagues they know of who had graduated from a particular MBA program. As further evidence that accreditation is important to managers, respondents were asked how they could assume an MBA program was a quality program. Fifty-one percent of respondents said that quality could be assumed as long as the program held at least one international accreditation, 51 percent indicated that rankings in news publications such as the Financial Times in the UK indicated a quality program, and only 41 percent said they would assume that a program held quality based on the reputation of the university offering the MBA. These findings indicate that accreditation is one of the primary criteria used to differentiation MBA program in Australia, even more important than the perceived strength of the brand of the university that offers the program (Segon & Booth, 2012).

The Department of Communication at the University of Indianapolis used its one-credit capstone course, and specifically the senior project that is in that capstone, as a quality assessment tool that is tied to accreditation. Faculty used evaluation of the senior projects to better align curricular goals to student learning. For example, the department changed some curriculum to emphasize oral and written communication skills (Catchings, 2004).

Capstone Methods in Business Courses

There are numerous instructional methods used in capstone business courses. Studies and papers about portfolios, case analysis/case studies, living cases, computer-based simulations, and service-learning are described in this section. Literature surrounding lesser-used instructional methods such as role play, storytelling and showing a movie is also reviewed.

Portfolios. Increasingly, schools of business, business majors, and business programs are using portfolios in business courses and capstones (Buzzetto-More, 2010). While there is applied research that has investigated the use of portfolios in business (Amirian & Flanigan, 2006; Mummalaneni, 2014), basic research is limited. Types of portfolios vary depending on the purposes, and while studying different formats such as digital portfolios and print portfolios (Lorenzo & Ittelson, 2005; Yancey, 2009), is relevant and interesting, it is outside the scope of this literature review.

As a definition, portfolios are collections of students' work. Within a capstone, a portfolio might be a collection of students' best work as chosen by the students, or a comprehensive collection of all of the students' work. The portfolio may demonstrate that students have achieved certain outcomes or all outcomes. The portfolio could ask students to include items across all curriculum, or it could focus on items within the specific academic discipline (Schilling & Schilling, 1998).

One of the purposes of portfolios in business capstones is to synthesize information from the capstone and/or discipline-specific courses. In a capstone Strategic Marketing course at Pennsylvania State University, one of the assignments was to calculate the Customer Lifetime Value for different marketing segments and discuss their managerial implications. The professor's goals for this assignment were to allow students to apply theory to solve real-world problems, and well as to synthesize information learned in previous coursework (Mummalaneni, 2014).

Another purpose of portfolios in business capstones is to allow students to engage in integrated reflection. In a Strategic Marketing capstone course at Pennsylvania State University, the professor, who was also the researcher, implemented an e-portfolio into the course in order to "enhance students' engagement in their own learning by reflecting on their performance on various assignments and developing insights into the learning process itself" (Mummalaneni, 2014). He chose one section of the course with 42 business student participants to do a qualitative analysis of the reflective essays that were assigned in the course. The methodology used to conduct the qualitative analysis was not described, but the professor/researcher described several themes that were extracted from the data analysis. About fifty-percent of students reported an increase in self-awareness as a result of the opportunity to write reflective essays. About twenty-one percent of the students linked two of the assignments in the capstone to real-world problem-solving. They felt these assignments would help them make decisions in their own future jobs.

Another purpose of portfolios in business capstones is a tool for career preparation. Business portfolios may contain evidence of school and career accomplishments, transcripts, a written career plan, references, academic awards and honors, and evidence of skills, knowledge and abilities (Amirian & Flanigan, 2006).

Portfolios may also be used as an assessment tool in business capstones. Reviewing actual work students complete in courses allows students, faculty, and program leaders to learn a lot about the kinds of experiences students have had while enrolled in an academic institution (Schilling & Schilling, 1998). A Strategic Marketing business capstone course at the University of Pennsylvania incorporated an applied study about the integration of an e-portfolio into the course to recommend programmatic/curricular changes. For example, it was found that students were having trouble analyzing and interpreting data. Recommendations to include more math and revise the marketing research course were made (Mummalaneni, 2014). While there are benefits to including a portfolio as a component of a capstone, there are limitations. While most portfolios are intended to be summative, students may have a tendency to wait to work on their portfolios until final deadlines approach, which may be in the last portion of the capstone course. This may be stressful for both students and faculty (Schilling & Schilling, 1998).

Case analysis. Case analysis in business is generally the study of a specific problem that an organization had, including the chronology of events and the key stakeholders involved. Also called *case studies*, they are an instructional approach used in business capstones (Forman, 2006). Case studies can build knowledge about specific business concepts. For example, a two-week mandatory MBA course called *Turnaround Management* was delivered at Bocconi University in Milan, Italy, during 1997 and 1998. While the MBA program is in Italy, students in the program come from more than 40 countries. The study's primary goal was to study the course in light of the andragogical didactic model of instruction and analyze the effectiveness of a specific model called the Business Navigator Model. The researchers, Mundell and Pennarola (1999), were hopeful that the study would help readers understand how shifting from pedagogical to andragogical methods could be useful in an MBA program. The major instructional method in this course was the case method, but it was unique in that the student teams actually used raw data about one of three European companies to write their own case. A mixed-methods, exploratory case study was used, and variables included students' perceived course innovation and perceptions of group autonomy and responsibility. Data collection and analysis included pre and post course questionnaires, document review that included student assignments, peer-evaluations, and course evaluations, and direct observation. Findings showed that students took an active role in their own learning and were more motivated by working on a team then if they had worked on the project by themselves.

There were both strengths and limitations of this study. A strength was that questionnaires were administrated by someone other than course faculty, ensuring that students felt there was no direct link between their responses and course grades. Further, the researchers did not give the response data to course faculty until after final grades were entered. Because of the nature of case study research design, results may not be generalizable to other MBA capstone courses (Mundell & Pennarola, 1999). Also, though the authors called this course a capstone, they did not describe whether the course met generally accepted definitions of capstones. For instance, it is unclear whether the course was intended to be summative in nature. Although there were limitations to this study, it is used in this review because it is an example of an MBA capstone course that used case analysis as an instructional method.

A specific example Schon (1987) gives of how a reflective practicum could bridge the worlds of university and practice is by using the case study methodology of teaching. Normally, case studies allow students to analyze a business situation and use underlying theory and business principles to say what they would have done to solve the problems set forth by the case. He calls for deepening the learning in case studies by linking the cases to other disciplines outside of business, and by not only asking students to describe what they would have done to solve the problems, but which interventions they would have used to solve the problems.

Living cases. A living case is a variation of a case analysis where students work with an organization to complete a project (Kerka, 2001). An example of a living case took place at the University of Dayton in its operations management major. The capstone experience, a senior-level operations management course, is offered in a two-semester format, meaning part of the capstone is in one semester and the rest is in another semester. This allows students and the business clients they work for a time space between planning and implementation. In the course, faculty find projects from real companies for student groups to complete, and students are the consultants to the companies. The author of the article admits that for various reasons, not all student consulting projects are successful. However, the author has quantitatively identified that student consultants have saved businesses over $4 million in the eight years of offering this capstone experience (Gorman, 2010). As an example of another living case, an MIS department incorporated a capstone where project teams met with a corporate sponsor to complete a major project. Examples of projects included developing an IT plan, developing a corporate Intranet, and developing a Windows-based database (Novitzki, 1998).

A variation of the living case is called the live in-class CEO intervention. Used by MBA and Executive MBA programs, in this method, an executive with high-level organizational authority brings to the course a real problem for which no solution has been found. The executive becomes part of the teaching and learning process by bringing his/her business expertise to help students work through the business problem. This method is known to have first been conducted with MBA students at Loyola College, Baltimore, Maryland, in 1973. It is first known to have been conducted with undergraduate management majors at Rockhurst College in Kansas City, Kansas, in 1976 (Rashford & de Figueiredo, 2011). No published empirical studies that address the impact of this method could be found during the literature search.

Computer-based simulations. Computer-based simulations are used to bridge the gap between theoretical knowledge and applied learning. Experiential in nature, simulations are often used by student teams who work together to solve simulated business problems. Often, instructors can initiate settings which allow the computer simulation to react based on students' decisions.

Several colleges and universities that are using computer-based simulations in their capstones. A course called Enterprise Integration was the capstone course as part of the e-business management undergraduate at the University of New Brunswick. The course, which focused on Enterprise Resource Planning, had a lab component that included computer software called SAP R3 and was intended to be a hands-on experience for undergraduate business students that would allow them to “use previous learnings to address and solve business problems” (Davis & Comeau, 2004, p. 5). Students were evaluated in three ways: a reflection log, exercises completed in the computer simulation, and completion of a take-home case study. Course instructors and staff had numerous technical operational issues with setting up, testing and implementing the computer-simulation for the course.

At the end of the course, the 25 students who had taken the course were given a questionnaire that was intended to measure perceived learning of the course outcomes, students’ previous experience and knowledge of Enterprise Resource Planning, suggestions for improvement of the course, and students’ perceived usefulness of the course. For purposes of data analysis, students were broken into four clusters. Quantitative data analysis including hierarchical cluster analysis and ANOVA tests (to test for significant differences in the group means), as well as post-hoc tests were performed to determine between which of the four clusters the differences were significant. Results showed that students in all four clusters rated the course highly (average mean 4.0 out of 5.0) in terms of its ability to provide skills and knowledge that would be useful to them in the job market (Davis & Comeau, 2004), and there was no significant difference in any of the clusters. A limitation of this study was that there was no pre-course evaluation to measure pre-and post-differences of gains in student learning. Another limitation was that the study did not describe the rationale for how the students were grouped into clusters, so it is impossible to hypothesize why the differences between clusters might have existed.

The purpose of a study of a capstone business strategy course was to explore a computer-based simulation and determine whether there would be a difference in student performance on the final exam whether a simulation was used or whether a combination of paper and oral presentation were used. This experimental research design involved a control and treatment group. Two sections of the same course (a treatment and control group) were taught by one instructor. While both groups had identical course curriculum, for the final project, the control group was assigned a group paper and oral presentation. Quantitative data collection and analysis were done of final exam scores, with the final exam consisting of a case analysis. Further data collection and analyses were performed on course evaluations and informal student comments, and these were analyzed qualitatively.

Results showed no significant difference in exam scores between the control and treatment groups. Informal student feedback indicated that the treatment group, the one that used a simulation for the final exam, seemed to be more emotionally engaged in the simulation than in the paper. Limitations included the difficulty of generalizing the results to a larger population because two identical business strategy courses were taught over the course of one term. Replicating the experiment with the same instructor over multiple terms would be one way to increase generalizability. Another potential limitation may have been the measure itself, the final exam. If this exam did not measure what the students learned, a question of having a valid measure to begin with, then the results may have had less merit (Reid, Brown & Tabibzadeh, 2012).

Other computer-based simulations also exist. For example, an agribusiness capstone uses a computer-based simulation called The Business Strategy Game: A Global Industry Simulation by Thompson and Stappenback to implement a strategic plan for a fictional organization (Fairchild & Taylor, 2000). Bethel University's College of Adult and Professional Studies uses a computer-based simulation called CAPS-SIM in its BUSN480 Corporate Finance course to give students a learning experience where they make decisions that have a financial impact on a fictional company's success. One of the course outcomes asks students to "integrate learning from experience and other business management classes including human resource management, ethics, marketing, economics, and others, with financial considerations, to practice making business decisions in a simulated business environment" (Syllabus, 2013). Capstone is the name of a strategy computer-simulation widely used at the MBA and undergraduate business levels. Ethics-LX can be customized to provide learning in business ethics, quantitative analysis, and more. The Green Business Laboratory has been used in MBA strategy capstone courses, and has also been used in senior-level undergraduate business courses (Heuer, 2010).

Other capstone instructional methods. In addition to the more common capstone methods, other, less-often used methods also exist. These include role play, storytelling, and showing a movie. For example, an undergraduate corporate finance capstone course used the movie *Barbarians* at the Gate as its main teaching tool. This movie is based on the true events of the battle for and buyout of RJR Nabisco by

Kohlberg Kravis Roberts & Co. in 1988. The capstone, using the movie, brought together such concepts as agency theory, capital budgeting, mergers and acquisitions, and business ethics. Students were asked to evaluate their perceptions of the capstone course as a learning experience, which besides watching the movie in class, included papers and class discussions. Among other findings, students reported that the capstone brought financial issues into a real-world setting (Nofsinger, 1995).

In a course that used the role play method in its capstone, students were placed on a cross-functional team for a fictional manufacturing company. Students were given roles, and the roles were intentionally not the same as students' majors. Students performed business tasks that were related to their function, which helped them learn how to understand the other functions of their team (Hartenian, Schellenger & Frederickson, 2001).

Service-Learning

Performing service-learning in a capstone course combines two of Kuh's (2008) high-impact practices: service-learning and capstones. For example, an undergraduate business major at a U.S. Midwestern public university has a business strategy capstone course. The course is intended to synthesize both discipline-specific business courses and general education skills such as communication skills and critical thinking. Students work in teams as process consultants to a real-world client, usually small businesses and local community organizations. Students use strategic management theories and tools used in the course to conduct strategic activities for clients such as conduct an internal and external analysis and perform a gap analysis. In the last two weeks of the term, students prepare and executive a final oral presentation and written report for their client and complete a reflection report. The reflection is one of the assessments used in the course and is used by course instructors to assess the impact the service-learning had on students (Robinson, Sherwood, & dePaolo, 2010).

This section outlines the history of service-learning in higher education, as well as access to and participation in service-learning. The purposes and goals of service-learning in higher education are reviewed, and the four broad outcomes/impacts of service-learning and some of their related studies are discussed.

Definitions

Service-learning is an educational pedagogy that is derived from experiential learning theory. Since its conception in the 1960s, many terms such as collaborative learning and community-based education (O'Grady, 2000) have been used to describe service-learning, so it is important to define what service-learning is for purposes of this study. According to the National and Community Service Trust Act of 1993, service-learning is a "method under which students… learn and develop through active participation in thoughtfully organized service that: is conducted in and meets the needs of a community and is coordinated with… an institution of higher education…and with the community; helps foster civic responsibility; is integrated into and enhances the academic curriculum of the students… and includes structured time for the students…to reflect on the service experience" (p. xx).

Building from that Act, Bringle and Hatcher (1996) emphasized that service-learning is "a course or competency-based, credit-bearing educational experience in which students (a) participate in mutually identified service activities that benefit the community, and (b) reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of personal values and civic responsibility" (p. 222). Prominent service-learning expert Barbara Jacoby (1996) offered a similar definition, stating, "service-learning is a form of experiential education in which students engage in activities that address human and community needs together with structured opportunities intentionally designed to promote student learning and development. Reflection and reciprocity are key concepts of service-learning" (p. 5). Eyler and Giles (1999) offer support to those definitions, by saying that service-learning links academic study with service and must contain a reflective component.

Service-learning is distinguished from other types of service programs. In defining service-learning, there is a continuum of service opportunities that students can engage in and that the continuum depends on the activity's intended purpose, degree of emphasis on the service and the learning, and the intended beneficiary of the service. The continuum consists of five types of service programs: volunteerism, community service, internships, field education and service-learning (Figure 2.2) (Furco, 1996).

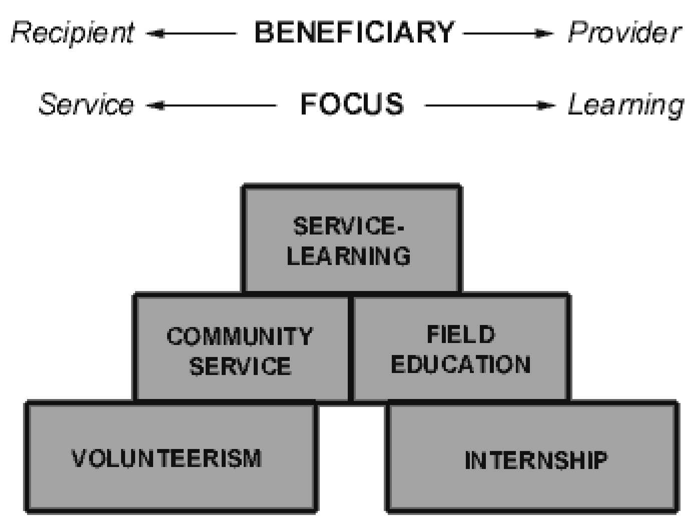

Figure 2.2. Distinctions among service programs (Furco, 1996)

In volunteerism, the primary recipient is the person, group or community being served by the volunteer. The intention is to help and there is little focus on academics or learning. Further along the continuum is community service, which still primarily benefits the recipient of the service, but can be a learning experience for the student who engages with the community. Although community service is usually done on a voluntary basis, it is not typically part of a formalized educational curriculum, thus it may lack academic credibility. Moreover, community service sometimes refers to court-imposed work (Jacoby, 2015).

In an internship, students perform paid or unpaid work for a for-profit or not-for-profit organization. Students are the primary beneficiary of the service activities and the focus of the activities is what the students learn. If an emphasis is placed on the service activities, internships become closer to becoming service-learning. Also on the continuum is field education, which consists of co-curricular service activities that are related to academic studies. Student teaching is an example of field education, and emphasis is on what students will learn by being exposed to the community environment. Lastly, service-learning, which is intentionally located in the center of the model, expands on volunteerism and community service by including experiences and structured reflection that are tied to academic learning outcomes. Service-learning is intended to equally benefit the students and the recipients of the service activities, and there is an equal emphasis on both the service and the learning (Furco, 1996; Jacoby, 2015).

While service-learning is best known as pedagogy, and secondarily thought of as a social movement, there is a desire to develop it into its own theory instead of using

Dewey and others as the theoretical framework for service-learning (Giles & Eyler, 1994). Doing so would develop another framework with which to test hypotheses and build on previous research, and would further legitimize service-learning.

History of Service-Learning in Higher Education

Service-learning in the United States can be traced to the 1800s, although the term was not used until much later. Jane Addams was born in 1860 and attended both a liberal arts college and medical school. She and Ellen Gates Starr founded Hull House in Chicago in 1889 as a central charitable, cultural, educational and political hub to help the immigrant families in that neighborhood. John Dewey visited Hull House in 1891 and was so impressed with it that he became a regular visitor as well as a founding member of the Hull House's Board of Trustees. His writings reflected his work with Hull House, as he wrote, "closer contact with neighborhood conditions not only enriches school work and strengthens motive force in the pupils, but it increases the service rendered to the community" (Dewey & Dewey, 2003, p. 205-206). Addams did not view service as a program to help those who were less-fortunate, but instead viewed it as citizens working together to enjoy a better democracy. Her emphasis was on building relationships, not on measuring program success (Dewey & Dewey, 2003).

Service-learning is often rooted in civics, which prepares people to be involved members of society. French born Alexis de Tocqueville, who traveled and studied in the United States, believed that a healthy democracy was predicated on participating in our communities, writing, "all the citizens are independent and feeble; they can do hardly anything by themselves, and none of them can oblige [others] to lend their assistance. They all therefore become powerless if they do not learn voluntarily to help one another"

(Tocqueville, 1945, p. 115). Arthur Dunn (1907) wrote the first civics book for educators and was the first civics educator to say that students should participate in practical experiences within their communities as part of their civics education. Dunn wrote, "The best of your life comes from participation in the life of your community…giving to and receiving from the community's life" (p. 9). He felt that American citizens had a personal responsibility to participate in their communities. The first community that most students participate in is school, and the second should be their larger community. In this way he was like Glaser (1941) and Dewey (1916), who both believed strongly that a strong educational system was important for a strong democracy, and Jacoby (1996) later argued that service-learning is one of the most effective ways to produce educated citizens who can contribute to promoting a successful democracy.

Due to the efforts of Dunn and others, social studies curriculum was reformed in 1916 to include a course called Community Civics, and this curriculum was the forerunner to today's middle school civics (Hepburn, 1997). Dewey's (1916) ideas of this time also helped reform social studies to include community experiences. His ideas called for a balance between school learning and learning from experiences in society.

National initiatives focusing on service helped pave the way for much later educational service-learning initiatives. For example, President Roosevelt established the Civilian Conservation Corps in 1933 through the Peace Corps. In addition, the Youth Conservation Corps began as a pilot program in 1971, and grew to include 46,000 youth in 1978. The program focused on summer conservation projects, and the youth were paid with federal funds. This program was, for the most part, stopped in 1980 when federal funding was taken away. A similar program also began in the late 1970s called the

Young Adult Conservation Corps (YACC). It had an annual federal appropriation of $260 million and it employed approximately 25,000 youth to work on conservation and community service projects. Federal funding for this program also ended in the 1980s. Fortunately, several states were able to take over the funding; for example, California started the California Conservation Corps (CCC) in 1976 to continue providing youth with the opportunity to work on conservation efforts ("History of the Service and Conservation Corps Movement", 2011).

Prior to the emergence of service-learning in the United States, President Kennedy's creation of the Peace Corps in the 1960s, followed by the creation of Volunteers in Service to America in 1965, engaged college students in social problems within their communities. The term service-learning found its way into higher education in 1964 when members of the Southern Regional Education Board in Oak Ridge, Tennessee, developed a community service program. This program eventually expanded to 15 states and provided internships that were in the areas of social and economic development (Wutzdorff and Giles, 1997). In 1967, Robert Sigmon and William Ramsey used the term service-learning at a meeting of the southern Regional Education Board (Jacoby & Associates, 1996). In 1969 the National Center for Service-Learning was established. This center did not last very long, but colleges continued to establish their own networks and service-learning continued to grow in the 1970s. Several college-based service-learning programs started in 1972 thanks to a federal program called the University Year for Action. The University of Vermont and Michigan State University both stated programs at their schools under this federal program (Wutzdorff & Giles, 1997).

The service-learning movement of the 1970s on college campuses did not last, as the service was not well-integrated into curriculums and programs. However, service-learning saw resurgence in the 1980s when presidents from Stanford University, Brown University, Georgetown University and the Education Commission of the United States started Campus Compact: The Project for Public and Community Service. Beginning with a base of 23 member schools, Campus Compact now has over 1,120 academic institutional members and is a major promoter of service-learning programs (Campus Compact, 2013). In 1982, the National Society for Experiential Education founded a Special Interest Group in Service-Learning (Wutzdorff & Giles, 1997). 1988, the Commission on Work, Family and Citizenship was established to consider how to promote citizenship education through service-learning. The commission's final report encouraged all states to adopt school-based service-learning programs in their academic curriculums, and also encouraged states to provide financial assistance to make this happen (need source). In 1990, President George H.W. Bush signed the National and Community Service Act with the primary goal of encouraging volunteer service and renewing the ethic of civic responsibility (Melchior & Bailis, 200). In the same year, the White House Office of National Service and the Points of Light Foundation were established to encourage youth voluntary service (Jacoby, 1996).

In 1990, the United States Congress passed the National and Community Service Trust Act. This law was the first time service-learning was federally funded, and it also created the Commission on National and Community Service. In 1993, the National and Community Service Trust Act was passed and signed by President Clinton. This act changed the Commission into the Corporation for National and Community Service (the

Corporation). It also made the Corporation the central organization of Learn and Serve America (formerly known as Serve America), Senior Corps, and AmeriCorps (Ryan, 2012).

While funding AmeriCorps and Senior Corps was important, they key part of the National and Community Service Trust Act was Subtitle B which supported service-learning in K-12 schools as well as colleges and universities. The Learn and Serve America program became the most important, and sometimes, sole federal funding for service-learning in K-12 schools and higher education. When Congress passed its 2011 budget, it eliminated funding for Learn and Serve America. This federal funding, about $40 million per year to both the K-12 and college level, has not been restored, so currently there is little to no federal funding for service-learning initiatives in K-12 schools or higher education. Although federal funding does not exist, the National Service-Learning Clearinghouse (NSLC) which was funded and built through Learn and Service America program still exists, and remains "the country's most comprehensive service-learning resource" (Ryan, 2012, p. 8) that provides information about service-learning to community partners, educators, parents and students.

The research agenda of service-learning was elevated in 1994 when the peer-reviewed periodical Michigan Journal of Community Service Learning was launched. There are now other research publications that focus on service-learning as well as state, national and international conferences, such as the International Association for Research on Service-Learning and Community Engagement, that focus on various aspects of service-learning. In addition, there are national and international educational conferences whose primary focus is not on experiential learning or service-learning, but whose speakers and articles include service-learning (Jacoby, 1996). The Carnegie Foundation for the Advancement of Teaching added a new classification that has increased the prominence of service-learning in many higher education institutions. To date, the Elective Classification on Community Engagement has been earned by over 300 institutions (Jacoby, 2015).

Participation

In recent years, as service-learning has become more popular in both K-12 and higher education, there is more data available about student participation in service-learning. In the 2012 National Survey of Student Engagement, undergraduate seniors reported low rates of participation in a community-based project such as a service-learning project in at least one of their college courses. The sample for this national survey was 546 U.S. colleges and universities who granted at least a baccalaureate degree, and is based on responses from 163,609 seniors who were census-administered or randomly sampled. On a scale from very often to never, 52 percent said they had never participated, 29 percent said they had sometimes participated, 12 percent said they had often participated, and 7 percent said they had very often participated.

Data also exist on how many undergraduate business students participate in service-learning, but could not be found for graduate business students. In 1999, it was reported that about two million students (not just business) participate in service-learning at four-year colleges and universities (Shumer & Cook, 1999). The National Survey of Student Engagement (2012) reported that in 2012, 40 percent of senior undergraduate business majors self-reported that they had participated in some kind of service-learning experience during their senior year. Fifty percent of these seniors were enrolled full-time at their academic institution. In this same survey of senior undergraduate business majors, 41 percent reported that they had participated in a culminating experience before graduation (NSSE, 2012). The numbers of undergraduate business majors increased slightly in the National Survey of Student Engagement's 2013 survey, where it was found that 52 percent undergraduate business majors self-reported that they had participated in a service-learning experience during their senior year (NSSE, 2013).

Not every college student participates in service or service-learning. In a large longitudinal study conducted four years after students entered college, students were asked how long they spent volunteering during their last year in college. Most students (over 61 percent) said they did not spend any time volunteering. Over 26 percent spent between less than one hour per week and two hours per week. Only about 5 percent spent more than six hours per week. A limitation of this study is that students were only asked about volunteer hours during college, they were not asked about hours they may have spent during service-learning experiences in college (Astin, Sax & Avalos, 1999). Still, there is opportunity for colleges to improve the numbers of students who engage in service as part of their academic program.

Best Practices of Service-Learning in Higher Education

A review of the history of service-learning now turns to the major best practices of service-learning in higher education. These include increased civic-mindedness, appropriate duration and intensity, integration of learning and service goals, connecting theory to practice, and reciprocal collaboration.

Increased civic-mindedness. Service-learning is attractive to higher education because it can prepare students to be involved members of society. Why is participating in democracy important? Dewey (1916) believed that a strong educational system was important for a strong democracy. An emphasis on democracy helps people build a sense of community, discuss the meaning of community, to allow people to relate to each other using events in history (Palmer, 1999), coexist as a community (Horton, 1990), and help students see themselves both as individuals and as part of a larger community with social problems that students might be able to impact (Rhoads, 1997).

Mabry (1998) studied civic-mindedness when he looked at a sample of 144 undergraduate students, average age 20, participating in service-learning through 23 different college courses. Most of the courses were in education, human resources, and the arts and sciences. The independent variables were number of service-learning hours during the semester, amount of contact with service beneficiaries, frequency of reflection, and variety of reflection (journal, paper, report, online discussions, discussing in class, talking with instructors, talking with service beneficiaries), gender, frequency of prior volunteering, ethnicity. The dependent variables were personal social values, civic attitudes, self-perceptions of the academic benefits of service-learning. Results showed that those with less prior volunteer experience had the most significant positive change in civic attitudes. Contact with beneficiaries was also important, as students who interacted a lot with their service beneficiaries had a significant positive change in their personal social values and civic attitudes.

Appropriate duration and intensity. One way to categorize service-learning experiences is by a combination of time frame and goals. There are intensive, one-time/short-term, extra-curricular, and curricular models. Each model has different time frames, goals and activities that can be accomplished. Intensive service-learning generally means more than ten hours per week for a sustained period of time in an environment where the student lives and works (Albert, 1996). Intensive service-learning can include both one-time and short-term experiences which introduce students to their communities through events and short visits to community settings. These events can help inspire students towards further service as well as promote team-building among students by allowing a group to work together to achieve a goal (McCarthy, 1996).

There have been studies to add to the body of knowledge surrounding how long service-learning experiences must be to achieve their learning goals. Eyler & Giles (1999) measured quality of student thinking and problem solving in a course with a service-learning component, and found that students did not self-report an increase in their own critical thinking skills over the course of a one-semester project. The recommendation was for students to have multiple service-learning experiences over a longer period of time. Markus, Howard & King (1993) found that students who spent at least twenty hours over a semester in a service-learning project have more positive attitudes about community involvement and more awareness of social problems. Mabry (1998) found that undergraduate students in education, human resources and the arts and sciences had a significant positive change in their civic attitudes when they served for 15-19 hours during a semester, while students who served less than 14 hours during a semester perceived significantly less academic benefit from their project.

In a business ethics course in an MBA program at the University of Denver, graduate business students served in the community for 8-10 hours in a 10-week quarter. Findings of the study revealed that of the 71 students who were surveyed, about 66 percent felt that the amount of the service requirement was about right, while about 20 percent felt it was not enough time. The researchers did not say in their study what the roughly other 12 percent of students perceived as the right level of time (Wittmer, 2004). In an application paper based on service-learning performed during an intermediate accounting course at a college in Massachusetts, USA, each student or pair of students performed 10-12 hours of service-learning work throughout a traditional semester course. When the community organizations were surveyed, eight out of the 28 respondents (29%) said they felt the length of the service-learning was too short, preferring a project length of 25-35 hours. It should be noted, however, that these same 28 respondents all said they had benefited from the students' work, and 12 out of the 28 (43%) rated the students' work as "invaluable" or "great" (Gujarathi and McQuade, 2002). Therefore, the optimal length of time of service-learning in academic courses is inconclusive.

Time can be a barrier to students' willingness to participate in service-learning. In one study of undergraduate and graduate business students, the sample was asked about their perceptions of service-learning. Results showed that students have a positive perception about community service but a less positive perception about service-learning. They agreed that it is important to participate in community service, but less likely to say they would register for a class that had a service-learning component. Students cited lack of time and work pressures as key reasons why they would not want to register for a class that contained service-learning. The biggest limitation to this study is that the students who were surveyed did not complete a service-learning or community service project before this survey. All they did was a read a scenario about how students signed up to do a community service project through Jr. Achievement (McCarthy & Tucker, 1999).

Integration of learning and service goals. Many believe that service-learning can be extra or co-curricular, so both are described here. In extra-curricular service-learning, the service is done outside of a course. Examples might be service done with groups of residence hall students, or service done by fraternities and sororities, or projects done by sports teams. Critics of extra-curriculur service-learning say that since it is not tied to course outcomes and does not provide opportunities for structured reflection, it does not meet the definition of service-learning (Bringle & Hatcher, 1996). An example of an extra-curricular service-learning project was done at the University of the Sunshine Coast in Queensland, Australia. This service-learning activity was designed to have undergraduate business students provide auditing services for three non-profit associations located in Queensland. This was done as a non-credit bearing activity supervised by a faculty member in the college of business. Nine undergraduate accounting majors chose to participate in this activity (Laing, 2013). The activity was not tied to course outcomes, because it was not part of a course, and it did not have a reflective component, which means it does not fit the definition of service-learning (Bringle & Hatcher, 1996).

In the co-curricular model, service-learning is integrated into a course more than just once. Academic outcomes are tightly woven with the goals and activities of the service. This could range from making a service project a graduation requirement to a fourth-credit option, where a fourth credit that focuses on service could be added to a three-credit course (Enos & Troppe, 1996).

Connecting theory to practice. Students can sometimes struggle to find a connection between academics and their personal lives or to their communities. In a study of 1,500 students from twenty colleges and universities, surveys were conducted before and after one semester of service-learning. Qualitative interviews of 66 students at six colleges were also conducted. One of the program characteristics that was shown to be a predictor of meeting the course learning outcomes was called application. This means the degree to which students can link service to academic classroom learning (Eyler & Giles, 1999).

In the 2012 National Survey of Student Engagement, undergraduate seniors were asked about their service-learning experience. Results showed that 59 percent of responding seniors reported that their service-learning experienced helped them understand the connections between their studies and real life very much, while 30 percent reported that their service-learning experience only somewhat helped them understand the connections between their studies and real life, and 11 percent reported that their service-learning experience do not help them understand the connection between their studies and real life (National Survey of Student Engagement, 2012).

Reciprocal collaboration. Effective implementation of service-learning in higher education involves a three-pronged "kaleidoscope" (Enos & Troppe, 1996, p. 34) of collaboration, reciprocity and diversity. Collaboration between the university staff, students, and community leaders is key to building trust, sharing resources, and accomplishing goals.

Reciprocity is the concept that both those doing the service and those being served are both teacher and learner (Jacoby, 1996; Rhoads, 1997). Without this, there is danger that both parties will be exploited, and paternalism, the tendency for those serving to view themselves as trying to fix communities by doing good works, could supplement for helping communities learn how to serve themselves (Kendall, 1990). Service-learning can allow students to interact with those who are different from them. It can also help students understand issues such as privilege, prejudice, power and oppression. It is important to view all three of these through the kaleidoscope, and just like the kaleidoscope changes every time it is viewed, the mixture of collaboration, reciprocity and diversity will change depending on the situation (Enos & Troppe, 1996). Sigmon (1979) also addressed reciprocal collaboration early in the history of service-learning, when he proposed three principles of what he labeled as community service-learning. The first principle was that those being served control the services that are being provided. The second principle stated that in time, those who are being served will be better able to serve themselves. The third principle stated that those who serve are learners. Whitney, McClure, Respect & Clayton (2007), summarize importance of reciprocal collaboration by saying all participants benefit from each other by learning, growing and changing, and in following fundamental principles of servant leadership.

Outcomes of Service-Learning

Now that best practices of service-learning have been reviewed, the outcomes that are based on these best-practices are addressed. There are four broad domains that impact students who participate in service-learning: academic and cognitive development, civic and ethical development, personal and social development, and career and vocational development. Each of these impacts will be discussed, including studies that show the impacts on students.

Academic and cognitive development. The impact of service-learning on the academic and cognitive development of students is well-developed in the literature.

Service-learning has a positive impact on the content knowledge and skills of students from a wide variety of disciplines. For example, in the 2012 National Survey of Student Engagement, undergraduate seniors were asked whether their service-learning experience helped them understand the subject matter of the course. Seniors overwhelmingly (55%) reported that their service-learning experience helped them understand the subject matter of the course very much, while 32 percent reported that it helped them somewhat, and 13 percent reported that it did not help them at all (National Survey of Student Engagement, 2012).

The American Association of Community Colleges (AACC) was awarded a three-year grant by the Learn and Serve America program which is run by the Corporation for National and Community Service. The grant included thirteen community colleges, and the AACC measured the potential academic learning outcomes of service-learning in six areas: critical thinking; communication; career and teamwork; civic responsibility; global understanding and citizenship; and academic development and educational success.

In this mixed-methods study, the population, community college students, was located in large and mid-sized cities as well as rural communities. Over a two-year period, surveys were administered to students in courses that both required service-learning as well as those that made it an option. Survey questions focused on the six potential academic learning outcomes stated above. In addition, demographic questions were asked to distinguish those who participated in service-learning from those who did not. While the article did not specify the sample size, there were 2,317 responses; 1,687 from service-learners and 630 from non-service- learners. Data analysis showed that in all six academic learning outcomes, the service-learners scored higher than the non-service-learners, and scored highest in the academic development and educational success outcome. Participation in service-learning was a predictor of increased academic success (5.03 out of 6.0).

In this same study, five focus groups consisting of students who had participated in service-learning were done; most of the students had also participated in the survey research. One of the questions asked was, “Did participating in service-learning help you to learn or understand the course material better?” (Prentice & Robinson, 2010, p. 7). Qualitative data analysis found that students learned more from service-learning than through textbooks, they felt they were better able to apply course materials, and the experience made class more relevant. There were limitations in this study. The response rate to the survey research is unknown because the sample size was not provided. Focus groups were not conducted with non-service-learners like they were with the service-learners. Because the population was community college students, results may not be generalizable to other levels of college students. Because program directors at the community colleges chose which courses would be surveyed, there is the possibility the program directors chose courses they knew might provide positive results for their colleges. Finally, the length of students’ service-learning experiences was not considered, and could have had an impact on students’ experiences and thus the results of the study (Prentice & Robinson, 2010).

Service-learning has also been shown to improve higher-order thinking skills. For example, a study involved beginning nursing students who participated in a service-learning experience. The theoretical framework used by this study was Paul’s (1993) components of critical thinking dimensions: (a) elements of reasoning, such as the ability to identify problems and develop more than one point of view; (b) abilities of reasoning, such as the ability to evaluate information, compare situations, and generate solutions, and (c) traits of reasoning, such as humility, courage, fair-mindedness, confidence, integrity, and the ability to explore thoughts and feelings.

The purpose of the study was to describe the growth in critical thinking achieved by nursing students through service-learning experiences. The sample was sophomore baccalaureate nursing students enrolled in a clinical nursing course. The service-learning experience required of students consisted of identifying a community agency, researching it, working at the agency for 14 hours, write an ongoing reflective journal, and present a poster session at the end of the course. The study used a qualitative design, and data analysis was done of the written journal reflections, summative evaluation of the service-learning experience, and coding of data into Paul's (1993) critical thinking dimensions. After coding, themes were developed. One of the themes was development of a professional self-perspective. Students were able to develop multiple points of view, which resulted an increased ability to care for others, a necessary skill in the nursing profession. Students also showed growth in traits of reasoning such as confidence and humility, and because of their interactions with the community agencies, showed increased communication skills. A second theme to come out of the study was the development of a community perspective. By using the critical thinking skill of reasoning, students reported that the service-learning helped them promote nutritional and other kinds of health in the communities they served. Students also developed the critical thinking trait of fair-mindedness because their experiences were often times with different cultures.   Overall, researchers found that service-learning had several impacts on the critical-thinking skills of nursing students (Sedlak, Doheny, Panthofer & Anaya, 2003).

Persistence. Retention, also called persistence, is a key priority of colleges and universities. Because adult undergraduate and graduate students comprise approximately 30 percent of all enrollment in the United States (U.S. Census Bureau, 2010), colleges and universities need to understand how to retain them. Service-learning has been shown to impact academic persistence, or re-enrollment into a college. Research indicates that service-learning influences students' intensions to re-enroll in their existing academic institution, as, among other factors, it enhances relationships with peers and faculty (Gallini & Moely, 2003).

Service-learning can also help institutions keep students enrolled. For example, a study was done of first-year undergraduate students from 11 academic institutions that were all members of the Indiana Campus Compact. The primary purpose was to see whether participation in a course that included service-learning during a fall semester was related to intentions to stay enrolled the next fall semester. Courses in the areas of sciences, education, liberal arts, social work, law and technology were chosen, and both courses that contained service-learning as well as courses that did not were part of the sampling frame. Survey research consisting of pre-semester and end-of-semester questionnaires were completed by a sample of undergraduate students, mostly females (76.3%), with an average age of 18.   Across the 11 campuses, there were 805 respondents out of an unspecified number of possible students. Results showed that students enrolled in service-learning courses were more likely to say they would come back than students enrolled in non-service-learning courses, even when controlling for pre-course intentions, and when mediated by the quality of the experience (Bringle, Hatcher & Muthiah, 2010). Limitations of this study included an unspecific sample size which did not allow authors to report a response rate and possible variability in the types of service-learning experiences offered in the courses.

Civic Outcomes

There have been several studies that have found that service-learning impacts civic responsibility in students who participate. In particular, service-learning experiences have been shown to have a positive effect on students' sense of social responsibility and citizenship skills (Levine, 2010; Astin & Sax, 1998; Eyler and Giles, 1999), and service-learning also develops the intention to do more volunteer work in their communities (Astin, Vogelgesang, Ikeda & Yee, 2000). In the mid-1990s, a national study that included over 20 U.S. colleges and universities called The Comparing Models of Service-learning was conducted. There were two purposes of the study. The researchers sought to discover whether students who chose service-learning differed from those who did not in several outcomes: attitudes, skills, perceptions and values. A secondary purpose was to determine what impact service-learning had on those outcomes. Selection of colleges was based on whether they had several service-learning opportunities available. Another basis was geographic location so that schools from all parts of the United States were represented. Most of the students surveyed participated in service-learning, although some did not.

For this study, a sample of over 1,500 students were surveyed both before and after they performed the semester-long service, which included options such as service within internships, classes in discipline-specific areas such as education and social work, and general education courses. One of the significant impacts was that service-learning had a positive impact on citizenship confidence, which includes the belief that students can be effective in their community. Another significant impact of service-learning was on student values. The results showed that service-learning impacted students' value of wanting a career helping people and wanting to volunteer time in their community. Another impact that this study found was on the way students think about social issues. Specifically, service-learning was found to be a significant predictor of students' perceptions of social justice. The findings also revealed that students were more likely to be able to see different perspectives, and view societal problems as systemic and not just the fault of individuals (Eyler, Giles and Braxton, 1997).

Service-learning also has an impact on commitment to service. Studies show that when students engage in and meaningful work in communities through service-learning, it enhances their commitment to community service (Eyler & Giles, 1999; Marcus, Howard & King, 1993). For example, a large, longitudinal study of undergraduate college students in the mid-1980s was performed using several data sets. Results showed that there was a correlation (r=.22) between the how much students volunteered during college and how much they volunteered after college. For instance, spending six or more hours volunteering during the last of year of college almost doubled chances of volunteering after college (Astin, Sax & Avalos, 1999).

Career Outcomes

Service-learning has been shown to impact students' current and future jobs and careers in numerous ways. As one impact, service-learning increases skills students need to be prepared for the world of work. For example, in a large study of community colleges students, already described in this chapter, learning outcomes related to careers were found to have a higher impact on students who participated in courses that included in service-learning than courses that did not. The learning outcomes related to careers included being able to work well in teams, understand the daily responsibilities of a job or career in which they were interested, leadership skills, and obtaining skills that would make contributions to society (Prentice & Robinson, 2010). As another example, in a large, longitudinal study of undergraduate college students, participating in service (not service-learning) during the undergraduate years did show a significant positive effect on the student's perception of how well the undergraduate college prepared the student for work. However, participation in service during college did not have any effect on students' satisfaction with their employment after they left college (Astin, Sax & Avalos, 1999).

Personal and Social Outcomes

Perhaps, above all, service-learning has been shown to enhance the personal and social development of college students. It can increase participants' self-esteem, self-efficacy, and likelihood to engage in prosocial behaviors. It has also shown to have positive effects on students' motivation for learning and their levels of civic, social and academic engagement (Eyler & Giles, 1999). Service-learning can also impact emotional development of students. For example, a university in Scotland added a service-learning honors course in its Department of Urban Studies. Service-learning experience was integrated into the course by having students completed six hours of volunteer service with a variety of public agencies over a period of three months. A study was undertaken to understand the effects of service-learning on students in higher education. There were 14 students in the course, and all participated in the study. The research design was qualitative case study, and data collection consisted of focus groups and in-depth interviews. The coursework required of students was also included as data, as was a Personal Social Values questionnaire. Findings showed that service-learning had a personal transformational impact on them, reporting that the service-learning experience had changed them both intellectually and emotionally. The transformation occurred through service-learning work itself as well as classroom discussion and critical reflection activities that were require during the course. Students gained more confidence from the experience, some felt more competent in their academic studies, and some reported that the experiences caused them to think more deeply (Deeley, 2010).

Outcomes for Business Students

In regards to service-learning in graduate business education, "there has been little empirical data collected in terms of the value and impact on students" (Wittmer, 2004, p. 360.). Research is also scant in regards to impacts of service-learning on undergraduate business students. Of the four broad outcomes: academic, civic, career and personal and social, the most research has been done in the area of academic outcomes of business students, although not all of the studies focus on higher education students.

Academic impacts. Although research is scarce, there is some evidence that service-learning impacts the academic knowledge and skills of business students. Service-learning can be used to build communication skills (Gale, Crews & North, 2007), and oral presentation skills are one type of communication skill. A study of undergraduate business students at a four-year university was done to see if they increased their presentation self-efficacy through service-learning. During the course, some of the students participated in a Junior Achievement service-learning experience and some did not. All students were given both a pre and post-test. At the end of the course, all students completed a final assessment, which was an oral presentation. Using the Cronbach alpha test and hierarchical regression, results showed that the service-learning project had a significant positive effect on the presentation self-efficacy of the students (Tucker & McCarthy, 2001).

As another example of using service-learning to improve presentation skills, Tucker and McCarthy (2001) undertook a study was done to see if undergraduate college students who participated in a service-learning project increased their presentation self-efficacy more than those who did not participate in service-learning. The sample was 127 undergraduate business students at a four-year university. During the course, some of the college students participated in a Junior Achievement project and some did not. All students were given both a pre and post-test, and at the end of the course, all students gave an oral presentation which was the final course assessment. The survey given to the college students was a questionnaire that measured efficacy of presenting to children, peers and adults. Results showed that the service-learning project significantly increased participants' self-efficacy in all three areas. Limitations of this study that the researchers identified included the inability to generalize the increased self-efficacy to other skills that may be taught in business courses, and the fact that the results were self-reported by the college students instead of independently assessed using a measure such as grades or G.P.A. (Tucker & McCarthy, 2001).

An exploratory study of an MBA program was performed in South Africa. It was the first time service-learning had been implemented and studied in an MBA program in that country. Authors of the study hoped that their action research study would show that MBA students who participated in service-learning would be "more competent managers and leaders" (Carmichael & Rijamampianina, 2008, p. 75), and also hoped that the community organizations who were recipients of the service-learning would positively benefit. The authors used action research to implement service-learning into two sections of a course called Organizational Design and Development. The sample consisted of 72 full and part-time MBA students who took the two sections of the course, 142 employers, and 25 community organizations. Taking on the role as business consultants, the students interacted with a community organization to conduct a needs analysis, determine the appropriate solution to the need, and report that to the organization. Community organizations were asked what types of business help they needed, and students performed a variety of projects such as strategic planning, marketing projects, and accounting projects.

The required assignments for the course were a reflective journal that described how they developed personally and academically, a class presentation describing their project, and an evaluation based on a Likert scale that evaluated students' self-perceptions of their learning and the learning and benefits that had taken place in the community. Students reported statistically significant positive impact on their learning. A strength of this study was that authors took the exciting risk of doing an exploratory study on a phenomena that had never been implemented in an MBA program in South Africa. Other researchers can now build off this study. A limitation of this study was that some of the findings were not explained well. For instance, the authors stated that students did not find the course to be any more time consuming than their other courses, but they did not provide the methodology for how that question was asked, nor did they say why that was an important question to ask (Carmichael & Rijamampianina, 2008).

However, not all studies of service-learning have shown positive outcomes for students. For example, in the national study of over 1,500 students described in a previous section, students did not think their service impacted their critical thinking skills, issues identification (being able to identify community issues), or communication skills. Researchers were disappointed that students did not self-assess a relationship between service-learning and an increase in critical thinking skills, and posited that students might not have been clear on the definition of critical thinking on the questionnaire (Eyler, Giles and Braxton, 1997).

Civic impacts. Research is scarce on the civic impacts of service-learning on business students. One study showed that service-learning may influence business students to perform community service throughout their lifetime, and this study is described under the personal and social impacts section below, because it also included those impacts (Wittmer, 2004).

Career impacts. Service-learning impacts the career aspirations of business students. For example, the purpose of a case study at a faith-based Jesuit university in the United States was to look at a service-learning program and compare its impact on worldviews of undergraduate business students with worldviews of liberal arts, education, and nursing students. The sample was undergraduate business majors. The setting for the program was a year-long ethics and philosophy coursed called Individual and Social Responsibility. Within the course, students participated in a community service-learning project, and served for 10 hours per week in their chosen setting. Both business and non-business majors took the course, as it was designed as a course that could be applicable to students from any major. The goal of the service-learning program was to "foster critical consciousness and enable students to question conventional wisdom and learn how to work for a just society" (Seider, Gillmor & Rabinowicz, 2011, p. 485).

In the mixed-methods case study design, there were 396 respondents who completed a quantitative survey at the beginning of the course as well as a second quantitative survey that was given nine months later, at the end of the course. These pre- and post-surveys were required assignments in the course, which ensured high participation. In addition, qualitative interviews were conducted with 30 of the students who were enrolled in the program, and these were a mix of business (37%) and non-business (63%) majors.

A theme that emerged from study was called altered career aspirations. Fifty percent of the business majors felt the service-learning program altered their career aspirations, and many others thought it impacted their professional aspirations, by, for example, realizing they could work in a corporate position that allowed them to also make an impact on their local community, either by personally working in the community or funding efforts to do so. On the other hand, fifty percent of the business majors who were interviewed after the program's conclusion did not believe their participation in the service-learning project altered their career aspirations. Interestingly, 56 percent of the non-business majors thought the service-learning program may have impacted their career aspirations, leading the researchers to conclude that the program seemed to have a stronger influence on career aspirations of non-business majors than business majors.

A strength of this study included its methods of data collection because it was performed by the university's Office of Institutional Research and not by the course faculty. A limitation of the study is that there are only 28 Jesuit universities in the United States, making it an atypical university setting, and thus not generalizable to all American universities, even private ones. The authors also felt that studying whether the service-learning program impacted the future career plans of the business students would have been worthwhile, and said they planned to follow up with participants in future years to study the service-learning's long-term impact on their career choices (Seider, Gillmor & Rabinowicz, 2011).

Personal and social impacts. For business majors, building students' global perspectives is an important outcome. Because business has become global, having a workforce that understands the importance of diversity and how to work with diverse groups of people has become a competitive advantage. Since, traditionally, business schools are historically a "predominately white, middle class, male-oriented culture" (Zlotkowski, 1996, p. 9), business students need opportunities to connect with diverse cultures. Rhoads (1997) wrote that although higher education should prepare students for work, even more importantly it should develop people who are "willing to seek understanding about others within their communities, their country, and around the world" (p. 208).

Changes in demographics of the U.S. population make the ability to work with diverse groups of people even more important. The United States Department of Labor reports that in 1995, the percentage of Whites in the U.S. population was 73.6 percent, and by 2050, that percentage will decrease to 52.8 percent. In contrast, population rates of Hispanics, Asian and Pacific Islanders, Blacks and American Indians are all growing. Other changes to the U.S. population include a rise in the median age of the population, an older workforce, more immigrants, and women working more while men are working less (U.S. Department of Labor, 2008). Collaborating with people across cultural boundaries to accomplish shared goals is both a key 21st century skill (Trilling & Fadel, 2010) as well as a key goal of service-learning.

Service-learning impacts the worldviews of students, including how they think about social justice. For example, at the Jesuit university mentioned above, findings showed that while non-business majors who participated in the service-learning program saw an overall decline in the belief that the world is a just place for all people, business majors actually increased in their belief that the world is a just place. The researchers could only posit why they thought this might be the case, and drew on previous literature to conclude that it is possible to believe the world is just while realizing that society has structural influences that do not allow for justice for all (Seider, Gillmor and Rabinowicz, 2011).

Service-learning may help business students recognize the level and kinds of needs that exist in the community, and give students a sense of personal satisfaction. For example, in a core MBA course called Values in Action taught at the Daniels College of Business at the University of Denver, MBA students do 8-10 hours of community service in a 10-week quarter. The students can perform he service with a group or as an individual and can choose and make their own arrangements with the community organization, although there is a Volunteer Coordinator at the university who can help students find projects. This university actually discourages the students from choosing a project where they can apply their business knowledge and skills, and instead emphasizes the importance of providing direct help to the community. Examples of projects include helping with construction of a home, childcare and helping the elderly. The university does not even require that the assistance be given to a formal organization, but instead has allowed students to, for example, help elderly neighbors with snow removal. In this way, the university is allowing the students to choose to help in a way that best works with their schedules and interests (Wittmer, 2004).

Because the authors had read research about the importance of reflection in a service-learning project, the final project in this course is a paper which requires students to describe the organization they worked for, describe what kind of service they performed, and reflect on the service by connecting the experience to themes of the course such as social capital or ethics. The paper was combined with an informal oral presentation on the last day of class. After eight years of teaching this course, the authors began collecting data on it. They hoped to find out what kinds of organizations MBA students were choosing, what kinds of activities they were doing, whether they found the service-learning requirement meaningful, and what specific perceived impacts did the service-learning requirement have? They also hoped to find out what connections the students made to concepts taught in the class. To do so, they surveyed a sample of 71 students during their capstone business course. Types of data analyses included content analysis of the final papers.

Results showed that, in terms of kinds of activities the MBA students chose, the most common types of service performed were construction/home improvement, followed by event management or participating in events, followed by tutoring or some other kind of educational assistance. To answer the research question regarding the specific impacts of the service-learning, 48 percent of the sample felt the service-learning helped them recognize the “level and kinds of needs that exist” (Wittmer, 2004, p. 365), closely followed 46 percent who felt they had an increased awareness of community service, and 35 percent who felt a personal satisfaction upon completing the service activity. Interestingly, 23 percent said the service requirement had no effect on them at all (Wittmer, 2004).

Part III

Cutting across all aspects of experiential learning is the important role that reflection plays in enhancing student learning from experiential learning. For example, in service-learning, reflection is considered to be the bridge that connects the service with the learning, and without reflection, the experience cannot be defined as service-learning (Hatcher & Bringle, 1997; Jacoby, 1996). For capstones, reflection is considered to provide students with a way to synthesize both program and course objectives. Critical reflection is rooted in Dewey (1933) who defined it as, “active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it, and the further conclusions to which it tends” (p. 118). PHC Ventures (2013) describes critical reflection as generating, deepening, and documenting learning. Reflection is a metacognitive skill, requiring students to think about how they think

(Krathwhol, 2002; Martinez, 2006), which helps build higher-order thinking skills that employers need. Reflection is what connects the service to the learning.

Schon (1987) has written extensively about reflection, and sees the importance of placing a reflective practicum into a business school, or any professional school, as a "bridge between the worlds of university and practice" (p. 309). He believes reflection should not come last in a sequence of curriculum, but should be at the core of the curriculum. Reflection comes through knowing-in-action, reflection-in-action, and knowing-in-practice.

Knowing-in-action is the knowledge revealed by doing something, such as riding a bike, using a calculator, or catching a ball. Knowing-in-action is difficult to describe, because we do it without consciously thinking about how we do it; it is quite spontaneous. While this is one important kind of knowledge, it has its limitations. More complex processes need reflection-in-action, the ability to reflect while taking action. This allows us to monitor and adjust our actions in hopes of improving their outcomes and shaping future actions. Knowing-in-practice is when students are able to practice their knowledge in settings that are related to their profession. Schon states that while practice learning can be done on its own, the best way for a student who hopes to enter a profession such as business to practice learning is to take part in a practicum, which is a "setting designed for the task of learning a practice" (p. 37). Apprenticeships, internships, and the other experiential learning methodologies covered in Part I would be examples of practicums, as long as they are real-world projects that are supervised and allow students to learn by doing. Service-learning would also fit Schon's definition of a practicum.

The literature confirms repeatedly that reflection is a key part of a successful service-learning experience, and more broadly, to any successful learning methodology that involves experiences (Dewey, 1933; Eyler & Giles, 1999; Kolb, 1994). For example, a case study was done of a capstone course that consisted of 18 students earning an undergraduate certificate in leadership. The leadership certificate included an experiential course that focused on either an internship, service-learning, some kind of research, or another type of experience. The capstone course then was intended to synthesize the learning in the other courses, and was the course that was studied. Both semi-structured interviews and focus groups were used to understand how students perceived reflection during the course. Findings showed that students were able to see value in reflection, but disliked forced reflection in the form of some of the class assignments, and found the time associated with reflective activities a challenge (White, 2012).

Characteristics and Models of Reflection

Bringle and Hatcher (1999) offer a set of characteristics for designing effective reflection in experiential classes: (a) Link the experience to the learning outcomes; (b) Ensure that experience is structured; (c) Ensure that the experience occurs more than just once during a so that students are able to reflect more deeply and broadly; (d) provide feedback on the reflection; and (e) include opportunities for students to explore their personal values.

An evaluative model called The DEAL Model was developed to quantitatively evaluate student reflections in courses that include service-learning experience. It is a process-oriented model that has students (a) Describe the service-learning experience, (b)

Examine the service-learning experience from academic, personal growth and civic engagement lenses, and (c) articulate their learning through reflection (Ash & Clayton, 2005; Ash, Clayton & Moses, 2007). The model is grounded in Bloom's Taxonomy of Educational Objectives (1956) and Paul and Elder's (2002) work on critical thinking.

The DEAL Model begins with engaging in the experience. Then, through reflection, students must articulate their learning through the lens of civic engagement, personal growth and academic enhancement. Reflection surrounding civic engagement asks students to, for example, describe the objectives they and the community organization are mutually working towards as well as how the community is working towards those goals. As another example, students might be asked to consider possible approaches that could be used to foster systemic change in the community organizations. Reflection surrounding personal growth asks students to consider their service-learning experience in light of their beliefs, sense of identity, personal characteristics, assumptions, and sense of identity. Reflection surrounding academic enhancement directly links the course material with the service experience. For example, students might compare academic theories with their experiences, and explain and analyze concepts learned in course readings (Ash, 2009; Ash & Clayton, 2005).

An evaluative case study of the DEAL Model was undertaken at a large university in the northeast United States. The researchers (Molee et al., 2010) wanted to know what, as measured by the model, the depth of learning and level of critical thinking students achieved during a service-learning experience. Further, they wanted to know whether using the model enhanced depth of learning and level of critical thinking within a semester. The sample was obtained from two courses: a freshman psychology course that included four sections totaling 95 students, and an upper-level seminar titled Challenges, Potentials, and Practices of Community Organizing that was taken by 17 Communication Studies undergraduate majors or minors. After going through the consent process, 26 freshmen and 16 upper-level students were able to participate in the study. The service-learning experiences consisted of 10 weeks of work at a variety of community-based nonprofit organizations.

During the course, the students participated in several structured reflections that were designed to measure their depth of learning in the three areas described above: academic enhancement, personal growth, and civic engagement. The assigned reflections were slightly different in the freshman-level course and the upper-level course. In the freshman course, students wrote weekly reflections using prompts (questions) that were based directly on the DEAL Model. Towards the end of the semester, students wrote a first draft of an academic enhancement reflection, a personal growth reflection, and a civic engagement reflection, received written feedback from the course instructor, revised their work, and then submitted a comprehensive final reflection paper integrating all three areas.

Quantitative statistical measures were used to measure whether students could deepen their depth of learning within the timeframe of a semester. Specifically, t-tests were used to compare rubric scores of the first and final drafts of student reflections, as well as to determine if there were differences between the freshman and upper-class levels. To assess the depth of learning in the reflections, the DEAL Model's Depth of Learning rubric was used, and used by two subject matter experts that were trained to use the rubric to evaluate the reflections. Frequencies, means and standard deviations were also calculated to measure depth of learning. Results showed that students had the most difficulty reflecting on civic engagement, with over a third (36.8%) unable to achieve any depth of learning. However, about 24 percent achieved depth of learning at the analyze and synthesize level of learning, and over 34 percent achieved depth of learning at the application level of learning. In the area of personal growth, results were similar. While only about 7 percent were unable to achieve any depth of learning, about 28 percent achieved depth of learning at the analyze and synthesize level, and over 53 percent achieved depth of learning at the application level. In regards to academic enhancement, most students only achieved depth of learning at the application level of learning (55.6%), and about 19 percent did not achieve any depth of learning.

Quantitative statistical measures were also used to measure whether students could increase their critical thinking within the timeframe of a semester. To assess levels of critical thinking, two subject matter experts independently read and evaluated each reflection for these elements: relevance, accuracy, clarity, grammar and spelling, depth, breadth, logic, and significance. These are elements of critical thinking based on the work of Paul and Elder (2002) and Ash, Clayton, and Atkinson (2005). The levels of the rubric were poor, fair, adequate, or good. Results showed that in the area of civic engagement, most students reflected poorly, with over two-thirds earning a poor evaluation and almost one-quarter earning a fair evaluation. Personal growth mirrored the poor and fair evaluation results of the civic engagement area. Students performed better in the academic enhancement area, with over twenty-five percent earning scoring at the adequate level, although over seventy percent scored at the poor or fair level Among its recommendations for further practice, the researchers concluded that one semester was too short of a time frame for students to develop reflection skills (Molee, et al., 2010).

This study contained many strengths which lended to the rigor of the study. For example, two independent subject matter experts, not course instructors, were used to evaluate the reflections. The study was grounded in theory, and results were analyzed and reported in a clear and concise manner. Limitations were that the case study of one large university and small sample sizes make it difficult to generalize results to a larger population. There was not a control group to compare using the DEAL Model of evaluation with another model. Finally, researchers were not able to control for the quality and quantity of written feedback that was provided by different course instructors, and those factors could have influenced the effectiveness of the feedback and thus the scoring of the reflections. The researchers recommended longitudinal research to see if longer of periods of time influence students' abilities to deepen their learning and achieve higher levels of critical thinking. They also recommended using the DEAL Model in courses that include service-learning in various content disciplines, and replicating their study in order to further test the DEAL Model.

King and Kitchner (2002) developed, through their research, the Reflective Judgment Model (RJM). This model formalizes how reflective thinking is developed in adolescence and carried through into adulthood. Conceptualized over 20 years ago, the model has been used in longitudinal research and informs the work of educational psychologists and others in higher education about high school, college, graduate and non-student adults. The seven developmental stages of the Reflective Judgment Model are grouped into three levels: Stages 1-3 indicate pre-reflective reasoning, Stages 4-5 indicate quasi-reflective reasoning, and Stages 6-7 indicate reflective reasoning.

There are unique characteristics for each stage of the Reflective Judgment Model. Characteristics of pre-reflective thinking include a heavy reliance on ones' beliefs or opinions to define and reflect, that a single, right or wrong answer exists for all questions, that evidence is not needed, and that all problems needing solving are actually well-developed, well-structured problems. In the second level, Stages 4-5, quasi-reflective reasoning is characterized by the ability to recognize that knowledge is constructed and there is not a single, right or wrong answer. Also in Stages 4-5, the use of evidence to inform reflection becomes clearer, and different kinds of evidence are needed to reflect on different kinds of problems. Still, quasi-reflectors tend to choose evidence that conforms to their beliefs, instead of allowing their beliefs to be informed by the evidence.

Reflective thinkers are at the highest level, Stages 6-7, in the Reflective Judgment Model. These individuals care about knowing about several points of view, because there is recognition that in order to develop their own judgments, they must understand other perspectives. Reflective thinkers come to conclusions, but recognize that those conclusions must be continually reevaluated.

The Reflective Judgment Model was conceptualized from the work of several theorists. While it was initially developed based on theoretical work of Piaget (1965), there was disagreement that Piaget's assertions that cognitive development is formalized by late adolescence. Another theory that informed this model is complex stage theory (Rest, 1979), which states that while reasoning does happen somewhat sequentially, it is not completely linear, which means pay move among the stages during their learning processes. Based on this, King, Kitchener and Wood (1994) called for reflective thinking to be thought of as waves that change in shape, rather than steps that have plateaus. People are not necessarily in only one stage at a time.

Another theoretical framework that informed the Reflective Judgment Model was dynamic skill theory. First proposed by Fischer (1980), it identified seven developmental models that are separated into a representational tier and an abstract tier. While the representational tier focuses on the ability to use concrete thinking, the abstract tier focuses on the ability to integrate and reason using abstract concepts, which is required by reflective thinking. Stages 4-7 in the Reflective Judgment Model correspond to the upper levels of Fischer's skill theory (King & Kitchener 2004). Fischer and others (Fischer & Pipp, 1984; Lamborn & Fischer, 1988), further defined abstract thinking as done at an optimal level which is the upper limit of where an individual can achieve reflective thinking. In contrast, an individual's functional level is the lower level where concrete thinking takes place. Coursework and experiences are needed to develop skills at the functional level so that individuals will be able to engage in reflective thinking at the optimal level; thus, both levels are needed. This knowledge can help educators develop the appropriate kinds of reflective assignments for the appropriate cognitive levels, as well as help them provide supports which could help individuals move from lower to higher levels of development over time, thus increasing capacity for reflective thinking (King & Kitchener 2004).

Another measure of reflective judgment is the Reasoning About Current Issues (RCI) questionnaire. In the early 1990s, King et al. (1995) conducted a review of 25 studies where more than 1,500 U.S. respondents took the RCI. The purpose of the analysis was to examine reasoning at various educational levels. Respondents were grouped into education levels consisting of high school, traditional-age college, early graduate, and doctoral students. Of the stages in the Reflective Judgment Model, only the doctoral students consistently used reflective thinking. In contrast, high school students usually engaged in pre-reflective thinking, and the traditional-age college students consistently engaged in quasi-reflective thinking. While encouraging news for doctoral students, these results are discouraging for educators of traditional-age college and early graduate students. Still, it helps educators understand at what educational levels people can engage in various levels of reflective thinking, so that appropriate reflective assignments can be developed and implemented.

Reflection allows students to understand course material at a deeper level (Huber & Hutchings, 2004). A study of graduate business and graduate education students was done in order to contrast differences in graduate student perceptions of several variables, including deep learning. This quantitative study used data from the researcher's dissertation study. The survey instrument used a five-point Likert scale to rate graduate student perceptions of deep learning and other variables. The sample consisted of 3,232 graduate students who were currently enrolled in business and education programs in the United States, and the total response rate was 11percent, with graduate education students responding at a higher rate. After measures of reliability and validity were applied, 67 graduate business and 70 graduate education surveys were used for data analysis. The data was analyzed using t-tests for comparing differences between groups.

Findings showed that for the variable deep learning, there was positive significance in differing students' perceptions between graduate business and graduate education students (p=.011). While business students somewhat agreed and agreed that they engaged in deep learning, education students reported that they agreed that they engaged in deep learning (Economos, 2014).

As another example of using reflection to engage business students in deep learning, an Australian business program incorporated a reflective learning journal in its required master's-level management accounting course in 2004. The course was delivered in a distance-learning format. The course objectives specified that students should be able to "critically evaluate theories and research studies and relate thought, theory and the research literature to the practice of management accounting in the real world" (Bisman, 2011, p. 317). One of the assignments in the course was a reflective learning journal. Guidelines for the learning journal were to keep notes, reflective comments, and thoughts about the management accounting content covered during the course.

A five-year, longitudinal case study (Bisman, 2011) of the implementation of the learning journal was then performed with 37 students. The first time the course was taught, which the author called a trial, qualitative thematic analysis was done on the reflections to classify the journal writing as either surface or deep reflection. The journals were classified as being surface or non-reflective when the requirements of the assignment were not fulfilled, when there were lower-levels of complexity of thought, and when they were not of sufficient length. Instructors noticed that surface or non-reflective journals were sometimes written towards the end of the course, as was evidenced by late submissions and/or requests for due-date extensions. The journals that were classified as having deep reflection displayed, among other characteristics, higher levels of complexity of thought, sufficient length, and were more comprehensive. The average scores of the journals that were classified as surface or non-reflective was 62.9 percent, in contrast to the average scores of the journals that were classified as deep reflection which were 84.8 percent. Only during one of these years was inter-rater reliability verified by having two educators classify the writing as either deep or surface reflection.

During subsequent course offerings over the next four years, refinements were made to the reflective journal assignment. The researcher classified the first year as the trial stage and the next several years as the refinement stage. One of the changes was that other writing assignments were removed from the course and the learning journal became both the formative and summative writing assessment for the course, and was submitted and graded three times over the semester. Between-group comparisons of the learning journals were then done based on the thematic analysis. The dimensions included general thoughts, writing style, length, criticality, inclusion of work or past learning experiences, and whether personal opinions were included how they were substantiated. Findings included student reactions that they appreciated the ability to include their voice through the learning journals. In contrast to prior discipline-specific assignments where the perceived purpose of the assessment was to "regurgitate material and satisfy or appeal to what they perceived to be the leanings or opinions of the lecturer" (Bisman, 2011, p. 327). A strength of the study was its longitudinal design, and limitations included a lack of inter-rater reliability as well as a case study design, which made it difficult to generalize findings to a larger population. This case study is an example of how graduate-level business used reflection as an effective andragogy to help students engage in deep learning and find their voice.

When it comes to reflection, more is not necessarily better. Mabry (1998) studied undergraduate college students in the areas of education, human resources and the arts and sciences and found that when students were assigned two types of written reflection, one an ongoing type such as journaling and one a summative type such as a paper, this was enough to cause significant positive changes in civic attitudes and personal social values. Discussion also proved to be valuable, as students who discussed their experiences with more people, such as students, instructors, and service beneficiaries, had higher personal social values and civic attitudes. Frequency of in-class reflection was also important, as students who reflected more often in class had higher post-course personal social values and perceived a greater academic benefit of the service-learning. There was not, however, a significant difference in students' personal social values based on the amount of in-class reflection.

Experiences should be linked to learning outcomes, students should reflect on their experiences, and instructors should provide feedback on the reflections. Students should be urged to make connections between their own knowledge and their experiences, they should be challenged to consider various perspectives, and instructors should provide emotional support to students during the experience. Eyler and Giles's (1999) study of students from 20 colleges and universities was done with the purpose of measuring if there are service-learning program characteristics that are predictors of meeting course learning outcomes. Surveys of 1,500 students were conducted before and after a semester of service-learning, and qualitative interviews of 66 students at 6 colleges were also conducted. Results showed that there are several program characteristics that have shown to be predictors of meeting course learning outcomes. One of the predictors is reflection; both the amount and quality of reflection are important. Reflection was associated with the amount that students learned and how motivated they were to work harder in their service-learning classes than other classes (Eyler & Giles, 1999).

There is research showing that timing plays a role in reflective activities. Reflection can be categorized as reflection before service, reflection during service, and reflection after service. Students should do some pre-reflecting before engaging in their service-learning experience. This allows them to reflect on any preconceptions they may have about the community they will serve. It also allows them to voice any assumptions they have about the project, which they can later prove or dispel through more reflection (Eyler, 2002). Students should not reflect just one time, but should reflect before, during and after the experience. A study focused on how reflection activities should be designed in order to increase the quality of the service-learning experiences for undergraduates. Results showed that having students reflect more than once during the semester increased the quality of the experience (Hatcher, Bringle, & Muthiah, 2004).

Reflection during service allows students to monitor their own learning, which is a key aspect of adult learning theory (Mezirow, 1994). Students should be able to discuss their experiences with their classmates and connect their experiences to academic content. Reflecting during their experiences allows them to continually test their own assumptions in order to gain deeper meaning, something that would not be available to them if reflecting happens only after the experience ends. Students may also want to engage in reflective activities with their community partners (Eyler, 2002).

Reflection after service can take many forms. One option is for students to present what they have learned to their community partners. Reflection papers and journal entries are other ways students can reflect. Students can also be asked “now what” so that they can think about how they will take what they have learned into the next phase of their academic journey (Eyler, 2002). Reflection has also been integrated into written end-of-course exam. For example, an English professor teaching Business Communication used a written essay exam to have Business Communication students reflect on their experience. The same instructor used a written assignment called a researched biography, where students researched the organizations for which they were doing service-learning in order to orient students to the community needs, history and mission (Dubinsky, 2006).

Chapter Summary

This review of the literature frames the essence of my research investigation. Two high impact practices used in business education are business capstones and service-learning. Both of these instructional practices are experiential in nature and are shown to have several outcomes that positively influence learning. Employers want a wide range of employability skills to fill positions needed in the business industry, and research shows there may be a gap in the skills employers need and those that are provided in business education. Therefore, the purpose of the study was to examine the alignment between the employability skills employers need and the employability skills that graduate business students gain through service-learning in business capstones. In addition, the study sought to understand whether reflection, a stated requirement of service-learning, enhances the employability skills of graduate business students who participate in service-learning during a capstone. To accomplish the purpose of the study, the following research question was studied:

RQ1: Which, if any, essential employability skills, as identified by employers, are enhanced by service-learning experiences in business capstones?

Demographic data was collected and analyzed in order to answer this sub-research question:

Sub-RQ1: Are there differences among various demographic groups in the extent to how their employability skills were enhanced?

Not only was it important to learn which, if any, employability skills are enhanced by service-learning, it was important to learn which parts of the service-learning experiences students believed contributed to those enhanced employability skills. Therefore, a second research question was:

RQ2: Which aspects of service-learning experiences contribute to enhanced employability skills in graduate business students?

As found in this literature review, reflection is a key component of any successful learning methodology that involves experiences such as service-learning and capstones. Therefore, it is essential to explore the role that reflection has in helping business students gain the employability skills needed in business. Therefore, two additional research questions were studied:

RQ3: Which aspects of service-learning experiences contribute to enhanced employability skills in graduate business students?

RQ4: In what ways did reflection offered through business capstones that included service-learning enhance, in participating students, their employability skills?

CHAPTER III: METHODOLOGY

This chapter defines the methodological approach used in this study. The purpose of the study was to examine the alignment between the employability skills employers need and the employability skills that graduate business students gain through service-learning in business capstones. In addition, the study sought to understand whether reflection, a stated requirement of service-learning, enhances the employability skills of graduate business students who participate in service-learning during a capstone. The research questions guiding the methodology were:

RQ1: Are there differences in employability skills developed between MBA students who participate in capstones that include service-learning and comparable MBA students who participate in capstones that do not include service learning?

Sub-RQ1: Are there differences among various demographic groups in the extent to how their employability skills were enhanced?

RQ2: Which, if any, essential employability skills, as identified by employers, are enhanced by service-learning experiences in business capstones?

RQ3: Which aspects of service-learning experiences contribute to enhanced employability skills in graduate business students?

RQ4: In what ways did reflection offered through business capstones that included service-learning enhance, in participating students, their employability skills?

This chapter first describes the research design that was used to explore the research questions. It then describes the population and sample, participants, recruitment plans, measures/evaluations and data collection procedures, and data analysis plan. The

IRB-approved survey instrument and interview protocol are located in Table 3 in Appendix A.

Research Design

The research design for this study was a non-experimental comparative descriptive study. Specifically, it examined outcomes of students' development of employability skills through their participation in service-learning in MBA capstones. In particular, the study assessed whether capstones that include service-learning influence students' development of employability skills in comparison to capstones that do not include service-learning. There were two groups: Group A consisted of alumni or students who completed a capstone in an MBA program that included a service-learning experience, and Group B consisted of alumni or students who completed a capstone in an MBA program that did not include a service-learning experience. Group A provided perceptions of which, if any, employability skills were enhanced by the service-learning component of the capstone. Group B's data provided perceptions of which, if any, employability skills students believed were influenced by their capstone.

The methodology of this study was mixed methods, and incorporated both qualitative and quantitative methods in order to offer various forms of data to address the research questions (Creswell, 2009). The quantitative method used in this study was survey research. Specifically, an existing instrument, described below, was used to test which, if any, of the essential employability skills that were identified by employers through the Chapter II literature review, were enhanced by service-learning experiences. Once those results were obtained, the qualitative part of the study began. Qualitative research, in a mixed-methods research study, is often included when quantitative results alone are not adequate to explain the outcomes. Qualitative data also provide an opportunity to enhance the inclusion of participants' voices, which can enrich and help explain the quantitative results (Creswell & Plano-Clark, 2007).

In considering the weight of the qualitative and quantitative research, this study used an explanatory strategy (Creswell, 2009), where the quantitative data were collected first and then elaborated upon with a set of qualitative data, as described below. Once the quantitative data were analyzed, the qualitative component then evaluated which aspects of service-learning experiences contribute to enhanced employability skills. The qualitative component also evaluated the extent reflection enhances employability skills of students who participate in service-learning experiences during their capstone.

The paradigm that underpins many mixed methods studies is the pragmatic worldview, and there are several key characteristics of this worldview. As its name suggests, the pragmatic worldview fits mixed-methods because it is not centered on one philosophy, but instead incorporates various perspectives and epistemologies. There is a focus on finding solutions to problems, and researchers are encouraged to use all available methods to understand the research problem (Creswell, 2009). Other characteristics are that absolute truth regarding reality cannot be determined, one explanation of reality is no better than another explanation, and sometimes explanations are based partially on the values of the researcher (Teddlie & Tashakkow, 2009). This is the view that I applied to my study.

Mixing the Methods

In making an argument for combining quantitative and qualitative methods of research, Gorard (2013) suggests that mixed methods research may have a greater impact, may allow researchers to use information that could possibly be otherwise wasted, and may require a greater level of skill than using just one method. A major advantage of mixed methods research is that it can both demonstrate predictability of one variable on another and answer questions about why that relationship happens (Teddlie & Tashakkow, 2009), while a potential disadvantage is that it may take more time because of the need to collect both qualitative and quantitative types of data (Creswell, 2009).

The mixed methods design used in this study is called a Sequential Explanatory Mixed Methods Design with Participant Selection (Plano Clark & Creswell, 2008). Mixing occurred at the point of data collection. Timing was sequential, beginning with the quantitative phase. Once the quantitative data were collected, the results were used to inform which participants would be chosen for the quantitative data collection. Thus, the qualitative data collection depended on the results of the quantitative data, and the qualitative results were used to add new insights to the quantitative results as well as the study as a whole.

In making decisions about which participants to select for interviews, one survey question was chosen: *Reflection means intentionally considering an experience in light of particular learning objectives. Keeping that definition in mind, what was the frequency of the reflection in your MBA capstone course?* Possible answers were measured on a seven-point Likert-style scale of 1 (no reflection), 2, 3 (some reflection), 4, 5 (quite a bit of reflection), 6, and 7 (a great deal of reflection). Once data were analyzed for both Groups A and B, Group A was further analyzed to break respondents into two sub-groups. Sub-group A.1 was clustered to include responses of 1(no reflection) and 2. Sub-group A.2 was clustered to include all responses 3 through 6. All participants in sub-group A.2 were contacted for an interview via an invitation to the email address they provided on the survey, if they said on their survey responses that they agreed to be contacted.

Sample

This section describes the sample that was chosen to represent the population, a description of the participants, plan for recruitment, and criteria for inclusion.

Population. The population of interest was graduate business students who completed a capstone experience as part of their MBA program. In 2011, the greatest numbers of master's degrees were in the fields of business (187,000), closely followed by education (185,000) ("Digest of Education Statistics," 2012). Graduate business students can be enrolled in many types of business education, such as accounting, finance, management, management information systems, and doctor of business administration (DBA). The graduate business education program that is most common worldwide is the Master in Business Administration (MBA), and historically, MBA programs have been widely respected both in academic circles and in business as a way to prepare leaders, instill ethical values, and teach useful skills.

Demand for MBAs in the workforce is strong and growing. In 2013, 85 percent of US-based companies planned to hire an MBA graduate, an increase from 82 percent who did so in 2012 ("Corporate Recruiters Survey," 2013). The MBA is a worldwide-recognized brand, thanks, in part to international accreditation organizations such as the Association of MBAs based in London, UK, The Graduate Management Admission Council (GMAC) based in the United States, the European Quality Improvement System (EQUIS), the European accreditation body based in France, and the Association to

Advance Collegiate Schools of Business (AACSB) based in the United States. Mintzberg (2004) described the MBA as the ultimate academic achievement to prepare graduates for the for-profit sector.

Sample. The sample sought for this study was MBA students who completed a capstone as part of their MBA program. While no data could be found to indicate how many MBA students participate in capstones, data do exist about undergraduate business students who participate in capstones. According to the 2013 National Survey of Student Engagement, 66 percent of undergraduate seniors self-reported that they had already completed a culminating senior experience or planned to complete one before they graduated (National Survey of Student Engagement, 2013). We do know that capstones exist in MBA programs, both from the literature reviewed in Chapter II and other sources. For example, Bloomberg Businessweek annually ranks MBA programs. For its 2012 ranking of full-time MBA programs, the top 10 MBA program curriculums were reviewed, online, to see if there was a required capstone course. Findings showed that four of the ten (40%) had courses that were explicitly called capstones, while six (60%) did not ("Business Schools," 2014). As another example, an online ranking called The Best Colleges lists a ranking of online MBA degree programs ("The 12 Best Online MBA Degree Programs," 2014). The Best Colleges ranked these programs according to perceived prestige, academic quality, and affordability. Of the 12 programs listed, six (50%) identified a capstone as one of the program requirements.

The sample was purposeful, and the specific type of purposeful sample was criterion sampling. In this type, the researcher chooses participants based on criteria (Patton, 1990). Because the existing data on the number of US-based MBA programs that include capstone courses is very limited, and no data to tell us the number of MBA capstone courses that include a service-learning component could be found, a sample size was estimated. Based on literature reviewed in Chapter 2 about service-learning in graduate business capstones, it was estimated that about 20 percent of MBA capstone courses include a service-learning component. Therefore, the goal was for 20 percent of the survey respondents to be part of Group A, the students who completed a capstone in an MBA program that did include a service-learning component.

For the qualitative phase, the goal agreed to by my committee at the proposal meeting was 14-15 interviews, or until data saturation was achieved. IRB approval was sought for up to 20 interviews. While the original plan was to randomly select participants for interviews in order to allow greater generalization than a non-random sample, in order to have enough participants all interview participants who answered on the survey that they agreed to be contacted, were emailed according to the approved protocol. Those who did not respond within one week were emailed one more time. Of those who were contacted, 11 agreed to be interviewed. Of those 11, one interview was discontinued before I turned the voice recorder on, after I learned that the student had not completed a service-learning project in his capstone course after all. Data saturation was found after 7 interviews, as no new codes were added to the codebook for the eighth, ninth or tenth interviews. After data saturation was achieved, three more interviews were conducted.

Participants. Participants were graduate business students who completed capstone experiences as part of an MBA program within the last five years. Five years was used so that answers to questions would be fresh in participants' memories, and because academic programs may change their program requirements every few years. Completion of service-learning was not a requirement for participation in the study, as, since it is a comparative study, I wanted participants who both did and did not experience service-learning in their MBA capstone. Participants could either be alumni who had already earned their MBA or current MBA students, as long as they had already completed the capstone. In actuality, all 10 participants had completed their MBA by the time they were interviewed which makes sense, because a capstone course is generally the last course students take in an MBA program.

Recruitment. Participants were sought through professional electronic mailing lists, Google Groups that focus on service-learning in higher education or MBA alumni, and LinkedIn groups that focus on service-learning in higher education or MBA alumni. No specific electronic mailing list, Google Group, or LinkedIn Group that focuses on capstones could be found. An announcement was posted on each of these electronic mailing lists, all on the same day, advertising the study. The announcement is included in Appendix A. Here is an identified list of professional electronic mailing lists and groups:

- The Google Group called HE-SL. This is an electronic mailing list for researchers and administrators to share information relevant to service-learning (number of members is not known);
- The LinkedIn group called Higher Education Management (over 73,000 LinkedIn members as of October 3, 2014);
- The LinkedIn Group called Academy of Human Resource Development (over 4,500 LinkedIn members as of October 3, 2014);

- The LinkedIn Group called CEHD (College of Education and Human Development) (over 2,200 LinkedIn members as of October 3, 2014);
- The Linked Group called IARSLCE (International Association for Research on Service-learning and Community Engagement), which is for professionals, researchers, faculty, staff and students interested in service-learning in Higher Education (over 600 members as of October 3, 2014);
- The LinkedIn Group called Northern Illinois University MBA Alumni, my MBA alma mater (over 400 members as of October 3, 2014);
- The Google Group called The Graduate Student Network Google Group of IARSCLE, which is open to members and non-members of IARSLCE (size of group is unknown);
- The LinkedIn Group called Service-Learning Practitioners in Higher Education (over 787 LinkedIn members as of October 3, 2014);

Additionally, a business management professor who supervises the management capstone for MBA students at Institution A verbally agreed (by phone) to forward my announcement to a group of her institution's MBA capstone completers. Institution A gave me IRB approval on November 17, 2014.

In addition, there were two identified groups of MBA alumni who met the inclusion criteria that were not recruited from an electronic mailing list. The first was a set of approximately 500 MBA students and alumni who were enrolled in a Moodle (a Learning Management System) called MBA Student Resources Moodle. The MBA Program Director from Institution B posted my announcement in that Moodle.

The second identified group was an alumni group from the College of Arts and Science's Department of Institution B. The number of alumni who have obtained their MBA was unknown, but the department chair knew, from keeping in touch with alums, that some of them have earned their MBA. Institution B's marketing department gathered a list of alumni who graduated from the Department of Business and Economics, and this listed contained 1,148 alumni. Estimating that 20 percent, or 280, of them may have earned an MBA, it was hopeful that 20 percent of them, or 56, would have earned an MBA within the past five years, which was the cut off time frame. Institution B's Institutional Review Board gave me approval to access these two groups on November 13, 2014.

Recruitment for the interviews that were conducted after the survey came from survey participants who answered a question agreeing to be contacted after the survey for a possible face-to-face or telephone interview (see the Table 3: Interview Protocol). All survey respondents who said they would like to be contacted for an interview were emailed.

Criteria for inclusion and exclusion. The inclusion criteria for survey participants were: 1) must be a student or alumni of a US-based MBA program; and, 2) must have completed a capstone course in the MBA program within five years of the date of the survey. An additional criterion for interview participants was that they must have completed a service-learning experience as part of the identified MBA capstone course. The exclusion criteria for both survey and interview participants were: 1) participants who did not complete an MBA capstone course; and, b) participants younger than 18 years old.

Measures/Evaluations and Data Collection Procedures

This study was composed of two measures/evaluations that best answered the five research questions. As seen in Table 2, findings from the survey addressed RQ1, Sub-RQ1 and RQ2, and findings from the semi-structured interviews addressed RQ3 and RQ4.

Table 2

Measure/Evaluation Used

Research Question	**Measure/Evaluation**	**Data Collection Protocol**
RQ1: Are there differences in employability skills developed between MBA students who participate in capstones that include service-learning and comparable MBA students who participate in capstones that do not include service learning?	Survey instrument modified from Tanyel et al. (1999)	Electronic questionnaire using Qualtrics survey tool to the sample
Sub-RQ1: Are there differences among various demographic groups in the extent to how their employability skills were enhanced?	Survey instrument modified from Tanyel et al. (1999)	Electronic questionnaire using Qualtrics survey tool to the sample
RQ2: Which, if any, essential employability skills are enhanced by service-learning experiences in business capstones?	Survey instrument modified from Tanyel et al. (1999)	Electronic questionnaire using Qualtrics survey tool to the sample
RQ3: Which aspects of service-learning experiences contributed to enhanced employability skills in graduate business students?	Semi-structured interviews of a sub-set of the survey participants who indicated they participated in service-learning and who agree to be interviewed, selected by their answer to the frequency of reflection question on the survey	Face-to-face or phone interviews

RQ4: In what ways did reflection offered through business capstones that included service-learning enhance, in participating students, their employability skills?	Semi-structured interviews of a sub-set of the survey participants who indicated they participated in service-learning and who agree to be interviewed, selected by their answer to the frequency of reflection question on the survey	Face-to-face or phone interviews

Instruments

Two instruments were proposed, approved, and used for this study: a survey and Interview Protocol. Both are described in this section.

Survey. The instrument for this study was a list of skills and attributes first used by Tanyel et al. (1999), and this study is described in Chapter II. The Tanyel study sought to answer three questions: the skills and abilities prospective employers of entry-level business graduates desired; the skills and abilities faculty believed prospective employers desired of business graduates; and was there agreement between the prospective employers and faculty on the skills needed of new graduates. While my study expanded on the employability skills used in the Tanyel study, my study should not be considered a replication of that study.

Tanyel et al. (1999) described the methods used to test their instrument. After reviewing the existing literature, they developed a proposed list of skills/attributes, and then pre-tested them with a group of human resource professionals. Then, they surveyed human resource managers or directors from a five-county area in the Southeastern part of the United States. Because one of the research questions asked whether prospective employers and university faculty agreed on the skill set needed by new business graduates, this same instrument containing the same list of skills/attributes was also given to selected faculty at two regional universities.

The instrument consists of 16 managerial skills/attributes that respondents rated on a five-point Likert-type scale from 1 (very important) to 5 (less important). The 16 managerial skills/attributes are:

- Responsibility and accountability
- Ethical values
- Interpersonal skills
- Oral communication
- Time management and punctuality
- Ability to work in teams
- Decision-making and analytical ability
- Written communications
- Creativity and creative thinking
- Ability to assimilate new technology
- Project management
- Presentation skills
- Computer problem-solving skills
- Computer word-processing skills
- Persuasive ability
- Global awareness

Another study (Shuayto, 2013), published fourteen years later, also used the measure developed by Tanyel et al. (1999). The purpose of this study was to see whether business leaders believed MBA programs prepared students. A secondary goal was to explore relationships between business school leaders and business managers and see how they each believed MBA programs prepared students in the skills the managers desired. Using the Tanyel (1999) instrument for both the business managers and business school leaders, surveys were mailed to employers, and the business school leaders answered the questionnaire via a telephone survey. Findings of the study showed that the top three skills prospective employers said needed to be obtained by business graduates were responsibility and accountability, interpersonal skills, and oral communication skills. These differed from the top three skills business school leaders believed were most important: oral communication skills, written communication skills, and interpersonal skills. A limitation of this study was a very low response rate, 3.4 percent, from the business managers. In contrast, the response rate from the business school leaders was 78 percent (Shuayto, 2013).

While this was the only other study that directly used the Tanyel et al. (1999) measure, there are at least two other studies, related to skills of business graduates and/or business students, which have cited the Tanyel et al. (1999) study in their literature reviews. For example, a study by Wardrope (2002) sought to determine the rating that business department chairs give to various skills taught in business communications courses. In another study, researchers sought to determine accounting students' perceptions of the levels of oral communication skills needed, as well as examine the levels of oral communication apprehension in accounting students (Ameen, Jackson & Malgwi, 2010).

Interview protocol. Interviews are an acceptable form of data collection protocol, especially, as Merriam (1998) states, "interviewing is necessary when we cannot observe behavior, feelings, or how people interpret the world around them" (p. 72). The participants chosen to be interviewed were based on how they answered the survey. Only participants who had a service-learning component in their capstone were eligible to be interviewed, and survey questions identified those respondents. Table 3 in Appendix A shows the Interview Protocol used for this study.

It was anticipated that earlier interviews would be more unstructured and that latter interviews would be adjusted to become more structured because of the analysis that began to happen once the interviews began (May, 1989), and this did happen. It was also expected that commonalities that started to emerge in early interviews would be points I would want to ask later participants as well, and this did happen. Interviews lasted between 35 and 55 minutes.

The key to determining how many participants to interview was to come to the point of saturation, when no new themes emerged from the interviews (Morse et al., 2002). Once data obtained started replicating itself, that was considered the point of saturation. Lincoln and Guba (1985) point to specific criteria for knowing when to stop data collection. When sources of information have been exhausted, when categories have been saturated, and when over-extension, or information that is far outside of the emerging categories, occurs, then data collection will stop. For my study, this point of saturation came after the seventh interview. No new codes were added to the codebook for the eighth, ninth, or tenth interviews.

In order to collect demographic information from participants, information obtained from their survey was used. This consisted of gender; age; race/ethnicity; current work status; number of years of experience working in business-related occupations; and current job title. Only demographic information from survey respondents who optionally stated their name, because they were interested in being asked to participate in an interview, was obtained for the interview participants.

Each interview was digitally recorded and uploaded to a computer. A transcriptionist was hired to transcribe the audio into Microsoft Word documents. After transcription was completed, the written transcription was reviewed by me to ensure it was complete. A back-up recording device was also used during the interviews to provide a safety net in the event the other recording device did not work. In all 10 interviews, both recording devices worked well.

Survey Instrument Validity and Reliability

Validity asks whether a test measures what it is supposed to measure (Gall, Gall & Borg, 2007). Validity was confirmed in this study in three ways: content, face, and construct, as described in this section. Reliability is a concept referring to whether a test is consistent in its measure (Krathwohl, 1998). Reliability was confirmed using Cronbach's Alpha and Exploratory Factor Analysis, as described in this section. Unfortunately, the Tanyel et al. (1999) study, from which the list of employability skills this study is modeled, did not report validity and reliability.

Content validity. Content validity asks whether survey items truly measure what the researcher expects them to measure, and it helps determine whether the content of the survey covered the scope of the research questions they were intended to answer. Since there is no quantitative measure that determines content validity (Gall, Gall and Borg, 2007), content validity was informed by a literature review, the use of a previous scale (Tanyel, et al., 1997), a small pre-test of the instrument, and the researcher and advisor's expertise. For the instrument pre-test, a pilot of the survey was conducted with MBAs outside of the proposed study population, and these participants were asked to confirm the amount of time it took to complete the survey and question clarity. The survey items were modified slightly according to suggestions from the participants.

Face validity. Face validity is a subjective inspection of scale items used to judge whether the items are adequate for the scale (Gall, Gall & Borg, 2007). Face validity was established by a literature review which revealed the Tanyel et al. (1997) study that had already measured employability skills. The literature review also revealed numerous studies confirming the importance of the employability skills to employers.

Construct validity. Construct validity is a form of internal validity that seeks to confirm whether scale items measure what they are intended to measure. For construct validity to be present, there needs to be a connection between the construct and the items used to measure it, and there also needs to be a connection between constructs (Cronbach & Meehl, 1995; Krathwhol, 1998). Exploratory factor analysis was used to determine construct validity. As Thompson (2010) says, "factor analysis can be used to summarize relationships in the form of a more parsimonious set of factor scores that can then be used in subsequent analyses" (p. 4). Each of the 19 employability skills was loaded into one of four factors, and these factors were then analyzed. Exploratory Factor Analysis is further discussed below in the Data Analysis section.

Reliability. To determine internal consistency reliability, Cronbach's (1951) alpha coefficient of internal consistency reliability (Cronbach's alpha) was utilized. Cronbach's alpha produces a statistic that correlates items ranging between -1 and +1. In the social sciences, a coefficient of .70 or higher is regarded as acceptable validation that the items measure an underlying (latent) construct (Creswell, 2007). The Cronbach's alpha for the instrument was .932 which is excellent.

Interview Instrument Validity and Reliability

In the post-positivistic paradigm that forms the backdrop for qualitative research, generalizability to a parent population is "impossible" (Guba & Lincoln, 1994, p. 213). Instead, Lincoln and Guba's (1985) criteria for rigor was used: credibility and dependability, confirmability, transferability, authenticity, and auditability. Credibility and dependability means the results should be consistent with the data collected, and is a term used in qualitative research instead of the traditional, positivistic term concept of reliability (Merriam, 1998). This study ensured credibility by using thick descriptions of the text to give the experiences of participants, and made sure the results of the research reflected those experiences. Transferability was met by writing thick descriptions of the data so that readers can use and evaluate that data for their own contexts. Writing thick descriptions increased the validity of the study. Confirmability happened because my research advisor reviewed my data analysis.

Authenticity is closely related to credibility, and means the research findings should reflect the experiences and meanings of the participants. Authenticity was met by making sure the findings were written in a way that gave readers enough details to see for themselves that the experiences and meanings of the participants were captured, without overwhelming the reader with too much detail (Sandelowski, 1986). Auditability means others could authenticate the findings of a study by following an audit trail of the researcher (Guba and Lincoln, 1981). Auditability was met by keeping confidential audio recordings of each interview, memoing throughout the data collection and analysis period, using a systematic coding process and keeping records of it, and describing and defending to a dissertation committee how and why decisions were made throughout the study.

Data Collection Procedures

This section details the data collection procedures that were used for the survey and interviews. For the survey, the instrument was loaded into the Qualtrics electronic survey tool. Qualtrics generated a link that was included in the announcement posted on the electronic mailing lists listed above. One of the survey questions asked participants whether they would consider a follow-up phone or face-to-face interview, and if so, to provide their name and email address. Semi-structured interview questions were developed in order to allow for flexibility in the interviews while making sure I would be able to ask questions most likely to capture the specific data I was seeking (Merriam, 2009), which were answers to RQ3 and RQ4. Because participants had completed their capstone course up to five years prior to the study, they had time to ponder their capstone experience, in hopes that they would be able to clearly communicate both aspects of their service-learning experiences that contributed to enhanced employability skills and how/whether the reflective activities in their capstone course, which contained service-learning, enhanced their employability skills.

Interviews were conducted from January through April 2015 and consisted of semi-structured participant interviews and researcher memoing. All interviews were conducted by telephone and lasted between 35 and 55 minutes. After verifying the participant had signed the consent form, and answering any process questions about how the interview would be conducted, the voice recorder was turned on. Interviews began by asking participants to describe how their MBA capstone course was structured. Interviews were semi-structured, and probing questions were used when needed to encourage participants to clarify or elaborate. All interviews were professionally transcribed, and the researcher reviewed each transcript against the recording to look for errors, but found none.

Demographic variables. The instrument included several demographic questions. GPA was captured because of the body of literature that exists about service-learning and its impact on GPA. While some studies show a positive impact of service-learning on academic learning (Markus, et al., 1993; Vogelgesang & Astin, 2000), others show no difference in academic learning based on participating in service-learning (Parker-Gwin & Mabry, 1998). A recent dissertation study sought to find out whether participating in service learning influenced adult student GPA. Findings showed that GPA was higher only for adults between ages 30 and 39 (Lebeau, 2012). In addition, the National Association of Colleges and Employers Job Outlook 2015 ("National Association of Colleges and Employers," 2014) found, when 250 employers were surveyed, that a job candidate's GPA is an important attribute considered when making a hiring decision. These examples highlight why GPA was an interesting demographic variable to capture. The complete list of demographic variables included in this study is:

1. Gender (0=male, 1=female)
2. Current overall GPA: 4.0-3.9; 3.8-3.0; 2.9-2.0; 1.9-1.0; less than 1.0)
3. Race/ethnicity: American Indian or Other Native American; Asian, Asian American, or Pacific Islander; Black or African American; White (non-Hispanic); Hispanic or Latino; Multiracial; Other; I prefer not to respond
4. Age (1 = *18-29*, 2= *30-39*, and 3 = 40-49; 4=50-59; 5=60 and over)
5. Current work status: 1=full-time (40+ hours), 2=part-time (less than 40 hours), 3= not currently working; 4=prefer not to answer
6. Years of experience working in business-related occupations: (1=0; 2=1-5; 3=6-10, 4=11-15, 5=16-20; 6=21 or more)
7. Current employment: (1=manager, 2=non-managerial professional occupation; 3=technical occupation, 4=administrative/secretarial occupation, 5=other)
8. How long have you been working at that level of employment? (1=0; 2=1-5; 3=6-10, 4=11-15, 5=16-20; 6=21 or more)
9. In what industry do you work? 1=not currently working; 2=business services or retail; 3=business manufacturing; 4=health care; 5=media/communications; 6=science/technology; 7=education; 8=government/non-profit; 9=agriculture/fishing/forestry; 10=other
10. At what college/university did you complete your MBA capstone course? (This was an open-ended question with no answer required.)

Data Analysis Plan

Both the quantitative and qualitative data were analyzed according to this plan.

Quantitative data analysis. The purpose of RQ1 was descriptive, meaning it asked *what* or *which* questions (Gall, Gall & Borg, 2007), so the statistical analysis followed those statistics appropriate for a descriptive research design. In a descriptive study, variables are defined and measured. The Tanyel et al. study (1999) used 16 skills/attributes as variables, but my study used 19, because a few of the Tanyel variables were double-barreled. For instance, responsibility and accountability were considered one variable by Tanyel but were separated into two variables for this study. In the same way, time management and punctuality were considered one variable by Tanyel but were separated into two variables for this study. Decision-making and analytical ability were also considered one variable in Tanyel but were separated into two variables for this study. A list of the skills and their definitions is included in Appendix A.

A Likert scale was used in the Tanyel study, and a Likert scale was used in this study. However, the Tanyel study used a scale of 1-5, but in order to capture greater nuances in the data, this study used a scale of 1-7. The scale was: 1=was not enhanced; 2; 3=was somewhat enhanced; 4; 5=was moderately enhanced; 6; 7=was greatly enhanced. There were two groups, and descriptive and frequency statistics were performed on the variables in each group. The following descriptive statistics were analyzed using SPSS v. 20:

- frequency distributions;
- means, or the average of each variable; and standard deviations, to measure the dispersion surrounding the mean;

- t-test for independent samples, calculated at the $p<.05$ alpha level of significance in order to measure whether the means of each of the variables in the two groups were statistically different from each other;
- measures of data symmetry including skewness to reveal concentrations of data at either end of the scale and kurtosis to reveal the concentration of data on a single value; and
- ANCOVA to determine if there was significance for the co-variates gender and overall GPA on the enhancement of employability skills for students who had a service-learning experience during their business capstone.

A multivariate statistical approach called Exploratory Factor Analysis (EFA) was used to identify the way the skills cluster around particular constructs, or factors. Because I did not have a predetermined number of factors in mind, EFA was appropriate. EFA, sometimes referred to as data reduction, identifies correlations between and among variables in order to combine them into one underlying factor that then can be analyzed. Several variables may be correlated with each other, and thus form a factor. In the same way, there may be variables that are not correlated to each other at all, and those remain their own factor.

Spearman's rank correlation coefficient, or Spearman's rho, were run to view the correlation coefficients of the 19 employability skills. Correlations identify relationships between variables, and higher correlations are a sign of stronger relationships. In an educational study such as this one, correlations can help researchers analyze a large number of variables within the same study (Gall, Gall & Borg, 2007). In order to analyze data using Spearman's, two assumptions must be met. First, variables must be measured on at least an ordinal scale. Since the 19 employability skills were measured on a 7-point Likert scale, this assumption was met. Second, there needs to be a monotonic relationship between the variables, meaning either the variables must increase in value together, or as one variable value increases, the other variable's value must decrease. To check for this assumption, a scatterplot was created and then visually inspected to check for monotonicity.

A correlation matrix was created (see Table 2) to determine which items were correlated. A scree plot was generated to help determine the number of factors that should be retained. Each factor was then named and described. Oblique rotation was performed to give the correlation between the factors (Costello & Osborne, 2005). I then used each factor to make comparisons between the service-learning and the non-service learning groups. Results are described in Chapter IV.

The Mann-Whitney-U nonparametric test was used to compare the scores from Group A and Group B to see if there were differences between students who had service-learning in their capstones from those who did not. The Mann-Whitney-U test is a powerful nonparametric test for comparing two populations. It does not assume that the data are normally distributed. Tests for normality of the data were performed and are described in Chapter IV.

Qualitative data analysis. Data collection and data analysis are simultaneous activities in qualitative research (Stake, 1995; Merriam, 1998) for reasons that are both practical and important to the methodology. For practicality, the amount of data was large, and I did not want to wait until all data was gathered to begin analyzing it. In addition, the data collection was emergent, and I needed to begin analyzing the data while still in the data collection stage in order to be able to ask new questions that emerge from the data, to see if there were comparisons and themes. This allowed allowed me to reformulate some interview questions, although, in general, I asked the questions that were developed in the Interview Protocol.

The two methods of qualitative data analysis that were used in this study were the constant comparative method and the content analysis method. In the constant comparative method, data were read as it was collected and transcribed beginning with the first set of interviews. After three interviews had been conducted, content analysis began by doing line-by-line open coding, where potential codes were written in the margin of each document.   A master codebook was started, and codes were copied and pasted into the master codebook. After three interviews, tentative categories began to emerge, so codes were clustered into categories. With these topics, I then went back to the raw data to see if the topic descriptions seemed to correspond with the data and whether new topics were discovered from the data.   If these topics still made sense after repeating this process with a new round of transcribed interviews, they were turned into more definitive categories. Once a preliminary set of codes and categories was created and organized, analysis of documents continued, using the results of the analysis to determine whether any new categories should be established or if any existing categories could be reduced to themes (Miles and Huberman, 1994; Peden-McAlpine, n.d.). Categories were expanded and collapsed between the fourth and seventh interview. The eighth, ninth and tenth interviews fit into the existing categories. I then began to examine the relationships between the categories and began writing about those relationships. At the same time, participants' quotes for each category were copied into one document.

Quotes were then chosen to represent the categories. Categories emerged from the analysis and were organized into themes. Themes were isolated, named, and quotations from interview participants were used to explain the voice of the participants. The themes were all related both to each other, to the data, and to the research questions (Whittemore, Chase, & Mandle, 2001).

In qualitative research, it is normal for the researcher to have preconceived ideas as long as they are made explicit (Creswell, 1997; Hutchinson & Wilson, 1994). I have some personal experiences with the major topics of this dissertation: business education, employability skills, service-learning, capstones and reflection. I am a graduate of an MBA program, and have worked in business and also co-own a business. As a business owner, I may have preconceptions about which employability skills are important in the workplace. I have also been involved in business education, both at the secondary and collegiate level, for approximately 14 years. As my own MBA program did not have a capstone, my only involvement with capstones is that the undergraduate business program for adults I direct at Bethel University has a capstone course, and I am the course author and one of the instructors of that course.

My personal experience with service-learning is that I included a service-learning component in two undergraduate business courses I taught a few years ago. Because of this I saw some of the potential outcomes to business students as well as some of the challenges, and it made me curious to learn more about service-learning. In addition, I have participated or led service activities (not service-learning) for many years. I was involved in the leadership of a non-profit organization that provided help to pregnant women, volunteered to teach illiterate adults how to read, worked as a volunteer guardian ad-litem, and helped mobilize church members to serve their community. Because of these experiences, I had more questions than preconceptions. I was eager and open to learning more about employability skills, business capstones, service-learning and reflection.

Participant Consent, Confidentiality, and Protection

Approval by the University of Minnesota's Institutional Review Board (IRB) was sought prior to the start of the study because the study involves human participants. Approval was granted on December 12, 2014. Because Institution A's students were directly approached to participate in the study, approval by that institution's Institutional Review Board (IRB) was sought, and was granted on November 13, 2014. In addition, an MBA professor from Institution A agreed to pass the survey announcement on to her MBA capstone completers, so IRB approval was gained from that institution on November 17, 2014. The informed consent was the first question on the survey, and if the consent was not signed, the participant was not allowed to continue with the survey. In addition to the consent form on the survey, all participants agreeing to be interviewed signed another consent prior to the interview.

This study provided minimum risk to participants. The Qualtrics electronic survey tool required a username and password that only I know. All electronic documents were stored on the hard drive of my password-protected computer, and one backup copy of all electronic documents was stored on a CD that will remain in a locked drawer at my home. The transcribed Microsoft Word documents were encrypted with a password. Each interview participant was issued a pseudonym so that real names were not used.

Chapter Summary

This chapter defined the methodological approach used in this study. It first described the research design, a non-experimental comparative descriptive design using a mixed-methods methodology, that guided the research questions. It then described the population and sample, as well as how participants were recruited. It also described the measures/evaluation used for each research question. Data collection procedures and data analysis techniques were described, as well as reliability and validity measures/evaluations for both the quantitative and qualitative methodologies. The IRB-approved survey instrument and interview protocol described in this chapter are located in Appendix A.

CHAPTER IV: RESULTS

Using the methodologies described in Chapter III, data collected are presented in this chapter. The purpose of the study was to examine the alignment between the employability skills employers need and the employability skills that graduate business students gain through service-learning in business capstones. In addition, the study sought to understand whether reflection, a stated requirement of service-learning, enhances the employability skills of graduate business students who participate in service-learning during a capstone. The research questions guiding the methodology are:

RQ1: Are there differences in employability skills developed between MBA students who participate in capstones that include service-learning and comparable MBA students who participate in capstones that do not include service learning?

Sub-RQ1: Are there differences among various demographic groups in the extent to how their employability skills were enhanced?

RQ2: Which, if any, essential employability skills, as identified by employers, are enhanced by service-learning experiences in business capstones?

RQ3: Which aspects of service-learning experiences contribute to enhanced employability skills in graduate business students?

RQ4: In what ways did reflection offered through business capstones that included service-learning enhance, in participating students, their employability skills?

This chapter is organized as follows. Following the Sequential Explanatory Mixed Methods Design with Participant Selection (Plano Clark & Creswell, 2008, the quantitative data are analyzed first. The results of the quantitative data analysis are used to shape the focus and questions of the semi-structured interviews from which qualitative data are collected and analyzed. The quantitative data analysis is used to report results for RQ1, Sub-RQ1, and RQ2, and the qualitative data analysis is used to report results for RQ3 and RQ4.

Quantitative Results

There were two research questions and a sub-question measured by the quantitative data analysis. The following data analysis was performed for *RQ1: Are there differences in employability skills developed between MBA students who participate in capstones that include service-learning and comparable MBA students who participate in capstones that do not include service learning?*

- Descriptive statistics that include year of MBA capstone course completion; number of respondents who completed a service-learning experience as part of their MBA capstone course; college/university where the MBA capstone course was completed; number of courses in MBA program that had a service-learning experience; and, number of undergraduate courses that had a service-learning experience.

The following data analysis was performed for *Sub-RQ1: Are there differences among various demographic groups in the extent to how their employability skills were enhanced?*

- descriptive statistics for gender, overall GPA, race/ethnicity, age, current work status, and type of industry, and
- ANCOVA, to determine if there was significance for gender and overall GPA

The following data analysis was performed for *RQ2: Which, if any, essential employability skills, as identified by employers, are enhanced by service-learning experiences in business capstones?*

- descriptive statistics of the 19 employability skills that were described in Chapter 2; and,
- non-parametric statistics including Spearman's Correlation, Exploratory Factor Analysis and Mann-Whitney-U test.

Demographic Profile of Respondents

Out of 109 surveys submitted, 79 contained useable data. There were several surveys where respondents started the survey, answered a few questions, but did not complete the survey. If survey data did not contain answers to the questions about employability skills, they were eliminated. Frequencies were run on the categorical data to count the number of individuals that fell into each category. Descriptive statistics were found for: year of MBA capstone course completion; number of respondents who completed a service-learning experience as part of their MBA capstone course; and college/university where the MBA capstone course was completed.

Year of capstone completion. The announcement respondents received about the survey asked for the date of MBA capstone completion to be within five years of capstone completion. For the most part, the data reflect this. Sixty-one respondents (76%) completed their MBA between 2010-2014, nine respondents (11%) completed their capstone before 2010, and 9 respondents (13%) did not indicate a year of completion, but did respond that they completed an MBA capstone.

College/University. Respondents were asked where they completed their MBA capstone. While a response was not required, all respondents provided an answer. In all, the respondents represented MBA students from 14 US-based colleges/universities. The largest response rates came from four institutions, with 46 responses (57.5%) from Institution A, 8 responses (10%) from Institution B, 8 responses (10%) from Institution C, 6 responses (7.5%) from Institution D, and the rest from 11 various institutions. The reason why response rates were higher for some institutions is because of the approach to how the survey was administered. The two institutions that administered the survey centrally had a higher response rate. In addition, one institution had a professor who made personal contacts with MBA alumni to encourage them to complete the survey. Lastly, I had a personal connection with one institution through LinkedIn.

Service-learning experiences in graduate and undergraduate coursework. Survey questions asked respondents to identify how many service-learning experiences they completed in their graduate and undergraduate coursework. Table 3 in Appendix A summarizes the results. Responses showed that a majority (52.5%) had not completed any prior service-learning in their graduate coursework, and a majority (53.75%) had not completed any prior service-learning experiences in their undergraduate coursework. At the graduate level, 35 percent completed one or two service-learning experiences, and 8.75 percent completed three or four service-learning experiences. At the undergraduate level, 33.5 percent completed one or two service-learning experiences, while 10 percent completed three or four service-learning experiences. The average number of service-learning experiences completed by graduate students was 1.58 and the average number of service-learning experiences completed by undergraduate students was 1.54.

Employability skills. Respondents were asked to indicate the extent that a given list of 19 employability skills was enhanced during their MBA capstone course. Employability skills were measured from a scale of 1 (skill was not enhanced) to 7 (skill was greatly enhanced). The mean and standard deviation for each employability skill are shown in Table 3. The three skills reported to be enhanced the most during respondents' capstone course were decision-making (6.71), presentation skills (6.66), and ability to work in teams (6.65). The three skills reported as being least enhanced during the capstone course were computer problem-solving (4.27), computer word-processing (4.57), and ability to assimilate new technology (4.75). Out of the 79 participants, 46 out of 79 (58%) respondents were from the same institution. Since that number was large, that institution was isolated into its own group, and all other institutions were put into another group. A t-test for independent groups was calculated to compare the means between the two groups. Results showed that at the p=.05 level of significance, there was no significant difference between the groups for any of the 19 employability skills.

Table 3
Level of Skill Enhancement During Capstone-Institution With Most Responses, All Other Institutions, and All Institutions Combined
n=79

	Institution Most Responses (n=46)		All Other Institutions (n=34)		All Institutions (n=79)	
Employability Skills	Mean	SD	Mean	SD	Mean	SD
Ability to assimilate new technology	4.59	1.771	5.03	1.959	4.75	1.850
Ability to work in teams	**6.59**	1.586	**6.81**	1.281	**6.65**	1.485
Accountability	6.37	1.372	6.56	1.390	6.43	1.375
Analytical ability	6.26	1.163	6.72	1.224	6.44	1.196
Computer problem-solving skills	4.0	1.838	4.75	2.200	4.27	2.036
Computer word-processing skills	4.59	2.082	4.66	2.209	4.57	2.146
Creativity and creative	6.37	1.181	6.84	1.081	6.56	1.152

thinking						
Decision-making	**6.54**	1.187	**7.00**	.916	**6.71**	1.111
Ethical values	5.74	1.902	6.19	1.839	5.95	1.880
Global awareness	4.85	2.129	6.13	2.277	5.35	2.255
Interpersonal skills	6.09	1.396	6.53	1.414	6.27	1.402
Oral communication	6.46	1.441	6.65	1.704	6.55	1.543
Persuasive ability	5.89	1.636	6.50	1.295	6.14	1.517
Presentation skills	**6.52**	1.362	**6.97**	1.332	**6.66**	1.413
Project management	6.41	1.600	6.56	1.865	6.46	1.701
Punctuality	5.39	1.868	5.53	1.967	5.46	1.887
Responsibility	6.00	1.745	6.25	1.741	6.10	1.725
Time management	6.39	1.468	6.50	1.606	6.37	1.627
Written communications	6.28	1.601	6.31	1.615	6.25	1.629

A Mann-Whitney-U test was then performed for the three skills reported to be enhanced the most (decision-making, presentation skills, and ability to work in teams) in order to see if there were differences between students who had service-learning in their capstones from those who did not. The Mann-Whitney-U nonparametric test is appropriate for comparing two dichotomous groups. While it assumed that the distribution was the same between the two groups and that the scale was ordinal, it did not assume normality of data. Skewness for each of the three skills did not fit the parameters of -1 and +1 (Bulmer, 1979) and kurtosis was not around three. The alpha value of $p < .05$, standard in educational research, was used to determine if there was a significant difference between the two groups. The data were divided into two groups: Group A=service-learning and Group B=no service-learning. Group A contained all of the respondents who had at least one service-learning experience in their MBA capstone course. Group B contained all of the respondents whose capstone course did not contain a service-learning experience. Results revealed that there was a significant difference between the two groups only for presentation skills (p=.003). There was no significance for either decision-making (p=.212) or the ability to work in teams (p=.087).

These results are different than the Tanyel et al. (1999) study upon which this study is based. In Tanyel, findings showed that employers ranked (in order) interpersonal skills, ethical values, and responsibility and accountability as the top three skills needed for success by new business school graduates. Similarly, facultys' rankings (in order) were interpersonal skills, a tie between ethical values and responsibility and accountability, and decision-making and analytical ability. One reason for the differences could be that in this study, the population sampled were MBA graduates, while in Tanyel, the population sampled were both employers and college-level business faculty. Another reason for the differences could be that Tanyel was done in 1999 and this study was completed 16 years later, and employers' needs may have changed.

Demographic Differences

Sub-RQ1 asked, *Are there differences among various demographic groups in the extent to how their employability skills were enhanced*? Of total survey respondents, 53.8% were male and had GPA of between 3.4 and 4.0 (93.7%). Most (86%) respondents were white-non Hispanic. Respondents were ages 18-29 (23%), 30-39 (39%), 40-49 (19%), 50-59 (18%), and one respondent (1%) was 60 or over. The current work status was full-time, 40 hours or more per week for 94% of respondents. The most frequent level of employment was manager (53%) and non-managerial professional (35%). Respondents mainly work in business services or retail (19%), or health care (18%), although a wide variety of industries were represented, including non-profit and education. Tables for these statistics are in Appendix A.

While data was collected for several demographic characteristics, the characteristics of gender and overall GPA were chosen for analysis to see if demographic differences existed in the extent to how their employability skills were enhanced by service-learning. Analysis of Covariance (ANCOVA) was used to test for differences. An ANCOVA is similar to an ANOVA, analysis of variance, except ANCOVA takes into account the effect of a covariate. A covariate is another variable that may or may not have an influence on the outcome of the dependent variable. ANCOVA tests the effect of a treatment while controlling for a covariate that might also be having an effect on a dependent variable. The two covariates chosen to analyze were gender (males, females) and GPA (3.4-4.0 or 2.4-3.3). I was interested to see if gender and/or overall GPA were having an effect on the 19 employability skills (the dependent variables).

Gender as a Covariate. Before running ANCOVA, two assumptions were checked. First, the values of the covariate cannot vary across the different levels of the independent variable which is service-learning/no service-learning. This means the values for respondents who had a service-learning experience and values for respondents who did not have a service-learning experience should be fairly similar. To check this assumption, an ANOVA was performed and results showed that at the 95% confidence level, there was non-significance ($p=.566$). Non-significance was the finding needed in order to be able to include the covariate of gender in the ANCOVA analysis.

The second assumption is called homogeneity of regression, which means that the slope for gender, the covariate, and all 19 dependent variables are similar. To test homogeneity of regression, ANCOVA was run with all 19 skills as the dependent variables. For each skill, at the 95% confidence level, the p value was greater than .05, which means there was non-significance.   Thus, the assumption of homogeneity of regression was met for all 19 independent variables and I proceeded with the ANCOVA analysis.

ANCOVA was next run for all 19 skills using the covariate gender (males, females). Of respondents, 53.8 percent were male and 46.2 percent were female. Results showed that the only statistical significance, when the covariate gender was held constant, were for the skills of analytical ability (p=.036) and oral communication (p=.014). From this result we can conclude that gender was found to be significant for enhancement of analytical ability and oral communication during a service-learning experience during a business capstone.   From this we can conclude that there is a relationship between gender and analytical ability and oral communication, and service-learning enhances these skills for males more than it does for females. Since it is important for females to have analytical ability and oral communication skills too, this may be an area that should be studied further, to see why these skills are enhanced more in males than females.

GPA as a Covariate. Before running ANCOVA, two assumptions were checked. The first assumption is that the values of the covariate cannot vary across the different levels of the independent variable, service-learning/no service-learning.   This means the values for respondents who had a service-learning experience and values for respondents who did not have a service-learning experience should be fairly similar. To check this assumption, an ANOVA was performed and results showed that at the 95% confidence level, there was non-significance (p=.300).   Non-significance was the finding we wanted in order to be able to include the covariate of overall GPA in the ANCOVA analysis.

Next, homogeneity of regression was tested. An ANCOVA was run with all 19 skills and overall GPA as the covariate to look for a non-significant result at the 95% confidence level. Results showed significant results for two variables: presentation skills (p=.038) and project management skills (p=.005). For the remaining 17 skills, results were non-significant, so I decided to proceed with the ANCOVA.

ANCOVA was next run for all 19 skills using the covariate overall GPA. All respondents said they either had an overall GPA in their MBA program in the range of 2.4-3.3 (6.3%), or 3.4- 4.0 (93.7%). Results showed that there was significance, when the covariate was held constant, for six of the skills: analytical ability (p.=.019), oral communication (p=.021), presentation skill (p=.003), project management (p=.030), responsibility (p=.024), and time management (p=.018). From this we can conclude that overall GPA does have a significant difference for some skills. There is a relationship between a high GPA and the above six skills when students engage in service-learning. To the extent that a lower GPA may hurt these skills, this should be studied further, as future studies on how students with low GPA may be affected by service-learning may yield interesting results.

Exploratory Factor Analysis

The 19 employability skills were analyzed to determine if factors were present using exploratory factor analysis (EFA). The EFA provided an opportunity to reduce a large number of variables to a few factors by combining those that were moderately or highly correlated with each other. Since there was no predetermined number of factors, exploratory factor analysis, and not confirmatory factor analysis, was appropriate. Factor analysis, sometimes referred to as data reduction, identifies correlations between and among variables in order to combine them into one underlying factor that can then be analyzed. Several variables may be correlated with each other, and thus form a factor. EFA is appropriate when there is no hypothesis about the underlying factor structure of the measures being analyzed. According to Gorsuch (1983), the goal of factor analysis is "to summarize the interrelationships among the variables in a concise but accurate manner as an aid in conceptualization" (p. 2). In the same way, there may be variables that are not correlated to each other at all, and those remain their own factor. Before EFA could be performed, Spearman's correlational analysis was obtained, after assumptions were tested.

Spearman's correlation analysis. To conduct the correlation analysis with these non-parametric data, Spearman's rank correlation coefficient, or Spearman's rho, were run to calculate the correlation coefficients of the 19 employability skills. Table II in Appendix A shows the results of the correlation analysis. The items/variables that were the most strongly correlated, with r=.80 or stronger, were:

- responsibility was strongly correlated with time management (r=.826);
- project management skills were strongly correlated with presentation skills (r=.822); and
- oral communication was strongly correlated with presentation skills (r=.814).

The three items/variables that were the most weakly correlated, with a weak correlation defined as r<=.3, were:

- punctuality was weakly correlated with creativity (r=.262);
- global awareness was weakly correlated with oral communication (r=.263); and,

- computer problem-solving was weakly correlated with ability to work in teams (r=.265).

A strong correlation between responsibility and time management might be expected, as responsible people may have strong time management skills so they could hold themselves accountable for their tasks, milestones and deliverables. The strong correlation between project management and presentation skills could also be attributed to the importance of completing presentations within set milestones. The strong correlation between oral communication and presentation skills also might be expected, because presentations are usually done orally. The weakest correlations also make sense. Punctuality is weakly correlated with creativity, which is not surprising because the two skills do not seem to have much in common with each other. Global awareness is weakly correlated with oral communication, which might be expected because they do not appear to have much in common. Computer problem-solving is weakly correlated with ability to work in teams, which makes sense if respondents thought of time spent working at their computers as independent, and not team-related, tasks.

Testing assumptions. Prior to running the EFA, two basic assumptions were tested. A Kaiser-Meyer-Olkin (KMO) Measure of sampling adequacy was performed to determine the suitability of the data for EFA by measuring its multicollinearity. A KMO looks at the data and tells whether it is likely to factor well. The overall test and each variable must produce a Measure of Sampling Adequacy of .5 or higher (Leech et al., 2008). Lack of significance means the variables are independent, while significance means there is interrelatedness in the variables. For the 80 cases analyzed, the KMO returned a value of .849 which is adequate.

Another assumption of multicollinearity was tested using the Bartlett's Test of Sphericity. This test determines if variables are highly correlated enough to be able to conduct an EFA. According to Leach et al. (2008), "a significant sphericity value (≤ .05) indicates that the variables are correlated highly enough to provide a reasonable basis for factor analysis" (p. 63). Since the Bartlett's Test of Sphericity returned a value of .000, the data could be used for EFA.

Selection of Factors. There were two basic stages of the EFA. The first was factor extraction, where the number of factors were extracted using SPSS v. 20. A scree plot was generated to help determine the number of factors that should be retained. A Scree plot plots eigenvalues in descending order, and shows the number of factors that fall before the evident drop of magnitude, which are the factors that should be retained (Cattell, 1966). Eigenvalues were generated for each factor. Eigenvalues are the sum of squared correlations for each factor, and represent the variance accounted for by each underlying factor. An Eigenvalue must be 1 or more in order to be considered stable and significant (Kaiser, 1958). The scree plot for this data analysis revealed a clear four factor solution, and all variables/items loaded into a factor.

The second stage was Principal Axis Factoring with promax rotation. Principal Axis Factoring seeks to identify the least number of factors which can account for the common variance (correlation) of a set of variables (Conway & Huffcutt, 2003; Garrison, 2010). If the factors were orthogonal, meaning statistically independent (not correlated), varimax rotation would have been chosen. Since there was correlation between the factors, promax rotation was used.

Results. The results of the EFA, using the Pattern Matrix in the SPSS output, showed that four factors existed on the scale and those factors accounted for 73% of the total variance. All items loaded into only one factor. Two of the factors contained seven items, one factor contained three items, and one factor contained two items. Each factor was then studied to determine if any items should be excluded. When deciding which items to include or exclude from a factor, the following criteria were considered:

- if a component was .4 or greater, it was included into a factor; and
- factors with eigenvalue greater than one (1.0) were included into a factor (Kaiser, 1958).

Based on these criteria, all items were included into their respective factors. Descriptive statistics were run on all four factors. The reported skewness and kurtosis confirmed that the data were not normally distributed. The Mann-Whitney-U was highest for Factor 1 (44.81) and Factor 2 (36.65), and lowest for Factor 4 (13.26), which loaded only two variables. Cronbach's (1951) alpha was utilized for all four factors to determine internal consistency. Cronbach's alpha for Factor 1 was .939, which is excellent, and Cronbach's alpha for the other three factors was also strong.

Each factor was then labeled and described. In labeling the factors, the items were looked at to determine what was common about the items that loaded into each factor. The four extracted factors, number of items in the factor, the variables contained in each factor, and the Cronbach's Alpha are shown in Table 4.

Table 4
Factor Loadings for Exploratory Factor Analysis with Promax Rotation

Factor Number and Label	Number of Items	Variables	Cronbach's Alpha
Factor 1: Collaborative	7	ability to work in teams, interpersonal, oral communications, persuasive ability,	.939

Learning		presentation, project management, responsibility	
Factor 2: Technological and Organizational Awareness	7	ability to assimilate new technology, analytical ability, computer problem solving, computer word processing, ethical values, global awareness, punctuality	.848
Factor 3: Timely Written Communications	3	accountability, time management, written communications	.899
Factor 4: Making Creative Decisions	2	creativity and creative thinking, decision-making	.749

Each factor was given a label that captured the essence of the variables loaded into the factor. *Collaborative Learning* was the label chosen for Factor 1. According to Drake et al. (2006), terms such as cooperative learning, team work, group work and collaborative learning "are often used synonymously" (p. 33). However, collaborative learning also has its own definition, and refers to "a variety of instructional practices that encourage students to work together as they apply course material to answer questions, solve problems, or create a project" (Colbeck et al., 2000, p. 61). In general, in collaborative learning, small groups share the responsibility for outcomes of tasks and projects.

Azim et. al. (2010) found that soft skills, defined in this study as employability skills, are key to managing complex projects. In that qualitative study, 75 percent of participants interviewed said the most important factor for dealing with complex projects was people skills. This helped confirm Factor 1 which includes the variables ability to work in teams, interpersonal, oral communications, persuasive ability, presentation, project management, and responsibility. As further confirmation, a study by Beard et al.

(2008) of 276 employers found that the top soft skills needed by information systems employers are oral and written communication skills, strong work ethic, and teamwork skills. Levasseur (1991) related interpersonal skills to effective communication by saying that effective communication involves actively listening and providing constructive feedback, both important skills necessary to relating interpersonally with others.

The label chosen for Factor 2, which loaded seven variables, was *Technological and Organizational Awareness*. The factors loaded were: ability to assimilate new technology, analytical ability, computer problem solving, computer word processing, ethical values, global awareness, and punctuality. In support of this factor, Lavasseur (2013) defined four classifications of soft skills: personal, interpersonal, group, and organizational. It was this study, combined with the word awareness from the global awareness variable, which gave me the idea to label the factor *Technological and Organizational Awareness*.

The label chosen for Factor 3, which loaded three variables, accountability, time management, and written communications, was *Timely Written Communications*. The idea for this label came from results of the qualitative data analysis. One of the two main deliverables all of the interview participants had to achieve in their team capstone projects was a written report, which was usually a business plan. There were deadlines associated with this deliverable, and the team was held accountable to each other for timely delivery of the written report. I believe this may be why these three variables loaded into the same factor.

The label chosen for Factor 4, which loaded the two variables creativity & creative thinking and decision-making, *was Making Creative Decisions*. The idea for this label came from results of the qualitative data analysis. The definition used in this study for creativity and creative thinking was, *generates new and worthwhile ideas and demonstrates originality in work* ("P21 Framework Definitions," 2009). The written work in the MBA capstone courses in this study were original work created by capstone teams. Creative thinking was needed to generate this written work.

Differences Between Service-Learning and Non-Service-Learning Groups

Mann-Whitney-U was performed to compare the scores from Group A (service-learning in capstone) and Group B (no service-learning in capstone) to see if there were differences between students who had service-learning in their capstones from those who did not. The significance value of $p < .05$ was used to determine if there was a significant difference between the two groups. Table 5 shows the results of the Mann-Whitney-U test for the four factors. Results indicated that there was significance only for Factor 1: Collaborative Learning. Collaborative Learning is enhanced for capstone students who have a service-learning experience more than students whose capstone does not include a service-learning experience.

Table 5

Significant Associations between Factors and Service-Learning or No-Service Learning
$p < .05$

Factors	Mean Rank		Mann-Whitney U	z	p
	Service-Learning	No Service-Learning			
Factor 1	46.53	34.19	479.000	-2.365	.018
Factor 2	45.78	35.79	528.500	-1.883	.060
Factor 3	45.28	36.77	576.500	-1.613	.107
Factor 4	44.00	37.55	615.000	-1.232	.218

Summary of Quantitative Analysis

Responses from 79 usable surveys were used to perform quantitative data analysis for RQ1, Sub-RQ1, and RQ2. From 19 employability skills that were measured, the three skills reported to be enhanced the most during respondents' capstone courses were decision-making, presentation skills, and ability to work in teams. Of these three skills, Mann-Whitney-U was performed, and results showed that only presentation skills were found to be enhanced by a service-learning experience. Exploratory Factor Analysis was used to combine the 19 employability skills into four factors. Mann-Whitney-U was used to determine if there were differences between capstone students who had a service-learning experience in their capstone and those who did not. Of the four factors, the one labeled *Collaborative Learning*, which loaded seven variables/items, was the only one found to be statistically significant. Service-learning enhances collaborative learning.

Two demographic variables, age and gender, were chosen to see if there were differences among demographic groups in the extent to how their employability skills were enhanced by service-learning. Using ANCOVA, results showed that for the covariate of gender, there was significance for analytical ability and oral communication. For the covariate of overall GPA, there was significance for six employability skills: analytical ability, oral communication, presentation skills, project management skills, responsibility, and time management. There is a relationship between a high GPA and several employability skills, and these results should be studied further. In the next section, qualitative data from this mixed-methods study are analyzed.

Qualitative Results

Qualitative data analysis was used to measure RQ3 and RQ4. The mixed methods design used in this study was the Sequential Explanatory Mixed Methods Design with

Participant Selection (Plano Clark & Creswell, 2008). Mixing occurred at the point of data collection. Timing was sequential, and began with the quantitative phase. Once the quantitative data were collected, results were used to inform which participants would be chosen for the quantitative data collection. Thus, the qualitative data collection depended on the results of the quantitative data, and the qualitative results were used to add new insights to the quantitative results as well as the study as a whole.

To determine which participants should be randomly select for interviews, one survey question was chosen: *Reflection means intentionally considering an experience in light of particular learning objectives. Keeping that definition in mind, what was the frequency of the reflection in your MBA capstone course?* Responses were measured on a Likert scale from 1 (no reflection) to 7 (a lot of reflection). In order to be eligible to be interviewed, respondents had to answer that they had at least 3 (some reflection).

Because the focus of the qualitative analysis was on the service-learning experiences of MBA capstone students as well as the reflection of MBA capstone students who participated in a service-learning experience in their capstone, interview participants were chosen from Group A: Service-learning. From Group A, there were 29 respondents who reported some reflection to a lot of reflection. Because of this, they met the criteria for interviews. Of those 29 respondents, 17 answered yes or maybe when asked whether they would agree to be contacted for an interview. All 17 were emailed, and of those 17, 11 agreed to be interviewed, for a 65 percent response rate). Of those 11, one was disqualified after finding out prior to the interview that he did not meet the criteria for the interviews in that, while he had completed at least three service-learning experiences during his MBA program, his capstone project did not contain a service-learning experience. This left 10 participants, a 59 percent response rate, who were interviewed.

The 10 participants represented three MBA programs. One of the programs, with two participants, was part of a faith-based East coast college in the United States. Another of the programs, with two participants, was an MBA program at a faith-based Midwestern university in the United States. The last program, with six participants, was an MBA program from a public, research-based university on the West coast in the United States. Demographically, four participants were male and six were female. The racial mix was 60% White (non-Hispanic), 20% Hispanic or Latino, 10% Black or African American, and 10% Multiracial. Age ranges were 18-29 (40%); 30-39 (40%), 40-59 (10%), and 50-59 (10%). While 90 percent of participants were employed full-time, 40 or more hours per week, one respondent preferred not to state a work status.

Aspects of Service-Learning that Enhanced Employability Skills

RQ3 asked, *Which aspects of service-learning experiences contributed to enhanced employability skills in graduate business students?* From the results of the quantitative analysis, the three most significant employability skills emerged: decision-making, teamwork, and presentation skills. Per the approved methodology, an Interview Protocol was developed to find out what aspects of the service-learning experiences enhanced those three employability skills. Results revealed the following four themes: 1) Structure and Deliverables of Capstone; 2) Opportunities to Make Decisions; 3) Opportunities to Build Teamwork Skills; and, 4) Opportunities to Build Presentation Skills. Each theme will be discussed in this section.

Theme 1: Structure and deliverables of capstone. How the capstone course was structured, the major deliverables of the course, and the professor's interaction with students all emerged as important aspects that could contribute to enhanced employability skills. All 10 participants had to complete a capstone project for community-based organization that they called their *client*, and the project was centered around a service-learning experience. The four aspects that were important to the structure and deliverables of the capstone were: the capstone was summative; the capstone used client-based and service-focused instructional methods; major deliverables were a written report and multiple oral presentations; and the professor's positive and/or negative interactions with students.

Summative nature of capstone. All graduates reported that their capstone was the last course in their MBA program. A slight modification was that one participant took the capstone the last semester alongside three other courses with permission from her university. Most mentioned that the capstone synthesized learning and skills from other courses. P3[1] said, "it echoed very much for me the ability to pull the different skills we're learning from the MBA program into one kind of grand finale course". Another participant echoed the summative nature of the course by saying, "I was able to go back and draw on various aspects of the program, other courses, other, um, disciplines within the study - not just management - and be able to use those - basically I remember the tool set that we were learning in the MBA program to draw on to do my paper". Another participant voiced,

> I think it's just they really expected us to put what we learned all in one, based on our, you know, work with our client. There wasn't really one specific - it's really

[1] Participants will be identified with a number ranging from P1 to P10.

> is a component of everything - marketing, accounting, you know, management courses that we have taken, put together. They expected us to show them, OK, we have, uh, taught you this, now show us what you've learned.

Client-based and service-focused. The instructional method used in all capstones of participants interviewed was the client-based instructional method. Examples of clients included a non-profit health care organization, an academic program at a non-profit university, a non-profit organization that helps people with disabilities, a non-profit organization that helps people with disabilities find employment, a non-profit organization that helps veterans, and two different city villages. While four out of 10 (40%) of participants were matched with an organization based on either contacts provided by their professors or contacts they had, the other six (60%) were matched to clients by their professors. Both tactics seemed to work well. P10, whose professor found the organizations the capstone teams worked for, appreciated the connection between school and the business world by saying, "our professor paired us up with people that we did not know - which was nice - because in the real world, that's what it's really like. If you go into a job, you're able to go in, meet people you don't know, and work with them, knowing how everyone's work style is completely different."

The one commonality in all of the client projects is that there had to be a focus on service to the community. As one participant explained, "It could be about a business topic - that was kind of the general overall arching theme - but the idea was that it was service-oriented". The service-learning piece was something students accepted as valuable to their learning. As one participant said,

> I've always been a person of service and giving back - and part of that's just because my parents were very much that way. And I think it's important for everyone to do it. And as far as the capstone involving that - did it help me? Yes, I would never say no, because I think every time you can give back, you're gaining something from that, you're helping your community, you're contributing

> to the progress of another organization, another individual. So I always think that's a great thing. And so this particular capstone - and for me - I think, yes, very valuable.

P4 voiced that all MBA programs should have a service-learning component in them by saying,

> I would love to see [name of university] or other organizations require their capstone to have a service-learning element to it. It just so happened that we - our team was, um, fortunate enough to have a service-learning component to it, based on the project that we chose… I think it would enrich the learning of, um, the MBA student and hopefully have about a community or an organization that's, you know, has a service component.

P10 appreciated the opportunity to summarize the business knowledge learned during the MBA program for the benefit of a community instead of benefitting herself by saying,

> the service-learning experience was to apply all of the knowledge that we had acquired through the program, which is heavily based around managing money and your finances - other people's finances. So, um, this incorporated how you can take that knowledge and use it for the benefit of a community. …you know it's very easy to get wrapped up in the money and finance part of business management, so this was using the knowledge that we had acquired for the greater good.

Major deliverables were a written report and multiple oral presentations.

All ten participants expressed that their major course deliverables were a written report and multiple oral presentations. Further, the oral presentation was presented both to the client and the class and professor. Differences existed there. With some participants, the class presentation was given after the client presentation, and was considered the final presentation. With others, the class presentation was given before the client presentation in order for the class and professor to practice for the client presentation and give the team feedback for how they could improve their presentation before it was given to the client.

In 60 percent of the cases, the written report was a business plan/business case. Elements of business planning including research, informal interviews with stakeholders, market analysis, competitive analysis, and proposing recommendations. Budgets and proforma financial statements were also commonly part of the plans. As P4 explained,

> and so our role as a, um, capstone course was to put together a business plan - looking certainly at the financial aspect but also at the marketing, um, prospects, looking at the legal implications of it, um, to really get the program on solid footing and making sure that they were - that the group that was putting this new program together was looking at all of the aspects of the program to make sure that it had sustainability and long term success.

Research into legal implications surrounding the business plan was also done by at least one student team. As P4 explained,

> We did a lot of research as far as looking at the Americans With Disabilities Act and some of the other legislation that surrounds, um, protecting students with intellectual disabilities, um, we looked at - did a lot of research in regards to that population, how many there are in the area from a marketing perspective on who the target audience was and things like that. Um, we met with, um, third party organizations like the PASA program, which is an organization - an advocacy organization here in the twin cities that advocates for, um, students with all sorts of disabilities, including intellectual disabilities. So it was really a wide range of research that we did in person, as well as, um, some background information and legal implications with our current legislation.

As P5 explained,

> …we were allowed to choose, obviously, a project that would be of assistance to an organization, um, that had to involve, you know, certain business planning - we had to do a performa - we had to, um, make sure that it met all of the key components of the capstone requirements, so had to touch on all of the basic components of the business plan, um - marketing, finance, um, strategy, etc.

Although in almost all cases, it was known at the beginning of the project that a business plan would be a deliverable, this differed in at least one case where the client initially wanted, or thought he wanted, a marketing plan, but the student team realized that what he really needed was a short-term and long-term business plan. The real-life nature of these business plans became apparent. For example, one student team's business plan was going to be used by the client to share with investors, because the client was aiming to find new funding sources.

The second major deliverable in the capstone project consisted of oral presentations; both external presentations to clients and internal presentations to classmates and professors. For two participants each deliverable included two training presentations to their clients. The purpose of one of the sets of training presentations, for example, was to teach the audience effective listening skills. For all other participants, a final oral presentation to the client was a required major deliverable of the course.

Participants discussed the impact the presentations had on their learning. Presentation skills had such a high impact on their learning that it emerged as a theme, *Opportunities to Build Presentation Skills*, and is discussed in its own section below. In addition to the categories that emerged from that theme, participants mentioned several skills gained by making oral presentations. Specifically, skills mentioned were: the ability to think quickly; the ability to present with confidence; the ability to have flexibility during a presentation; the ability to work together during a presentation; and the ability to adjust to an audience during a presentation.

Professor's interaction with students. Capstone professors played an important role in the learning that happened in the capstone. How they structured the service-learning project, including group structure, assignments, and deadlines, were determinants of student learning. For 8 out of 10 (80%) participants, experiences with their professor during the capstone was a positive or neutral one. For two participants (20%), their interaction with their professor was a negative part of the capstone. Most participants had strong feelings, based on their experiences, about the role their professor had in the capstone.

Two participants, in particular, felt that their professor truly helped them to have a successful capstone project. P2 described this by saying,

> I think that, um, [name of university] has some of the best professors, I think. I may be biased. You know, I felt that the professors really care about the students, and, you know, they really want us to succeed. I have to say, [name of professor]…is certainly one of them.

P5 also felt supported by the professor:

> … our check-in professor…placed a great deal of trust in our group, and so I think for us, he was just always a great motivating factor of keeping us energized and, um . . . focused. I mean we were a group of overachievers, I do say, and, you know, he always wanted to make sure that we just took care of ourselves too, I think, to some respect, you know, and just reassured us that, yes, everything you're doing is great, now just slow down and, you know, think about this or think about that, and . . . so . . . yeah, he was very supportive and always - we always knew that he was available for us. There was never a time where he didn't respond to an email or respond to a, you know, call or anything.

Students had the dual responsibility of trying to please two bosses: their client and their professor. This did not appear in the data as a challenge for any of the participants except for P7, as evidenced by this statement:

> So, early on we went through this process of trying to understand exactly what the professor was looking for. 'Cause ultimately that's - that was our aud - we felt that that was our ultimate audience. Um . . . granted the direct audience in the training was going to be the attendees and participants in the training, but our position was - our ultimate audience that we're speaking to - is Professor [last name].

For the two participants whose interactions with their professor were negative, there were strong feelings about these experiences. P4's capstone course had a disruption in program leadership which led to a change in the instructor assigned to the capstone course, and this change occurred shortly before the course began. P4 described this by saying,

> one of the challenges that we had that unfortunately put a little bit of a damper on, um, our overall experience - and I speak broadly for my team members as well, only because we had many conversations - was kind of the interruption that we had right before our capstone, which was our program director leaving and kind of a professor getting thrown at us - thrown into - being the professor of our capstone at the last minute. Um, in fact we didn't - I think it was the week before our capstone was to start we had a new professor named.

While the last-minute change in professors caused challenges, P4 did admit that, “the professor that had been assigned was very knowledgeable - especially in the marketing realm - and she gave us some very good feedback on our marketing plan, and where we kind of needed to go with that.” Another participant, P1, commented on the style of the professor during class presentations. “…our professor was an interesting character. She wasn't my favorite, in terms of a person outside of class. As a professor, I can see why she did some of the things she did. And she would definitely pick you apart, even mid-presentation…”

Theme 2: Opportunities to make decisions. Because decision-making was the top skill survey respondents identified that was enhanced by their service-learning experience, decision-making was isolated as a skill to be further unpacked through interviews. As P1 said, “Decision-making was a huge component for nearly every part of our project, from minor decisions to major ones, individual decisions, group decisions”. The top three characteristics of decision-making identified through the data analysis were: collaborative decision-making, process-oriented decision-making, and client-focused decision-making. Each is discussed in this section.

Collaborative decision-making. While participants said some decisions were individual decisions, they agreed that decision-making was team-based and collaborative. For the most part, teams were able to make decisions without conflict. P3 described how they made decisions by saying,

> …we would sit down and kind of discuss as a group and then would each share our pros and cons about why we should focus on the deliverable versus deliverable b or c. Um . . . it was pretty easy for us to arrive at the goal that way, just by, um, I guess process of elimination. But we would all kind of provide an open forum type, uh, discussion, to arrive at our decision.

P7 voiced a similar thought by saying, "So . . . by coming together as a group first, discussing it, and going to whatever party with that kind of unified message - and then bringing the answer back to the group - just a very good way of trying to manage, you know, a good outcome." Decision-making involved conversations, as voiced by P4, who said, "we had conversations as a group, and made decisions as a group, and then supported them as we moved forward. "

While decision-making was typically consensus-based, three participants voiced that a leader emerged who led the group towards decisions. P7 said he was that leader, when he said,

> and so, what I saw, though, is that they - a lot of the brainstorming dynamic that would take place in coming to a decision about, um, the tasks at hand, um . . . was sometimes - sometimes tended to get a little scattered. So I - I tend to be more of a objective-minded individual - I kind of played that role - to help focus the conversation and drive discussion to some conclusion that would then help us to come up with an action plan and move forward in our tasks to complete our efforts.

P6 admitted one of his team members emerged as the leader who helped them make decisions. Although this team used collaboration there was one team member who emerged as the person who would help the team close in on a decision. P6 explained this by saying,

> that type of person and was, um, a person that was very instrumental in helping us close out issues and close out tasks and move forward, even if they weren't perfect. Um, but they were to a level that would allow us to get to the next question and then tackle the next issue. So when I say she was the leader - she was the one that would, um, most clearly articulate, let's close this topic, and we definitely followed that lead. However, you know, it was a collaborative process. It didn't just happen because she was tired of talking about an issue. It happened because we were either at a stalemate or we were unable to move forward or find any new information that would allow us to make a better decision. So she would be the person that would help, um, you know guide, saying, look, we're not gonna get any better, we're not gonna get any new information, let's move on. And we said, oh yeah, good point, yeah, I think you're right. And then we would move on.

P5 also emerged as the team leader, but it may have been because she worked for the organization for which the service-learning project was done. As P5 said, "…I think because of the skills - additional skills - enhanced skills - that I acquired from my school - I think that it made me a better leader, I'm able to create strategies for my team…being a better decision-maker as a leader."

Leadership skills are valuable to employers, and service-learning has been shown to enhance leadership skills. For example, service-learning has been shown to provide students with more skills that will be helpful in their careers such as teamwork and leadership skills, (Prentice & Robinson, 2010). The National Association of Colleges and Employers' Job Outlook 2015 ("National Association of Colleges and Employers," 2014) surveyed employers about their hiring plans for new college graduates. Twenty-five percent, or 260, employers responded to the survey. Employers were asked what the most attributes were on a job candidate's resume, and *leadership* (77.8%) was tied for first place alongside the *ability to work in a team* (77.8%).

The Secretary's Commission on Achieving Necessary Skills (SCANS) studied what skills students needed to develop in an increasingly global, knowledge-based, and service-based economy, Their 1991 report found that interpersonal skills were critical, and leadership was one of the interpersonal skills identified ("The Secretary's Commission," 1991). A large Porter & McKibbins (1988) study sought corporate perespectives on which skills should be taught in MBA programs. Corporate college recruiters listed leadership/interpersonal skills, business knowledge, and high motivation to work as the top three attributes they were looking for when recruiting MBAs.

Process-oriented decision-making. All participants mentioned that decisions were made at various decision points throughout the capstone project. As P4 said, "I think there's [sic] a whole lot of little and big decisions throughout the whole process." P2 described many of the decision points by saying,

> It was a process, because, you know, in every step of the way of the project we had to make decisions. Uh, it comes from - we started with - OK, is this the right client? Do we really want to continue with the client? And then, the decision of, OK, we know he needs help on his marketing plan, but we saw other problems, issues with his business - not just the marketing issue. Because when he presented his, um, his problem to us - you know, you don't wanna just hone into that problem. Sometimes there's underlying issues, and so being a little bit more - it's really more into his own skills, his own time investment. So we had to kind of act more like a coach to him as well. That . . .you know, when he's the client and you're pretty much working for him, you know, how do you - as a person working - you know - giving the service to this person, try to make him see what you're trying to make him see - to help him on the project - to help him on his business. And so, it's a decision of how we're gonna approach him, what are we gonna show him, how are we gonna get this information from him, is he going to be acceptable of what we recommend, um . . . it's a process for us.

P4 also felt decision-making happened at certain points during the capstone course, by saying,

> I think the biggest process for decision-making came in the area of our group process, and, you know, how we were gonna handle different adversity that came

> our way through some background things, like our - the program director left right before our capstone started, who we had already been working on our capstone, and so - and then our - we got, um, a new member into our group, so how were we gonna deal with certain challenges and conflict that came up.

One decision point three participants specifically mentioned were group decisions surrounding their presentations. Decisions had to be made about how much content could be included in a presentation, who would present the information, and how they were going to present the information. As P4 explained, “we made decisions on how we were going to present the capstone project and, were we going to, you know, little decisions, like were we gonna sit down, and were we gonna dress up - different things like that.”

Client-focused decision-making. All ten participants had a client for which they conducted a group-based project. Seven of the projects were focused on business planning, two of the projects were focused on providing training, and one was focused on providing marketing communication tools such as a website and blog. The client brought a real-world emphasis to the project. As one participant explained, “the service-learning experience, really, it has to do with, um, understanding the client - what the needs are - and, um, basically for making decisions as future leaders - asking the right questions - considering the important factors that affect the client.”

The decisions that focused on the client primarily focused on decisions about *how* the team would work with the client. With two participants, there were challenges with the client, and the team had to make decisions about how deal with adversity. One participant’s team even faced a situation where they considered abandoning the project because of client conflict. As P2 explained,

> we had a challenging client all throughout the course. And, uh, we actually ran the risk of losing the client. Um . . . as a team we had to decide whether we should continue working with this client, or, should we just start over again? We were halfway through the project, so that option was not really a good one. So first we asked ourselves, you know, we can't - can we really help this client in growing his business? We had different skills, you know, I mean, you can't really - well technically you can choose your client, but that's not really good when you're in the real world. So, um, then we asked ourselves, how can we keep him engaged? How can we keep our team engaged? Since we're losing interest in him, and then he was losing interest in us. So, um, as for decision-making, that's something that, you know, we had to weigh in as well - how are we going to keep ourselves and the client engaged? And then, thirdly, how can we mitigate the risk of losing our client? Because we were halfway through it. And so, those are the decision-making - the skills that we had to use as a team, and, um, kind of good that we had gone through the challenge, because I think that, you know, it really applies towards real life. Especially, in the real - in the service world. Um . . . you can't just give up on your customer. You know, you have to work with him and try to understand why they're feeling the way they're feeling, and try to see what you can do to meet their needs.

As part of being client-focused, the capstone teams wanted to make sure they were doing a good job of meeting the clients' needs of solving an identified, business-related problem. Three participants mentioned that they were nervous with some aspect of their work with their client. P5's project involved a large health care organization, and she was employed by the organization, so she felt added pressure that her team perform well. P5's nervousness can be perceived here:

> There were various times we had to make decisions. We had to make decisions, you know, how . . . you know, where we wanted to allocate, you know, staffing - where we wanted to allocate, um . . . funding - certain performa goals or projections - I mean, the . . . the demographics of the area and, you know, the market study information, I mean, it's never 100%. And you're - there's a lot of variables - and when it comes to healthcare, um, some that you really can't predict. And so we had to make, you know, some decisions based on what could be and, you know, those decisions - they're - they're pretty crucial and so, you know, we had to do the best we could with the information we had. And so, you know, those kinds of decisions made us a little nervous, because obviously we had to present those to my CEO at the time, and - knowing that he may take those decisions, based on our recommendations to our governing board, and, you know, the last thing I wanted was for, you know, that to come back to me and say, hmm, you know, I had handed them that decision.

P2 also indicated nervousness about how the client would respond by saying,

> when he's the client and you're pretty much working for him, you know, how do you - as a person working - you know - giving the service to this person, try to make him see what you're trying to make him see - to help him on the project - to help him on his business. And so, it's a decision of how we're gonna approach him, what are we gonna show him, how are we gonna get this information from him, is he going to be acceptable of what we recommend, um . . . it's a process for us. You know, is it really gonna help his business, is it good for him?

While a major characteristic of decision-making was that it was client-focused, one participant seemed to be more focused on pleasing the capstone professor than the client. P7 said,

> Decision making . . . so the objectives for the learning experience that were given to us - although fairly specific - were somewhat broad and left some latitude for us to be creative on how we were going to meet the requirements for that portion of the course. So, early on we went through this process of trying to understand exactly what the professor was looking for. 'Cause ultimately…that was our aud - we felt that that was our ultimate audience.

Client-focused projects are an example of authentic learning, which is when real-world problems are solved, and there are consequences for how the problems are solved. When implemented correctly, authentic learning should help students think critically, solve problems, and apply skills to real-life situations (Ormrod, 2000). This authentic project gave students opportunities to utilize these skills.

Theme 3: Opportunities to build teamwork skills. The theme of decision-making is related to the theme of teamwork, because working as a small team was a course requirement, and decisions were primarily made collaboratively. There was little variation in size of teams, which ranged from four to six members. Four categories emerged from the theme *Opportunities to Build Teamwork Skills*. They are: 1) team forming; 2) team storming; 3) team norming; and, 4) team performing. Because these four categories were named after Tuckman's (1965) stages of group development model, the model is first described.

Tuckman (1965) suggested that teams progress through a particular sequence of stages when working together. His seminal article has become one of the most widely recognized and accepted models of the stages of group development. Tuckman suggested that teams progress through a group experience through a process of four stages: forming, storming, norming, and performing. In the forming stage, members begin to form relationships and get to know each other. Roles are established such as, but not always, the role of team leader. Team members figure out the tasks that need to be completed. In the storming stage, conflict begins to arise as individuals' personalities begin to emerge. Disagreements may occur over the objectives and tasks that are required. Members of the team, or outside parties such as course instructors, may help mediate conflicts (Whetten & Cameron, 2007 need to read). In the norming stage, teams establish group norms, or codes of behavior, that allow them to work together to accomplish tasks. In the performing stage, teams are able to work together to accomplish tasks and solve problems. If teams reach this stage, they will have the highest potential to perform.

Team forming. Teams were formed in one of two ways. In a few cases, the capstone professor formed the capstone teams, with little to no input from students, but for the most part, students formed their own teams. If students formed their own teams, they had, for the most part, worked on other team projects with the same members in other MBA courses. P2 described how the professor formed the teams by saying,

> we submitted our first three choices to the professors. And, they didn't guarantee us that we're gonna get our first choices. And so, if we don't get our first choice,

> then we get either the second or the third, um, and the professors ended up, um, giving us the project that - it wasn't really our first choice, but it was our second choice.

P2 further explained how the professor formed the teams:

> And the way that the teams were grouped were based on the, um, the skills and experiences that they assessed each student has, because, prior to our MBA, we did pretty much what our backgrounds are, what industries we're strong in, what we do for work, and, um, we found out that once the group was together, somebody has the experience in marketing, for example, in accounting, in advertising and management.

P1's professor also had a strategy for the way teams were formed, and more than one professor involved with the MBA actually chose the capstone teams. The professors chose teams according to their strengths and weaknesses. As P1 explained:

> So originally the teams were picked - uh - not picked by the students. They were assigned…the groups were not picked by the students. They were chosen by the academic professors, and it wasn't just one professor - it was a group that had met at day orientation that actually looked at our behaviors and looked at our weaknesses and our strengths, and then put together a team.

Three participants were allowed to choose their own teams. P6 identified early in the MBA program the people he would like to work with. "…we even halfway through the program said, well when we get to capstone, it's gonna be us four. I mean we knew from very early on that we wanted to be as a team - just because of how our complimentary skills work so well together." P6 then further explained why, by saying,

> that was one common characteristic that we all shared - is that we expected a high level and a very professional level of work, um, being generated. And not everybody in the program felt that way. Um . . . not to knock anybody else, but I think there was other groups - not other groups - but other team members that, um, a good-enough was a good-enough, and, I think that we had a very high expectation of ourselves and the capability that we had on our team. Um . . . that we would, um . . . had high expectation of each other for it, and so we - you know - iron sharpens iron - and we definitely sharpened each other and expected a lot of each other.

P4 had similar thoughts, saying, "the four of us chose together, based on past experience working together, and also the subject matter, and the program that we were going to get to work with - kind of the excitement that we had for it - decided to work together."

Literature defines networks of students who choose to work together in several classes throughout their studies as "meta-teams" (Bacon, Stewart & Silver, 1999, p. 482). Meta teams have more time to establish group norms (discussed below). A potential disadvantage to student-chosen teams is a concept called groupthink which is when groups make poor decisions because group members face peer-pressure to conform to the prevailing thoughts of the group, instead of speaking up with alternative views that could be considered a minority opinion (Janus, 1982). Groupthink can occur when groups are highly cohesive and under pressure to make decisions, which makes an academic course with team members who know each other well a situation where groupthink could occur. In this study, the frequency of groupthink was not measured, so it is unknown how or if it affected teamwork in this study.

Team storming. Not all teams experienced conflict, according to the participants, but if there was conflict, it came from two sources: the addition of a new team member to the group, and issues surrounding project workload. The source of the conflict was usually when a new team member was added to an existing group that had worked together on prior projects throughout their MBA. This caused conflict in three out of ten teams. For the most part, problems were with communication. P1 described this by saying,

> Well I can tell you, we had a unique group, again, because the group had worked together for a year and a half. When you spend that much time together, you learn how the other individuals work. You learn how you work, and - after a year and a half we had learned how to work well with one another. When this fourth

member came on, it kind of - you know, actually a disruption - so it took all of us again, to kind of, you know, jumble around to figure out how to work again, how to communicate. This fourth member was very different from the rest of us - and I don't mean, um, like physically or anything that way - just in terms of working style he was very different, communication style was very different.

P4's team had also worked together in another class, prior to another member being added to the team in the capstone class. He described the conflict that emerged from the team member who was added to the group by saying,

The reality is that the fifth member - when he came in - it was already difficult enough because he didn't have the same relationships established with us that we had with each other. So I certainly recognize that that was very difficult for him coming in. The challenge and the problem that we had and the conflict that arose was that he, um, did not put the same time and energy and passion into the project that the other four of us were, and so there were many times that he would miss meetings or be late for meetings or we would have meetings around his schedule and he would hang up from the call because he lived far away from us so he didn't attend in person, so he'd hang up an hour or two hours before the work was done, so us other four would end up picking up the slack. And so, you know, the hard thing with the team approach was that we, um - the four of us had already established those relationships - there was a new person implemented into that that we were trying hard to integrate into our teamwork - but that really wasn't willing to put the time and energy in. And so it really did challenge us as far as, you know, how to respond in a way that, um, encapsulate all of the learning that we had done throughout the MBA program and still insure that we were successful in our final product. And so it was, at the same time that it was the highest functioning team that I had worked with, it was also one of the most challenging and difficult teamwork experiences that I've had.

Rafferty (2012) found similar findings about MBA students working on a team project. Her study found that graduate business students can be nervous about who they will be working with on their team project. In that study, students faced uncertainty if they did not know their fellow classmates before and during the group forming part of the team project. Uncertainty produced fear, and one of the fears expressed by students was fear related to a noncontributing group member. Tuckman's (1965) developmental model found that during the storming stage, it is common for tams to experience conflict around interpersonal issues. This conflict can make it difficult for teams to complete their task requirements. Conflict can be beneficial so that groupthink, discussed above, is minimized.

In addition to conflict that arose from students joining after a team had already formed, another source of team conflict was due to project workload, and three participants mentioned that project workload was a source of their team's conflict. Two participants voiced that teams were too large, which allowed some team members to contribute less work to the project. This difference in workload was noticed by team members, and caused conflict. P10 said that only four of the six team members did any of the work and this bothered her because they were being graded as a team.

> I've just found that some students know that others try harder than others, and so they say, oh, you know, so-and-so will just make sure that this gets done even if I don't do anything, and I guess that's just life, but . . . that's kind of a problem that I have with group work in schools, that, um, if someone doesn't pull their weight, we all get the same grade…

P9's team also experienced workload conflict, and she reported that only half of the team put significant effort into the project. P9 matter-of-factly compared this to the workplace experiences she had where not everyone contributes:

> I would say that, like the real world, it's usually one or two people. I feel that sometimes people give their opinion - which is - that's what we were kind of noticing on our team. Sometimes everyone kind of gave an input, but it's kind of like they just wanted to throw in a word to say something, but they really didn't care whether you put this thought or that thought, or if you presented this or that. So, at the end of the day, it was that pretty much we tried to make sure everyone was involved, but sometimes you get one or two to three voices being heard over the other three, because the other three don't really care what's going on.

Two of the three participants who believed project workload contributed to team conflict were females. This could mean women are more sensitive to project workload issues than men. There is research that suggests that women and men have different characteristics when it comes to their beliefs about groups. For example, Halterman et al.

(1991) found that women see the team members helping each other as significantly more important to team effectiveness than do men. Women also see aspects such as respect and fairness as significantly more important to team effectiveness than do men. While men are expected to be independent and assertive (Broverman, Vogel, Broverman, Clarkson & Rosenkrantz, 1972), women are expected to have more group qualities such as friendliness and concern for others (Bakan, 1966). Another study found that female students were more likely than male students to agree that they did most of the work in their group projects (Monk-Turner & Payne, 2004). In short, it could be that in this study, it bothered women more than men that social loafing was occurring. However, given the small sample size, this is an interesting finding, but is not conclusive.

Team norming. As we have seen above, teams were chosen, sometimes by the professor, but more often by classmates, to achieve a common goal which was a business-related project that was service-focused. Tuckman's (1965) stages of group development holds that small teams will typically go through a process of norming, and in this stage, cohesiveness develops. In this study, the ability for teams to achieve their end goal was due to team collaboration and team cohesiveness.

Even though many team members did not know each other before the capstone course started, and there was sometimes team conflict, collaboration did occur, and this collaboration allowed teams to complete their projects. At least three participants spoke about this collaboration with fondness. P3 summed this up by saying, "…and what I also learned, um, is that you can try to be superman, and be the jack of all trades, and be great at everything, but you're really only gonna be as strong as your team." This participant described the team as "...a well-oiled machine" and also said the team had "synergy".

P5 ascribed this to the fact that they were able to choose their own team and they had worked together as a team in other classes.

> You know, um, we were able to choose our team at the beginning of our cohort, and it kind of stuck with us the entire way. So there were very few classes that teams were assigned, um, and I think just because a cohort was only a weekend, um, cohort, it was just felt that it was more efficient for everybody that, because, you know, some of us came from such a long distance - that, if you were used to working together and you had, you know, good synergy and what-not - it would be more difficult to always be mixing up the group.

While some participants genuinely like their team members, others saw collaboration as a means to an end. It was clear that P8 liked most members of his team, and spoke about the chemistry his team had until another group member had to be added to the team. "So we were able to establish chemistry well, and that can help in the program …but with this new member, that kind of changed the chemistry…". This chemistry helped the team work together on their project, despite the addition of a team member who didn't have the same chemistry. P3 saw the team as more of a necessity towards achieving a goal, by saying, "… it was just very business-oriented - we wanted to get this project done and out of our hair so we could continue our full-time jobs."

Team cohesiveness. There was a strong sense of team cohesiveness among participants. Relationships were built which contributed to this cohesiveness, and participants often called their teammates *friends*. Team members helped lift each other up when one was having a difficult time completing a task. As P2 said, "We helped each other as a team. If someone was struggling, someone else jumped in and helped that person". P1 likened the team presentation to an athletic team by saying, "if we were gonna go down, we were gonna go down as a team." P6 described her team as "close-knit" and "a family," and said, "we operated as a very close team, we were very - we were friendly… we continue to stay in contact and we're trying to go out for a happy hour here next week actually."

Team members had a fear of letting their teammates down, and this helped create a team cohesiveness that allowed them to complete their project. As P1 explained, "you don't want to let down your friends or your teammates. And being there for the other person too, like, even if you knew your part, you wanted to make sure that everybody felt comfortable." P5 echoed a fear of letting team members down by saying,

> …we knew that we were only as good as our weakest team member. And so we - we all knew that we had to always be there to pick up, um, and be there for each other…we were just such a close-knit group that we knew each other so well that we knew that when somebody was struggling…we were like a family, in and of itself, and I think that's what helped us kind of get through.

Team performing. Data analysis revealed that teams were able to perform when they shared these characteristics: team communication, team accountability and clear definition of roles. Tuckman's (1965) stages of group development called this stage performing and said this stage was attained when "interpersonal structure becomes the tool of task activities" (p. 396). New roles are sometimes adopted and the group has largely resolved conflicts which allow them to channel their energies into completing the required tasks.

Team communication was vital for completing all aspects of the capstone project. For the most part, teams preferred to meet face-to-face, although technology tools were used to facilitate distance communication. Technology tools mentioned by participants were email, Google Docs, Skype, and phone calls. P4 described how the team used technology tools to facilitate communication.

> We got together on a weekly basis, and we, um, generally met at one of our teammate's office, which included a overhead projector - and so we usually

> brought up our paper or our research or whatever it was up on the overhead projector. We also, as I said, one of our teammates typically could not join us in person, so he would call in and we'd use a conference call to do that. There were a few different times that we had to meet together on a conference call and not in person. We did that as well, and then, um, we used Google to store all of our documents so that we could go in individually and, um, you know, read changes and things like that as well. So it was kind of living documents, using a Google drive. So we used quite a bit of technology.

For the most part, formal rules related to how teams would communication were not established by the teams. One team, however, established a written charter, and part of the purpose of the charter was to help foster communication. P8 described how the charter functioned by saying,

> a charter that is just a way for us to establish guidelines, if - who was doing what, who, you know, would hold that title, and if somebody was not following up or somebody was being inconsistent in the group, how we would approach them, and if there was issues that needed to be resolved.

Teams met together often to work on their projects. These meetings were usually face to face and outside of class meetings. P4 said,

> …and we usually met for three to four hours every week, just going through the research that we had found and getting the rest of the team up to speed, and then also how we were actually writing [the business plan].

P6 said, “We probably met, um . . . a total of ten times - six to ten times total - including in class and outside of class.” P7’s team met even more often than other participants’ teams to work on their projects. “We would have periodic meetings, at least weekly, if not two or three a week if needed, especially during crunch time - to make sure that we were on track and we would be meeting all of our deliverables.”

Team accountability. Teams recognized the need to hold each other accountable in order to make progress on their projects, and ultimately finish them. Because they were given more autonomy on this project than in others in their MBA program, this need for accountability was heightened. P10 described this by saying,

> My capstone course was designed to be very independent… it actually required a great deal of autonomy. We were required to finish a lot of assignments on our own. We were also required to go out into the field on our own time, at whenever was convenient for both us and of course our client…

Team members expected a high level of professionalism and integrity from each other. Because teams were dependent on each other for project success, and ultimately a course grade, accountability to each other was important. P2 described this by saying it was important to,

> not miss any deadlines and any assignments when we had to meet, conference calls or face-to-face, you know, we really made the effort to not do this, and if we did miss, there's really a legitimate reason for it. So I think it's just, you know, your integrity, and your effort for the success of that project.

P6 talked about how the team expected each other's best work.

> … the expectation of having a good, professional work being completed. I think we all - that was one common characteristic that we all shared - is that we expected a high level and a very professional level of work, um, being generated. And not everybody in the program felt that way. Um . . . not to knock anybody else, but I think there was other groups - not other groups - but other team members that, um, a good-enough was a good-enough, and, I think that we had a very high expectation of ourselves and the capability that we had on our team. Um . . . that we would, um . . . had high expectation of each other for it, and so we - you know - iron sharpens iron - and we definitely sharpened each other and expected a lot of each other. We didn't complain to each other or place blame, we worked together to get the work done.

Clear role definition, defined by teams. All teams had group roles, and in each case, team members chose their own roles. Roles were either defined based on the strengths and weaknesses of the team members, as defined by the team members themselves, or most often, roles were defined based on team members' work experiences. For the most part, choosing roles was not a requirement for the project, but two participants said it was a requirement of their professor that the group choose formal roles for their team.

Roles were often defined based on team members' self-reported strengths and weaknesses. P3 described why this was important to team success by saying,

> Because our roles were defined, and we knew what each other was good at, we didn't try to take on tasks that we knew someone else would be able to do better…we had, um, a clear understanding of what each team member was great at, and, um, it was just easy to kind of delegate our tasks that way." P8 also felt that defining roles based on reported strengths and weaknesses worked well for the team as a whole, by saying, "as we worked together in the group, we recognized people's strengths and weaknesses, and we kind of just - worked on those things...

For five out of the 10 participants (P2, P4, P5, P6, and P9), roles were based on team members' work experiences. For example, P9's team chose roles based on work experiences, and they did this the first day of the capstone course, as she describing by saying,

> …let's say someone said that they worked in technology experience - so we'd say, so you would be more suitable for doing the technology part of this. You would be setting up the computers and the website and this and that. So we basically spoke to one another to see what we all do, because this was actually the first day of class. So we all spoke to each other - oh, what do you do, what career are you in, what do you like the most about it? And from there we kinda chose the role of who does what."

P4 also described the team's roles as being based on their work experiences.

> One of the roles on our team was main spokesperson to our client… another one of our teammates was - her career is in marketing, and so that was really her area of expertise and she brought a lot of expertise to the marketing section… [team member] had been involved in nonprofit and things like that before. He did a lot of the legwork as far as the… demographics and who our target audience was…[team member] had been involved in nonprofit and things like that before. He did a lot of the legwork as far as the, um - as far as the demographics and who our target audience was...

Even if a team said they did not have formal group roles, roles emerged. P7's said his group did not have formal roles, yet described the roles each team member had.

> Well, there were no formal roles. I mean, you know, on a given task we would assume roles - that was - so, um, for a given project we would assume roles that were kind of - that were more task-oriented around the scope of work that we had determined… when we had to deal with our client in action, we would appoint an individual to be the point person for that communication… when it came to putting our presentations together, we had an individual who was very good at PowerPoint, and so - and so at first it kind of turned out to be his job to put together the PowerPoints…one of the group members was the point person for…coordinating….a place for the presentation...

Theme 4: Opportunities to Build Presentation Skills. Because presentation skills was one of the top three skills survey respondents identified that were enhanced by their service-learning experience, it was isolated as a skill to be further unpacked through interviews. Three categories emerged and are discussed in this section: using presentation software required collaboration and creativity; multidimensional presentations; and feedback.

Using presentation software required collaboration and creativity. Presentation software, usually PowerPoint, was used to make presentations to classmates and clients. In fact, 60 percent of participants mentioned, without being prompted, that their teams used PowerPoint presentation software to give their presentations. While nine of the client presentations were face-to-face, one client's presentation was performed via Skype. Because the presentation software was a tool used during the project, and the projects were team-based, teams had to figure out how to collaborate with the tool. In most teams, everyone participated in working with the presentation software. As P1 described,

> For presentations, we would build and construct our PowerPoint presentation slide by slide. Each person would be given a group of slides to work on, there'd be an editor, and then we would practice together. And teamwork was definitely necessary for that." Sometimes, one person emerged as someone who was good

> at using presentation software, and that person then became the team member who led the collaboration.

As P7 described,

> …when it came to putting our presentations together, we had an individual who was very good at PowerPoint, and so - and so at first it kind of turned out to be his job to put together the PowerPoints, but then . . . it kind of gave a challenge to the rest of us to see the outcome of his work, and it would inspire us to get better at how we were able to use the tool.

In addition to a tool that necessitated collaboration, teams used presentation software to creatively determine how to best convey their message to an audience. P7 described this by saying,

> So we had a visual on screen as a focal point, um, but what we tried to do from that focal point is then use it as a launching pad to then spin off to other things. So we would try to incorporate video into our presentation, um, so that it wasn't just, you know, monologue from us to them, so to speak.

P6's team did not have anyone on the team with strong presentation skills. The participant considered this a barrier to creatively presenting information, and an aspect of the project that did not go well.

> The thing that didn't work well - um . . . I think we were all - and maybe this is just work output - we were all fairly novice on PowerPoint. None of us were PowerPoint junkies, and so, I think our - we really didn't know what to do in terms of on the creative side of what we were gonna do with the PowerPoint, so . . . that was probably the thing that worked poorly - or worked the poorest.

Presentations skills had the opportunity to be enhanced because so many presentations were required during the capstone project. The multiple presentations included: 1) a practice presentation to class and professor; and, 2) some, not all, teams practiced their presentations to themselves; and, 3) the final presentation to the client. Therefore, presentations as multidimensional emerged as an important aspect to having opportunities to build presentation skills. In addition to multidimensionality, feedback emerged as another category. Feedback helped the teams improve their presentation skill, prepare for the client presentation, and make further progress on their project. These two categories are discussed in this section.

Multiple presentations. Many participants saw the presentation given to their classmates and professor as the practice for the *real* presentation to their client. Six of the ten participants specifically mentioned the word *practice* when describing presentations given to their classmates and professor. Benefits to practicing in front of classmates and the professor were that it made the presentations increasingly easier to do, feedback was provided, it gave them opportunities to correct potential errors, and it was preparation for the real world. P3 described how the practice benefitted the team and the project by saying,

> because we did it so frequently, it just became easier for everyone …as the weeks went on… and then once we actually hit the presentation time for the client, we were able to weave in a little bit of humor, we all learned to speak a little bit slower, keep our content - um - we don't wanna go up there and read the slides to the client.

P5 described the benefits of the class presentation by saying,

> The capstone audience also had the opportunity to ask us questions or poke holes in our presentations. So if there was something that we might have said that did not make sense, or that could not be validated, or something within the financials that was not calculated correctly, um, we could be called out on that…

P9 knew the ability to practice would help her in the real world, when she said,

> And being able to do it in a classroom setting - where you can practice and fail and get yourself back up and practice again - that that helps you so when you go out into the real world - you pick up those past experiences and progress forward instead of practicing then when you're at that point.

For four participants (40%), an initial presentation to the class and professor was required very early in the capstone course. The purpose was for the class and professor to gain an understanding about what the project would entail, including its planned deliverables, and to give feedback on the team's plans. As P7 described,

> …what we had to do was, um, initially come up with a draft proposal of what the training would entail. And that draft proposal was presented to the professor and we had to do a class presentation as well. The class and professor gave feedback to us. That happened very early on in the capstone program - my gosh, within the first week or two.

P8's experience with the initial presentation was similar, "We gave two different presentations. The first one was what we were going to propose to do - how we were going to go about it and what our outcome was going to be."

In addition to practice presentations to their class and professor, three participants mentioned that their teams met together to practice their presentation to each other. This helps confirm the importance the presentations were given as deliverables of the overall capstone project. P2 remembered the practice sessions well, by saying

> …practicing in the morning before - we would always make a point to get to our session early, the day that we were actually doing the final presentation, the teaching for our capstone service-learning project - we would get there at least a half hour if not an hour before - we would meet outside the organization - we would park our cars, meet outside. Everybody would bring whatever materials that we needed, and we had talked about that - we had talked usually the night before - confirmed that we had all the information - we'd meet there early and go over, practice everything we needed - set up the room.

P8 described how the team would internalize the results of each presentation by saying, "we didn't just say, OK, good job team , we immediately discussed what went right, what went wrong, how we can improve".

Even when they did not feel like practicing their presentations, P1's team still did.

So I have to say - practice, practice, practice is what our team did. For presentation, we would build and construct our PowerPoint presentation slide by slide. Each person would be given a group of slides to work on, there'd be an editor, and then we would practice together. And teamwork was definitely necessary for that. Um . . . it's a lot of work to do school outside of work, and sometimes at the end of the day you don't feel like practicing. You still - even though you want to think that, you know what, um, that you're not wanting to let your team members down, is what's essential for all of us, and cares very much about - each of each other - for each of us.

The presentation to the client was considered by most participants to be the final, summative presentation. P4 described this by saying, "… ultimately, the big presentation was at the end of the capstone, and we presented on our, um, thirty-minute presentation on the actual business plan. And so, um, that was kind of the culmination of the whole program and the capstone." The practice the teams had done within their teams and in front of their classmates and professor helped make the client presentation go smoothly. While the class presentation was usually considered a practice for the client presentation, students took it seriously because they were critiqued by the professor and their classmates, they wanted feedback on the presentation in anticipation of the client presentation.

Two teams completed two or more client presentations because the client had several constituent groups who wanted to hear the recommendations of the capstone teams. This made all the work the teams had done even more valuable. P4 described that members of the team made four more presentations to other constituent groups at his client's organization, including the president of the organization. P5 also did another presentation of her team's work to a group of high level executives. " I did do a presentation of the completed project to the leadership team of the management team of the [organization]. So, um, that would be all of the directors of all the departments."

Feedback. The primary benefit of the practice presentations was the feedback given to the presenting team by the class and professor. The feedback had three primary outcomes: it helped the teams improve their presentation skills, prepare for the client presentation, and make further progress on their project. LaFasto and Larson (1989) found that the ability to give and receive constructive feedback from team members is a key reason why teams succeed or fail. They found that team members are often defensive, do not listen, and do not appreciate the “gift” (p. 45) of feedback. In this study, team members seemed to appreciate feedback. P8 described how feedback helped the team improve their presentation skills by saying,

> …so a week before the presentation [to the client] we performed it in front of the entire class and your professor. And that was the point where everyone was able to give you whether it was good feedback or criticism or how you should say something, or what you should take off, or even just physically evaluating you like - I know some people when they talk they look like they're dancing back and forth. So that's something that was like pointed out to them - that it was - keep in mind to either stay in one place, or move your hands instead of like wobbling back and forth as if you were dancing.

The questions and answers asked by classmates during presentations helped teams prepare for their client presentations. P5 described this by saying,

I think the question and answers, you know, that always helps, you know, when your audience starts questioning certain things, it prepares you for what to anticipate when you get into other audiences, you know…it certainly is beneficial to anticipate where some of those questions might be. And, you know, there was a lot of questions about competition and, you know, culture and - there was a big health system that was in that market area, and why do you think you can compete against the big health system, and, you know, and some of those types of questions from the capstone audience. And, you know, that were very valid.

Class presentations also helped teams progress with their project. P7 described the benefit of this by saying that the presentations,

> … contributed well, because they were meant to be open feedback, to help us refine our - our efforts. So that was their intent. Um . . . so, number one, it forced us to, you know - it forced us to have to have a formal presentation and, you know, so we had to have accomplished that level of work, you know, while in the process of developing the training. Um . . . and, if I remember correctly, there were some minimal requirements that we had to meet in these preliminary presentations - I don't recall exactly what they were - but . . . so we had to have

made a set level of progress to that point. Um . . . and so it also helped us in regards to managing our time and progress.

Reflection

As revealed in Chapter II, a stated goal of service-learning is for students to reflect on their learning. Therefore, a research question was posed to measure this: *RQ4: In what ways did reflection offered through business capstones that included service-learning enhance, in participating students, their employability skills?*

Interview participants were chosen from this group and were described in the *Characteristics of Participants* section above. Data was analyzed for both Groups A (service-learning) and B (no service-learning), and results are reported in Table 6. Group A had fewer respondents (38%) but a higher mean level of reflection (5.37 out of 7). Of the 30 respondents who completed a service-learning experience in their MBA capstone, 24 out of 30 (80%) had at least some reflection.

Table 6

Comparison of Frequency of Reflection Between Service-Learning and No Service-Learning Groups (n=79)

Characteristics	Group A Service-Learning		Group B No Service-Learning		Total
	Frequency	Percent	Frequency	Percent	Frequency
No reflection	1	3	4	8	5
	0	0	2	4	2
Some reflection	3	10	8	16	11
	2	7	7	14	9
Quite a bit of reflection	10	33	12	24	22
	5	17	6	12	11
A lot of reflection	9	30	10	20	19
Totals	30	100	49	98	79
Mean (SD)	5.37(1.520)		4.61(1.824)		

Semi-structured interview questions related to reflection were, *How did discussing your service-learning experiences in class contribute, if it did contribute, to* *your understanding of the skills necessary to do service-learning? Can you give me some examples? Thinking back to the course, in what ways do you remember being asked to reflect on the service-learning experience? Please describe those reflection activities. Do you think that reflecting on your service-learning experiences enhanced any skills that you use in your workplace?* Results of 10 interviews revealed one theme: *Reflection Enhanced the Ability to Complete a Project.* Two categories supported the theme: reflecting through a summative paper and reflecting through class discussions. The theme and categories are discussed in this section.

Reflecting through a summative paper. As discussed above, one of the two major deliverables in the capstone project, which included a service-learning experience, was a written report of some kind. Most, but not all, of the time, this report was a business plan for the team's client. The reflection did not occur in this report. Reflection occurred for the participants whose professors assigned them some kind of summative written paper that was intended to help the students reflect. P8 described how the paper was reflective by saying, "and then the paper that we had to write as well, summarizing how we went about everything - how we started, what the goal was, what processes we took, um, working with the group, were there any issues…" P8's comments help confirm the theme *Reflection Enhanced the Ability to Complete a Project.*

P1 said the final paper was a way to allow reflection about the whole project by saying,

> …it did force you to kind of go back through the project and think about . . . was this a good idea, this didn't work out the way that we had planned . . . would I change anything in the future? And even though some things maybe hadn't gone how we had expected them to go - that doesn't necessarily mean that we would have changed everything.

P9 did not see it as reflective as much as evaluative, and described the summative paper this way:

> But, the final project that [the professor] had us do for the end paper was the whole evaluating your group, evaluating the project, and evaluating how you felt throughout the whole process. So, you actually had to, as our final, within two hours, you had to write, as neatly as possible, your whole entire experience that you had. And [the professor] had like key questions that [the professor] wanted you to touch upon, and that's what you had to make sure that you put in this essay format report to hand in to [the professor].

Using some type of written assignment, such as a paper or journal, is found in literature on reflection in business education, and was discussed in Chapter II. For example, a five-year, longitudinal case study of a management accounting course asked students to keep a reflective learning journal (Bisman, 2011). Researchers analyzed the journals and classified them as either having surface or deep reflection. Researchers discovered that scores for the journals were higher when they were classified has having deep reflection. During subsequent years of use of the reflective journals, the researchers made them an even more integral part of the course, removing other writing assignments and putting more focus on the journals. While journals were not used by participants in my study, this illustrates the use of writing assignments as a research-based vehicle for reflection.

Reflecting through class discussions. Reflection also occurred for most participants during class sessions where they had to give oral presentations to their classmates and professor about their capstone project. Following the presentations, there was time for class discussions and feedback. P1 called this *real-time learning*, by saying,

> Part of reflection was actually learning taking place real-time, because we got to say, this is what we wanted to do with our project, these are mistakes - or maybe things

we've learned on the way, this is how we dealt with it, and then that allowed us to bring it back to our classroom and get feedback from the students, but also teach them, um, kind of another way of looking at things.

P8 described how they were able to make changes to training sessions given to their client because of the reflection during class discussions by saying,

It [class discussion] helped us out a lot, because what we did after each presentation, is, we didn't just say, OK, good job team- we immediately discussed what went right, what went wrong, how we can improve, and so, you know, when we - when we went back and discussed it and gave these pros and cons to our instructor, he had some feedback for us and asked for different things, if we had thought about doing differently as well - so - um - and it was interesting.

Research confirms that real-time reflection, as P1 described above, is important. While reflection can take place before, during, and after service-learning experiences, P1 described reflection during service. Eyler (2002) stated that reflection during service helps students reflect on possible preconceptions they may be having about their service, voice assumptions, and connect their experiences to academic content. Eyler also suggested having students engage in reflective activities with their community partners, but it does not appear that the participants in this study did that.

Reflection has been shown to be a metacognitive skill which requires students to think about how to think (Krathwohl, 2002; Martinez, 2006). P2 described this metacognitive ability when talking about how class discussions helped their team through the process of completing a client project:

We also reflected with our classmates about the challenges we were facing with our client. And as a team, there was one point where, in a class, with other, you know, others, we realized that we were not alone in our struggles - that other people were having the same, you know, issues - similar issues with clients. So, it was a real - it's a reflection of, you know - how are we going to pull through this as a team together? And we talked about challenges, and then we talked about, OK, how did you go through it, what did you do? How did you talk to your client? So we talked to each other - not just with the professors.

While class discussion was reflective for most participants, two participants did not feel their capstone courses included class discussion. P5 said there was not time to talk to classmates about each others' service-learning projects, and when asked to provide examples of how she reflected on the capstone project, could not think of any. P6 had a similar experience, and described the lack of formal reflection with classmates by saying,

> I don't remember having any long conversations or any method for it or any sort of discussion, um, with the other teams. We informally connected. We knew the other team members - we knew the other teams. So we heard a little bit about them. We had a little bit of a chance of discussion. I don't feel like it was - I don't remember it being formal. I don't remember it being part of the, um, this week we're gonna give an update on how your project is going, or post, you know, one page on what's going on with your project. I don't remember that particularly happening.

These results are interesting because these two participants, on the survey, answered that they had at least some reflection in their capstone course, but when prompted through interviews, had difficulties coming up with specific examples of reflective activities. I believe what happened is that the course instructors focused on a written reflective component for these respective courses instead of using class discussion as a vehicle for reflection. Literature is not conclusive as to how much and what types of reflection are required in order to make an impact on student learning. As described in Chapter II, Mabry (1998) found that students assigned to types of written reflection caused significant positive changes in civic attitudes and personal social values, two of the variables measured. In-class discussion was also found to be an important vehicle for discussion, but it did not significantly impact students' personal social values.

Chapter Summary

Chapter IV presented the results of this non-experimental, comparative descriptive study using mixed methods to guide the research questions. The study offered the opportunities to examine the alignment between the employability skills employers need and the employability skills that graduate business students gain through service-learning in business capstones. It also examined ways reflection, a stated requirement of service-learning, enhances the employability skills of graduate business students who participate in service-learning during a capstone.

Quantitative data collection was used to answer RQ1, sub-RQ1, and RQ2. Data was analyzed from 79 survey respondents, 38 percent who had participated in a service-learning experience in their MBA capstone and 62 percent who had not. RQ1 asked whether there are differences in employability skills developed between MBA students who participate in capstones that include service-learning and comparable MBA students who participate in capstones that do not include service-learning. Descriptive statistics and a Mann-Whitney-U test were used to analyze this question, and results were described. Sub-RQ1 asked whether there are differences among various demographic groups (gender, overall GPA, race/ethnicity, age, current work status and type of industry) in the extent to how their employability skills were enhanced. While data was collected for several demographic characteristics, the characteristics of gender and overall GPA were chosen for analysis to see if demographic differences existed in the extent to how their employability skills were enhanced by service-learning. Analysis of Co-Variance (ANCOVA) was used to test for differences. For the co-variate gender (males, females), there was significance for the skills of analytical ability ($p=.036$) and oral communication ($p=.014$). For the co-variate overall GPA, there was significance, for six of the skills: analytical ability (p.=.019), oral communication ($p=.021$), presentation skill (p=.003), project management (p=.030), responsibility (p=.024), and time management (p=.018).

RQ2 looked at which, if any, essential employability skills, as identified by employers, are enhanced by service-learning experiences in business capstones. Descriptive statistics of 19 employability skills were analyzed, and non-parametric statistics including Spearman's Correlation, Exploratory Factor Analysis (EFA), and a Mann-Whitney-U test were calculated. Results were then described.

Qualitative data collection and analysis was used to measure RQ3, which asked which aspects of service-learning experiences contribute to enhanced employability skills in graduate business students. Qualitative data collection and analysis was also used to explore RQ4, which asked in what ways reflection, offered through business capstones that included service-learning, enhanced capstone students' employability skills. Ten participants were interviewed and data analysis revealed the emergence of four themes for RQ3 and one theme for RQ4. Those themes and their categories were analyzed using thick descriptions from the data.

The last chapter will summarize the study, describing the major findings and exploring the research and practical implications of the results. In addition, recommendations for research and business education will be offered, and limitations of the study will be described.

CHAPTER V: CONCLUSIONS

The purpose of the study was to examine the alignment between the employability skills employers need and the employability skills that graduate business students gain through service-learning in business capstones. In addition, the study sought to understand whether reflection, a stated requirement of service-learning, enhances the employability skills of graduate business students who participate in service-learning during a capstone. The focus of Chapter V is to describe the conclusions from the study. Before that is done, the theoretical framework surrounding the study is reviewed. Then the major conclusions are detailed, including supporting literature. Next, implications for practice and research in the field of business education are detailed, limitations of the study are discussed, and recommendations are given. The chapter ends with a summary of the study.

Theoretical Framework

This study was situated in a broad theoretical framework that surrounds business education at the college/ university level. The role of business education is to provide "education for and about business" (PCBEE, 2002, p.1) which means preparing people with the knowledge and skills to pursue a wide variety of careers in a variety of industries (NBEA, 2013). Adult students have many reasons why they pursue advanced business degrees. Research suggests that MBA students perceive their degree will lead to career advancement (Buchanan, Kim & Basham, 2007; Hawksley, 1996; Mihail & Elefterie, 2006). In addition, there is evidence that an MBA increases one's income (Leonhardt, 1996; Mihail & Elefterie, 2006), although this may mostly hold true for graduates of prestigious business programs ("The MBA cost-benefit analysis," 1994; Dugan, Grady, Payne, & Johnson, 1999). The potential to change careers, organizational mobility (Buchanan, Kim & Basham, 2007), and increased self-efficacy (Baruch & Peiperl, 2000) are other potential outcomes. Finally, employability skills, defined in this study as "transferable core skill groups that represent essential functional and enabling knowledge, skills, and attitudes required by the twenty-first century workplace" (Overtoom, 2000, p. 1) have the potential to be increased by business education. John Dewey believed that students should learn a variety of skills to have the maximum opportunity at employability (Drost, 1977). While the list of employability skills is almost limitless, this study focused on a list of employability skills that had been measured in a previous study (Tanyel, et al., 1999) and was modified for this study.

Part II of Chapter II described two of the major experiential high-impact educational practices that are relevant to business education: capstones and service-learning (Kuh, 2008). Three of the theoretical frameworks surrounding experiential learning were reviewed: experiential learning theory, constructivist theory, and andragogy. Experiential learning theory has roots in John Dewey (1938) who believed learning through experiences was the starting point of the educational process. Kolb's (1994) experiential learning model drew on Dewey's work, and consists of four stages. In the concrete experience stage, activities such as field work, lab work, or service, are performed. In the reflective observation stage, self-analysis of the experience occurs. In the abstract conceptualization stage, students analyze their learning from their experiences and attempt to conceptualize a model or theory of the experiences. In the active experimentation stage, students act out the learning in some way.

The dominant modern educational approach to designing instruction, and one that informs experiential learning theory, is based on the theory of constructivism (Bruner, 1966; Dewey, 1929; Piaget, 1952; Vygotsky, 1978). In constructivism, students form new knowledge from their experiences by interacting with people and the environment (Fosnot, 1996; Gagnon & Collay, 2001; Grennon-Brooks & Brooks, 1999). While older learning theories such as behaviorism count on instructors to instill knowledge into students (Skinner, 1938), instructional methods based on constructivism ask students to pose relevant problems for students to solve, allow students to work together to solve those problems, build on prior knowledge, create authentic experiences, and have students reflect on their experiences (Grennon-Brooks & Brooks, 1999).

Andragogy, the art and science of helping adults learn (Knowles, 1984), is a learning theory based on constructivism. Andragogy is based on six premises. First, adults have a need to know why they need to learn something, so it is up to facilitators to help set the stage for why adults should learn a concept. Second, adults must be engaged in their own learning, and be responsible for decisions related to their learning. Third, adult learning should be based on experiential learning, and should be individualized when possible. Fourth, adult learners are self-directed. Instructors become facilitators of learning, not the primary instruments of knowledge. Fifth, adults learn the best when information is presented in context of real-life situations. Sixth, adults are motivated more by internal motivators such as self-esteem than external motivators such as promotion (Knowles, 1984; Knowles, Holton & Swanson, 2011; Lindeman, 1926; Wlodkowski, 1985).

Two instructional approaches used in graduate business that are based on experiential, constructivist, and andragogical learning theories are capstones and service-learning. Definitions, history, purposes/goals, and methods were detailed in Chapter II. One of the methods used in a capstone is called the living case, which is a variation of a case analysis where students work with an organization to complete a project (Kerka, 2001). My study's respondents all took capstones that used the living case method, but in my study it is called the client-based method because respondents all called the organizations they worked with their clients.

This study compared the employability skills of students whose capstone course either contained or did not contain a service-learning experience. Service-learning is another of Kuh's (2008) high-impact practices. Service-learning is an educational pedagogy that is derived from experiential learning theory, and is defined as a credit or competency-based educational experience where students engage in service activities that benefit a community and reflect on the service in order to achieve course outcomes (Bringle & Hatcher, 1996). Best practices of service-learning in higher education were reviewed as well as the four broad outcomes/impacts of service-learning. Best practices included increased civic-mindedness, appropriate duration and intensity, integration of learning and service goals, connections of theory to practice, and reciprocal collaboration. Then, the four broad domains that impact students who participate in service-learning were reviewed. They are academic and cognitive development, civic and ethical development, personal and social development, and career and vocational development. This study lends support to the academic and cognitive development domains as well as the career and vocational development domains. Similarly, of the four broad outcomes outlined in Chapter II for business students: academic, civic, career, and personal and social, this study lends support to the academic outcomes.

Part III of Chapter II discussed reflection as a high-impact practice that cuts across all aspects of experiential learning. Definitions, characteristics, models, and related studies of reflection were presented, especially as they related to service-learning in higher education. Reflection is known as the bridge that connects service with learning, and without reflection, academic service experiences cannot be defined as service-learning (Hatcher & Bringle, 1997; Jacoby, 1996). Models of reflection were offered; specifically, the DEAL Model (Ash & clayton, 2005; Ash, Clayton & Moses, 2007) and the Reflective Judgment Model (King & Kitchner, 2002). Students should reflect more than once, and at more than one time during their service-learning experience(s). Reflection after service-learning can take many forms, such as papers, journal entries, discussions, and exams. Reflection during service allows students to monitor their own learning (Meizrow, 1994) , which ties back to andragogy.

In addition to the theories detailed in Chapter II, and summarized above, Tuckman's (1965) stages of group development model emerged as an important theory related to the results of this study. Because it was not part of the theoretical framework for this study, it is possible that future research on service-learning in graduate capstone courses should include Tuckman in its framework, and this is further discussed below in the Implications for Future Research section.

Major Conclusions

Using the theoretical framework above, as well as the statistical and qualitative results reported in Chapter IV, this study yielded four major conclusions. Each conclusion is explained in this section.

1: There is alignment in the collaborative learning skills needed by employers and those enhanced through service-learning experiences in graduate business capstones.

The purpose of this study was to examine alignment between employability skills employers need and the employability skills that graduate business students gain through service-learning in business capstones. A major finding shows that there is, indeed, alignment in some of the skills needed by employers and those enhanced in service-learning experiences. The alignment occurs in the area of collaborative learning, which, according to the results of this study, includes these skills: ability to work in teams; interpersonal; oral communications; persuasive ability; presentation; project management; and, responsibility. To confirm the top three employability skills students said were enhanced by their service-learning experience in their business capstone, qualitative interviews were conducted and revealed the themes *Opportunities to Build Teamwork Skills* and *Opportunities to Build Presentation Skills*. Therefore, results of this study show that there is alignment between collaborative learning skills needed by employers and those enhanced through service-learning experiences.

Teamwork skills. Results of this study align with existing literature about the ability to work in teams, or more commonly called teamwork. Bloom & Kitagawa (1999) placed employability skills into three broad categories of academic, personal management, or teamwork. Examples of attributes of academic skills are the ability to communicate, think, and learn. Attributes of personal management skills are responsibility, adaptability, and having a positive attitude. Attributes of teamwork are the ability to work with others to achieve common goals. The National Association of Colleges and Employers' Job Outlook 2015 ("National Association of Colleges and Employers," 2014) surveyed employers about their hiring plans for new college graduates. Twenty-five percent, or 260, employers responded to the survey. Employers were asked what the most important attributes were on a job candidate's resume. Tied for number 1 was *leadership* (77.8%) and *ability to work in a team* (77.8%). The third most desired attribute was *written communication skills* (73.4%). Employers were also given a list of candidate skills and qualities and asked to rate them in order of importance. *Ability to work in a team structure* and *ability to make decisions and solve problems* tied as the most important skills, and *verbal communication skills* was a close third. This study helps to confirm the skills contained in the Factor Collaborative Learning that were enhanced by service-learning experiences in graduate business capstones.

LaFasto and Larson (1989) have worked with over 6,000 teams during their various consulting projects. They define a team as consisting of two or more people who have a specific objective or goal that needs to be attained, and the activities of the team must be coordinated in order to achive that objective or goal. During their consulting work, LaFasto and Larson developed a 6,000 person database consisting of people involved in management teams, project teams, and executive teams across industries such as banking/finance, insurance and retail. Using this database, they developed a model called Five Dynamics of Teamwork and Collaboration. The first dynamic is the individual Team Member. The researchers found that the personal qualities of openness, supportiveness, an action orientation, and a positive personal style were necessary for individuals to be able to function effectively on a team. The second dynamic is Team Relationships. The researchers found that the ability to give and receive constructive feedback from team members is a key reason why teams fail. They found that team members are often defensive, do not listen, and do not appreciate the "gift" (p. 45) of feedback.

The third dynamic in LaFasto and Larson's (1998) model is Team Problem Solving. Teams can effectively problem-solve if they are focused on the tasks and goals of the project. They can also effectively problem-solve if the climate of the team makes team members feel valued and accepted, and the tone is warm, comfortable and fun. Teams can also effectively problem-solve if they have open communication and discuss, rather than close off, issues surrounding problems and conflict. In this study, team members were focused on the tasks and goals of the project, but there was conflict among team members that sometimes hindered the ability to problem-solve.

The fourth dynamic is Team Leadership. One of the most surprising aspects of this study is that leadership, or lack of leadership, within teams did not emerge as something that the participants in this study said impacted their teams, with the exception of P7, who said he was the leader, P6, who said one of his team members emerged as the leader, and P5, who emerged as the team leader, possibly because she worked for the client organization. This may not be because leadership is not important, but because specific questions about team leadership were not asked. Overall, teams made decisions as a team, as previously discussed in Chapter IV.

The fifth and final dynamic is Organization Environment, defined by LaFasto and Larson (2001) as a "psychological atmosphere" (p. 158) where teams function. The organization environment can be increased by setting management practices that help increase team clarity, instill confidence in team members, which will lead to increased commitment both to the team and to the organization. In addition to the need for strong management practices, the organization environment needs formal structure and processes. This was seen in this study through the theme *Structure and Deliverables of Capstone* when participants discussed the need for a structured service-learning experience in their capstone, and by the theme *Opportunities to Make Decision*s, which found that collaborative decision-making, process-oriented decision-making, and client-focused decision-making were the three primary ways students had opportunities to make decisions during their project.

Presentation skills. This study's results indicate that presentation skills are enhanced by service-learning in business capstone courses. Presentation skills, while broader than oral skills, do include oral presentation skills. As found in the NACE (2014) study, referenced above, employers value oral communication skills in the workplace. In this study, students were given multiple opportunities to practice their oral presentation skills because so many presentations were required during the capstone course. Multiple presentations included a practice presentation to classmates and the instructor, a final presentation to the client for which the service-learning experience was done, and sometimes, but not always, practice presentations within teams. Therefore, presentations as multidimensional emerged as an important aspect to having opportunities to build presentation skills. Presentation skills are important to employers, and this study shows that employers can be confident that business graduates who had service-learning experiences in their capstone courses are likely to have improved business communication skills because of both their classroom training and multiple opportunities to practice, including practicing to real-world clients.

Interpersonal skills. One of the skills that is part of collaborative learning is interpersonal skills. Working in student teams gives students opportunities to improve their interpersonal skills, defined as the ability to understand and interact effectively with others (Gardner, 1983). As this study found, interpersonal skills are closely correlated with both presentation and teamwork skills. Employers value interpersonal skills in the workplace. Tanyel et al. (1999) found that prospective employers believed the top three skills needed by business graduates were responsibility and accountability, interpersonal skills, and oral communication skills. In the same study, business school leaders also believed interpersonal skills was one of the top three skills most needed by business graduates. In addition, the National Business Education Association (NBEA), the largest professional organization serving business education in the United States, promotes the demonstration of interpersonal skills as one of the purposes of business education (NBEA, 2013). The Secretary's Commission on Achieving Necessary Skills (SCANS) studied what skills students needed to develop. Their report identified interpersonal skills as one of the five workplace competencies needed by students, and defined interpersonal skills as incorporating teamwork, teaching, service, leadership, negotiation, and working with diverse groups of people ("The Secretary's Commission," 1991).

Persuasion, project management, and responsibility. The last three skills included in collaborative learning are persuasive ability, project management, and responsibility. Persuasive ability is a skill included in collaborative learning, and is defined as the ability to cause people to do or believe something ("Persuasion," n.d.). Studies about persuasion in business courses that include service-learning could not be found. This could be an area for future study.

Project management is a skill included in collaborative learning, and is defined as applying knowledge, skills and techniques to execute projects efficiently and effectively ("Project Management Institute," 2014). An award-willing MBA project management elective course in Washington state incorporated a service-learning project which consisted of a whole-class renovation of a low-income person's home in a mostly African-American area of Seattle, Washington. The curriculum included an introduction to project management tools such as Microsoft Project software and concepts such as mind-mapping (Buzan, 1983). Students were required to keep a log to provide reflections during the project, among other required assignments.   Project management outcomes that were reported as a result of this course included the importance of planning, diplomacy and persuasion (Brown, 2000).

Responsibility is a skill included in collaborative learning, and is defined as putting forth a high level of effort and persevering towards attaining goals ("Secretary's Commission," 1991). The workplace values responsibility as a skill. Bloom & Kitagawa (1999) placed employability skills into three broad categories of academic, personal management, or teamwork and said attributes of personal management skills are responsibility, adaptability, and having a positive attitude. Responsibility was listed as one of the basic skills all students needed for the workplace ("The Secretary's Commission," 1991). In the Tanyel et al. (1999) study, both employers and faculty ranked responsibility as one of the top three managerial skills/attributes needed by new business school graduates. In this study, responsibility loaded into Factor 1. A recent study by Shuayto (2013) sought to ask business school leaders and business managers which skills were needed in business. Alignment differed between the school leaders and business managers, with managers reporting the top skill needed by business graduates was responsibility, while business leaders reporting the top skill needed was oral communication.

2: written and oral reflection improve the ability to accomplish team-based client projects.

Reflection was evaluated in the qualitative part of this mixed-methods study, and revealed one theme: *Reflection Enhanced the Ability to Complete a Project.* Two categories supported the theme: reflecting through a summative paper; and reflecting through class discussions. Now that students had experienced a client-based project that included service-learning, they were able to reflect on it, and found it helpful to do so. Knowing-in-practice is when students are able to practice their knowledge in settings that are related to their profession. While practice learning can be done on its own, the best way for a student who hopes to enter a profession such as business to practice learning is to take part in a practicum, which is a "setting designed for the task of learning a practice" (Schon, 1987, p. 37).

A summative paper was the key written document found in the ten participants interviewed, and participants reflected while writing this paper. While a business plan was a written document that was a major part of most participants' client projects, writing this plan was not where the reflection occurred. Reflection occurred for the participants' whose professors assigned them some kind of summative written paper that was intended to help the students reflect. Gagnon and Collay (2001) called reflection one of six key elements found in constructivist learning. Acknowledging that reflecting can be teacher-led or student-led, they said that in student-led reflection, students may use writing to reflect on what they have been thinking.

The fact that students said that reflection occurred during class discussions parallels Kolb (1994), who said, “The learning process must be reimbued with the texture and feeling of human experiences shared and interpreted through dialogue with one another” (p. 2). During class discussions, as students gave each other feedback, the whole class became actively involved in the learning process, a key component of andragogy.

3: The instructor’s role in structuring and facilitating service-learning experiences in a client-based business capstone course is a key to learning.

There are many factors to consider when structuring the curriculum for a capstone course that is client-based. These include decisions about whether projects will be team or individual-based, whether the instructor will choose the teams or the students will choose their own teams, whether the instructor will find the client and service-learning experience or students will find their own clients and service-learning experience, what the deliverables will be, and how the deliverables will be presented and assessed. A lack of attention to all of these factors may not lead to successful outcomes for the students and/or the clients.

There are three primary ways the literature states that small student teams are assigned: self-selection, random assignment and teacher assignment. Self-selection is when students choose their own teams. In this study, five out of ten (50%) of the teams were self-selected. There are advantages and disadvantages to self-selected teams. Student teams are often together for only a short duration, the time it takes to accomplish the team project, so allowing teams to self-select may help teams to become productive, in whatever tasks need to be accomplished, more quickly. For example, Bacon, Stewart, and Silver (1999) found that MBA students who self-selected their teams experienced a better team experience than randomly-selected teams. The teams were more likely to complete work on time and to rate the cooperativeness of their team members more highly. In addition, there is some evidence that self-selection motivates students to manage any team conflict more successfully because by self-selecting their teams they are assuming responsibility for them (Mello, 1993). Bacon, Stewart, and Silver (1999) recommended "constrained self-selection" (p. 483) where students could choose their own teams under certain constraints, such as making sure each team has at least one international student on it. They also recommended gathering some data from students such as their preferences for teammates prior to then assigning the teams.

There are also potential disadvantages to team self-selection. In this study, participants discussed how important it was for team members to possess a variety of skills such as use of spreadsheets, marketing knowledge, and accounting knowledge in order to complete their client projects. Self-selected teams may not have adequate skill sets to complete their tasks, which could decrease productivity. Students may also not have the same goals or expectations for the project, and their priorities may be different (Mello, 1993). Self-selected teams may experience more groupthink (Janus, 1982) which may impair decision-making processes by inhibiting individual team members from stating their opinions when they feel that these opinions would be rejected by the team (Bacon, Stewart & Silver, 1999).

The second way to assign teams is random assignment, meaning assigning teams completely randomly. The advantage to random assignment is that it seems fair to the students. However, at a closer look, there could be problems with this method of team assignment. Students who do not want to work together may not be able to get through the stages of group development to the norming stage, where productivity occurs, quickly enough to accomplish team tasks. In addition, as with self-selection, there may be skill deficits on the teams which may decrease productivity.

The third way to assign teams is to have the instructor assign the teams. This approach is not widely used (Bacon, Stewart, & Silver, 1999). Advantages to this approach may be that the instructor, who may know the skill sets of students, can help ensure that teams contain a variety of skills, which may increase productivity. Another advantage is that students who have difficulty finding a team to work with, for whatever reason, would be included on a team. Disadvantages would be similar to the random assignment approach, where students who do not know each other may not be able to work through the stages of group development quickly enough to ensure that tasks are accomplished. Ideas for how instructors can structure and facilitate courses are discussed in the implications section.

The second major source of conflict in this study was over project workload. Several participants said that at least half of their team did not significantly participate in the project, leaving the rest to carry the workload needed to accomplish the project. Project workload is associated with a theory called social loafing, and it has also been called *hitchhiking* (Mesch, 1991). A German psychologist, Max Ringelmann, observed the effects of people pulling on a rope. When two people pulled at the rope, they used 93 percent of their individual efforts. However, when groups of eight pulled at the rope, individuals only used 49 percent of their effort. Latane, Williams and Harkins (1979) called social loafing a social disease, and said that is has "negative consequences for individuals, social institutions, and societies" (p. 831). They conducted an experiment with college men where the men were blindfolded and then asked to shout loudly. Sometimes the blindfolded men believed they were shouting with others who were also shouting, and some of the men believed they were shouting individually. Latane et al. found that groups decreased their shouting performance because individuals shouted less, and believed that because of it, working in groups can actually be a demotivating factor on individuals.

A meta-analyis of social loafing was undertaken by Karau and Williams (1993) in an effort to review the empirical studies on social loafing and identify gaps in the literature on the topic. An original sample size of 78 existing studies on social loafing was parced into 178 units of analysis. The studies were all of college-aged adults from Western cultures that usually contained both males and females. Results showed a moderate tendency for individuals to reduce their individual effort when working on group tasks; in other words, social loafing does occur in groups. Social loafing was more likely to occur when they were not evaluated as a group, when they were working with people they did not know,when they had higher expectations of their group members, and when they felt that their efforts toward the group were redundant with the efforts of other group members. While both men and women engaged in social loafing, women engaged in less social loafing. Suggestions for mitigating social loafing are presented in the implications section, below.

4: The skill of decision-making is enhanced as a result of service-learning experiences.

In this study, decision-making was defined as the ability to consider a variety of alternatives and make a choice ("Secretary's Commission," 1991). In the quantitative part of this study, decision-making was the skill most reported to be enhanced through service-learning during respondents' business capstone course, yet statistical significance between those who had service-learning in their capstone and those who did not have service-learning in their capstone was not found. This is a very surprising result because in the qualitative data analysis, the theme *Opportunities to Make Decisions* emerged from the data analysis. The top three characteristics of decision-making identified through the data analysis were collaborative decision-making, process-oriented decision-making, and client-focused decision-making.

Employers value the skill of decision-making, as was described in the Chapter 2 literature review. For example, Candy and Crebert (1991) found that employers criticize employees for having a lack of decision-making skills. The Secretary's Commission on Achieving Necessary Skills (SCANS) found that decision-making is one of the basic skills needed by students by the workplace ("The Secretary's Commission," 1991). The National Association of Colleges and Employers recently issued their Job Outlook 2015 ("National Association of Colleges," 2014). Employers from various industries such as manufacturing, finance, professional services, and retail trade, were surveyed about employment-related issues. Of the 250 employers surveyed, and asked to rate the importance of certain job candidates' skills/qualities, results showed that employers rated teamwork, the ability to make decisions, the ability to solve problems, and the ability to verbally communicate as the most important skills.

Implications for Practice in Business Education

Administrators and faculty responsible for aligning service-learning curriculum with institutional needs as well as stated needs of managers who employ business graduates can be helped by the findings of this study. Demand for MBA graduates continues to be strong, and a survey of 900 employers worldwide, in particular, Central Asia, Europe, and the United States, found that companies expect to increase the average number of MBAs hired from 11.4 in 2012 to 14.6 in 2013. In the United States, hiring MBAs is part of the organizational goals for many companies. In 2013, 85 percent of US-based companies planned to hire an MBA, which was an increase from 82 percent in 2012 ("Corporate recruiters survey," 2013).

Graduate business schools need to design programs that best meet the needs of adult learners, who bring their own experiences to their learning. The Association to Advance Collegiate Schools of Business (AACSB), the premier accreditation agency for business programs, asks business programs to offer curriculum that requires active and collaborative learning (AACSB, 2011). Adult learning theory advocates that adult learners learn most effectively by engaging in tasks that are experiential, focus on problem-solving, can integrate new information with their previous knowledge and past experiences, values those past experiences, and allows them to be self-directed (Fisher, 1985; Knowles, 1987). Despite the evidence that service-learning mirrors those characteristics of effective ways adults learn, the impacts of service-learning on adult students are not widely documented (Smith, 2008), and this study lends further support to the impact of service-learning on adult students.

One of the findings of this study was that the structure and instructor's facilitation of a capstone course that includes service-learning is key to student learning. There is no one right way to structure a client-based capstone project that includes a service-learning experience, but this study revealed findings that can help instructors structure their courses. For example, if the capstone project will be team-based, instructors need to give students guidance on how to work in teams. Students expressed, in a positive manner, that their capstone course gave them more autonomy than their other courses. It is unknown, from this study, whether participants had prior training on working in teams, because questions were not asked on this topic, but participants did not mention that they had received formal training on how to work in teams. Because teamwork is so important to successful outcomes, and because employers value teamwork skills in the workplace, training in how to work in teams should be built into curriculum goals in order to maximize team productivity and minimize team conflict, which can inhibit team productivity. French & Bell (1994) suggested team building activities could help teams learn how to make decisions, set goals, clarify roles, solve problems, and build relationships. Bacon et al. (1999) found in a study of MBA student teams that the MBA program studied did not have an emphasis on training teams to work together, and recommended further team training be infused into the MBA program curriculum, not just in one or a few courses.

In addition, since team-based projects can lead to team conflict, students need guidance on how to resolve conflicts within their teams. In this study, the major source of conflict occurred during the storming stage, and often because team members were added to the team after the team had gone through the forming stage, and formed group norms. Instructors should be aware of this and either not put students into teams that have already formed, or provide guidance to student teams about how to integrate a new member into a team.

The second major source of conflict in this study was over project workload, and several participants said that at least half of their team did not significantly participate in the project, leaving the rest to carry the workload needed to accomplish the project. One of the most common complaints students have about team projects is not wanting to work with social loafers (Dommeyer, 2012), and social loafing is widely thought of as something to be mitigated, or reduced, among teams. One study found that about 40 percent of students said they had at least one social loafer in their group (Payne & Monk-Turner, 2006). There are several ways to deal with social loafing. Allowing students to regulate themselves, without instructor involvement, is one idea (Payne & Monk-Turner, 2006, although it does not have much support in the literature. Mellow (1993) said that allowing teams to self-select may help teams to regulate themselves and hold themselves accountable. Yet another method might be to allow group members to “divorce themselves” (Payne & Monk-Turner, 2006, p. 138) from a group member if that group member is social loafing.

In addition to these three methods to mitigate social loafing, Dommeyer (2012) offers a strategy called the Segment Manager Method. This method is based on a quasi-experimental study of undergraduate marketing research students at one public university that compared using peer grading as an evaluation tool with using the Segment Manager

Method. This grading method breaks the student project into segments, and assigns a group member to each of the segments. Each segment has points allocated to it, and each segment has a segment grade that is earned by the manager of that segment as well as a group project grade that is earned by everyone in the group. The segment grade is weighted 80 percent and the group project grade is weighted 20 percent.

The researcher hypothesized that there would be less evidence of social loafing if group projects were graded using the Segment Manager Method. The treatment was given to a total of 132 students in three different semesters. The method of grading given to the treatment group was based on an individual project grade, which was 80 percent of the grade, and a group project grade, which was 20 percent of the grade. Both the control group, who gave peer feedback, and the treatment group, who graded their projects using the Segment Manager Method, were given a questionnaire with 20 belief statements, designed to measure attitudes about social loafing. Results found that the treatment group, using the Segment Manager Method, observed less social loafing than the group that conducted peer grading, and results were significant. Students felt that the Segment Manager Method allowed them to be rewarded for their individual contribution to the group project. In addition, the treatment group that used the Segment Manager Method had higher average scores on the final course exam and higher project scores. This study provides support for alternative ways of mitigating social loafing other than peer grading, which may have mixed results.

Social loafing has implications for how teams function in the workplace. Peer evaluations is a somewhat controversial way researchers have suggested may help with the problem of social loafing. Karau & Williams (1993) found that social loafing tended to decrease when individuals are being evaluated. Mellow (1993) reported that in management education courses, giving students lower grades, in response to negative peer feedback, helped students assume more responsibility within their teams. In this study, tension due to peer evaluations did not emerge as a factor that caused team conflict. However, P8 did state that his team was required to peer-grade each other, that this created some tension among team members. As P8 explained,

> Our professor was pretty open how he did it, it was just out of nowhere, he gave us this sheet, and said, break down and grade your team members - and we had to do that, and he gave us this whole stack in class - while everybody was there - so you can see if you got a lower score or a higher score than you're supposed to get - in class. Kind of created some tension there…

This demonstrates that peer grading does have the risk of causing team conflict, but it was not a major problem in this study, and does not appear to have contributed to social loafing.

Implications for Research in Business Education

This study's findings bring forward opportunities for further research. The process the teams used to facilitate and complete their capstone project aligned with Tuckman's (1965) theory of small group development. Because this emerged in the results, the study's theoretical framework was not based on this framework. It would be interesting to conduct more research about client-based graduate business capstones that include a service-learning experience through the lens of this framework. This may further help understanding of group development, which could help instructors who design and teach these types of courses better facilitate the small group process.

In addition, Tuckman's (1965) original theory of group development was later revisited by Tuckman and Jensen (1977), and a fifth stage of small group developed emerged, called adjourning. Adjourning is the wrap-up of activities related to the small group and includes potential celebrations of accomplishments. This study did not seek to find out how graduate business students adjourn after a capstone project is completed. P6 admitted that their team stays in touch by saying, “we continue to stay in contact and we're trying to go out for a happy hour here next week actually”. P8, whose team had conflict with one team member, admitted he never wanted anything further to do with at least one person on his team by saying, “…and fortunately we only had to deal with this person for a certain amount of time, and after this project was done, most likely you wouldn't keep in touch with this person after that…”. It would be interesting to explore the process of adjourning more. Possible guiding questions are: Does the process of adjourning have any impact on employability skills of graduate business students? Does the process of adjourning have any impact on the relationships between team members? Does the process of adjourning impact whether team members stay connected after they complete their degrees?

This study sought to examine the alignment between the employability skills employers need and employability skills graduate business students gain through service-learning business capstones. Unique to this study is that these alignment questions were asked of only the students. Important stakeholders’ voices were not studied. Faculty and curriculum designers who write curriculum, instructors who teach the courses, the business-focused clients who work with the students, and employers who need business skills to enhance their workforce. Asking these questions from the perspective of these other interested stakeholders would help confirm (or disconfirm) what the MBA students in this study said enhanced their employability skills.

There are numerous employability skills in the literature, and more than one way to define employability skills. No one list of employability skills exists. As this study showed, presentation skills had such a high impact on student learning that it emerged as a theme, *Opportunities to Build Presentation Skills.* In addition to the categories that emerged from that theme, participants mentioned several skills gained by making oral presentations. Specifically, skills mentioned were: the ability to think quickly; the ability to present with confidence; the ability to have flexibility during a presentation; the ability to work together during a presentation; and, the ability to adjust to an audience during a presentation. Therefore, the recommendation is to study this more isolated list of employability skills that are specifically related to giving presentations in graduate business capstone courses that include a service-learning experience.

There is another implication for further research related to employability skills. There were different findings between the qualitative and quantitative data regarding which employability skills were enhanced by service-learning. One explanation for this may be due to respondents having different interpretations and perspectives on how they define the different employability skills. For example, in considering the skill of decision-making, although it was one of the top three skills found to be enhanced, it was not statistically significant. This was surprising because the qualitative analysis found decision-making to be a key skill used by students to complete their service-learning projects. In the survey questionnaire, it was not possible to understand the respondents' perspectives, whereas in the interviews, there was some possibility of discerning the respondents' definition and the perspectives they applied by the terms they used, the nature of the overall discourse, and the issues they raised. Researchers may want to unpack the definitions of employability skills more fully to explore if and how respondents interpret and define the different employability skills.

A logical follow-up to the exploratory factor analysis completed in this study would be confirmatory factor analysis (CFA). CFA is a data reduction technique used to reduce a large number of variables to a more manageable number and is a more sophisticated type of analysis than exploratory factor analysis, and is used to confirm or disconfirm an a priori theory about factors that exist within variables (Merler & Vannatta, 2010). In a CFA, the four factors that were revealed in this study's EFA would be assumed to exist before the analysis would be done. A CFA would strengthen the confirmation of the four factors completed in this study by confirming or rejecting the factor loadings of the EFA.

Recommendations

The findings support several recommendations for graduate business programs that include service-learning and their associated faculty and administrators.

Promote Collaborative Learning as a Proven Outcome. MBA programs that include a capstone course that includes a service-learning experience should promote that these courses may enhance graduates' ability to engage in Collaborative Learning. Elements of Collaborative Learning include the ability to work in teams, interpersonal skills, oral communications, persuasive ability, presentation skills, project management, and responsibility. Literature shows that all of these skills are skills employers want in business graduates. This should be welcome news to employers hiring MBA graduates.

Teach/Facilitate Conflict Resolution Skills. Another implication for business education ties to the qualitative results of this study which showed that conflict exists in teams. Faculty who teach courses where group work is required should recognize that conflict is likely to occur, and should prepare students to proactively manage the conflict so that group projects can move forward and finish well. If conflict that occurs during the storming stage (Tuckman, 1965) cannot be resolved, students may not be able to move to the norming and performing stages. Group cohension could be prompted through team-building activities woven into the curriculum. In addition, business faculty and others in charge of curriculum should consider incorporating specific instruction about how to manage team conflict early in program curriculum. Faculty should not assume that students know how to manage and resolve team conflict; these skills must be taught. Teaching conflict resolution skills would not only help teams be more successful in their project tasks, but may prepare them to better manage workplace conflicts.

Teach/Facilitate Decision-Making Processes. In the same way that conflict was identified as a barrier to successful team work, decision-making emerged as one of the top three skills enhanced by service-learning in business capstones (although statistical significance was not found), and it also emerged as a theme in the qualitative analysis. This has implications for both faculty and students. Faculty who design and/or teach courses where teamwork is involved should help students learn how to make decisions that will help their team move along in the process of completing whatever tasks have been assigned to them. Faculty could teach students various ways of making decisions, such as decision-making by consensus, Robert's Rules of Order or other formal methods of voting on decisions. In working with thousands of work teams in a variety of industries, LaFasto and Larson (2001) found that "the inability to solve process problems accounts for the failure of teams as often as does the inability to solve the substantive problems" (p. 92). Teaching business students to make decisions that help them solve process problems while in school may help them do a better job of making decisions that help them solve business problems in the workplace.

Teach/Facilitate Feedback Techniques. Feedback is important on two levels: instructor to student feedback and student to student (teammate to teammate) feedback. As stated in the findings, LaFasto and Larson (2001) found that the ability to give and receive constructive feedback is a key reason why teams fail and in fact, feedback is a "gift" (p. 45) teammates can give to each other. Feedback can be difficult to give and receive. The suggestion for business education is that effective teammate-to-teammate feedback techniques should be woven into the curriculum where team-based projects are required. Not only might this help the team be more successful in their project, but it may better prepare them for the workplace.

Integrate reflection into team projects. One of the findings of this study is that reflection enhanced the ability to complete a project. This is good news for the workplace because all industries associated with business need workers who can accomplish tasks, meet deadlines, finish the job, and complete projects. Therefore, business education must actively prepare students for this workplace need by intentionally building reflective activities into team projects. This study shows that reflection through written papers and reflection through class discussion are vehicles for promoting reflection. Literature reviewed in Chapter 2 confirms that there are other tools for reflection being used in higher education. For example, reflective writing practices are used to promote reflection in business education (Lang & McNaught, 2013; Mummalaneni, 2014). In addition, a Strategic Marketing capstone course used an e-portfolio to allow students to reflect on their learning (Mummalaneni, 2014). Davis and Comeau (2004) used reflection logs to evaluate students' learning in a capstone business management course.

Limitations of the Study

While this study revealed findings and implications on the topic of service-learning's role on employability skills in graduate business capstones, there are five main limitations that exist. A limitation of non-experimental studies that are conducted for comparative purposes using non-randomly-selected participants is a lack of randomization and generalizability, and that was the case for this study. The ten qualitative participants came from only three MBA programs, and since there are hundreds of US-based MBA programs, results may not be generalizable. Further, two of the three MBA programs represented by the qualitative interviews are religious institutions, which may or may not mean those students have different views about service-learning than non-religious institutions. In addition, it is also possible that students who enroll in an MBA program that includes a service-learning experience may have some pre-conceived ideas that they will benefit from service-learning, and this could limit generalizability to all capstone courses.

Another limitation is that various studies describe skills and attributes in different ways. One way of identifying and describing the desired skills and attributes does not exist. For example, one study may separate written skills and oral skills into two variables (Segon & Booth, 2012) while another study may combine them into one variable ("Chronicle of higher education," 2012). In addition, skills may not even have the same definitions within organizational contexts. Take, for example, the skill of teamwork. Smith (1995) showed that teamwork means something different to members of different levels of an organization. To management, teamwork means staff and line workers should engage in activities such as working overtime. To staff and line workers, teamwork means management should reduce their salaries, to promote equity for all in the organization.

As mentioned previously, the list of employability skills used in this study was based on a prior study, and is not exhaustive. There are other employability skills that would be interesting to study. For example, *leadership* has been studied as an employability skill (Duke, 2002), and was mentioned as a skill needed by some of this study's interview participants to be able to work with a team. Leadership is also an important skill to employers. In the study cited at the beginning of this chapter, employers were asked what the most important attributes were on a job candidate's resume. Tied for first place was *leadership* (77.8%) and *ability to work in a team* (77.8) ("National Association of Colleges and Employers," 2014). Leadership, therefore, is an example of an employability skill that may be important to business educators and the field of business that was not specifically measured in this study.

Another possible limitation is that the use of the word *employers* is very broad. The employers that graduate business students may be going to work for in the future may be found in several different industries; for example, there are employers in manufacturing industries, healthcare industries, and service industries. Because of this, the studies in the literature review of this study focused on employers in the business industry which, again, is broad.

In addition, this study did not seek to distinguish between part-time MBA and full-time MBA students, and the two groups may have some different characteristics. In general, part-time MBA students are employed during their graduate studies, and are balancing both work and school (Rafferty, 2012). In this study, 92.3 percent of survey respondents indicated they work full-time, and 90 percent of interview participants (9 out of 10) responded that they were working full time. It may be interesting to study full-time MBA students in capstone courses that include a service-learning experience to see if results would be different.

Summary of the Study

The purpose of the study was to examine the alignment between the employability skills employers need and the employability skills that graduate business students gain through service-learning in business capstones. In addition, the study sought to understand whether reflection, a stated requirement of service-learning, enhances the employability skills of graduate business students who participate in service-learning during a capstone.

There were four major conclusions in this study. First, there is alignment in the collaborative learning skills needed by employers and those enhanced through service-learning experiences in graduate business capstones. Second, graduate business students used written and oral reflection to improve their ability to accomplish their team-based client projects. Third, the instructor's role in structuring and facilitating service-learning experiences in a client-based business capstone course is a key to learning. Fourth, the skill of decision-making is enhanced during service-learning experiences.

The educational outcomes of service-learning in higher education, described in Chapter II, include increased academic and cognitive development, increased persistence (retention), increased civic responsibility, increased career development, and increased personal and social development. The conclusions of this study lend support to the outcome of increased academic and cognitive development, which is beneficial, because research specifically regarding service-learning outcomes in business education is scarce. This study has demonstrated that collaborative learning, especially building teamwork skills and presentation skills, are outcomes of service-learning experiences. Service-learning allows students opportunities to practice these skills in preparation for employment.

Implications for practice in business education and implications for research in business education led to several recommendations. First, MBA programs can promote collaborative learning as a proven outcome of service-learning. Second, MBA programs should teach/facilitate conflict resolution skills in capstone courses that contain service-learning. Third, MBA programs should teach/facilitate decision-making processes in capstone courses that contain service-learning. Fourth, MBA programs should teach/facilitate feedback techniques in capstone courses that contain service-learning. Fifth, MBA programs should integrate reflection into service-learning team projects, because reflection enhances the ability to complete a project.

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Appendix A

Table 7

Definitions of Employability Skills

Responsibility: puts forth a high level of effort and perseveres towards attaining goals ("Secretary's Commission," 1991)

Accountability: ability to take responsibility for one's own actions ("Accountability," n.d.)

Ethical values: the ability to distinguish between right and wrong

Interpersonal skills: ability to understand and interact effectively with others (Gardner, 1983)

Oral communication: communicates thoughts, ideas, information and messages verbally ("Secretary's Commission," 1991)

Time management: selects goal-relevant activities, ranks them, allocates time, and prepares and follows schedules ("Secretary's Commission," 1991)

Punctuality: doing something at the expected or planned time ("Punctual," n.d.)

Ability to work in teams: contributes to a group effort ("Secretary's Commission," 1991)

Decision-making: ability to consider a variety of alternatives and make a choice ("Secretary's Commission," 1991)

Analytical ability: ability to break a problem into small pieces in order to examine and understand it ("Analytical," n.d.)

Written communications: communicates thoughts, ideas, information and messages in writing ("Secretary's Commission," 1991)

Creativity and creative thinking: generates new and worthwhile ideas and demonstrates originality in work ("P21 Framework Definitions," 2009; Secretary's)

Ability to assimilate new technology: can learn and use new technologies ("Board of Studies," 2012)

Project management: applying knowledge, skills and techniques to execute projects efficiently and effectively ("Project Management Institute," 2014)

Presentation skills: prepares and presents a topic to an audience

Computer problem-solving skills: solves problems with computer equipment and other technologies ("Secretary's Commission," 1991)

Computer word-processing skills: produces documents using a word processor

Persuasive ability: can cause people to do or believe something ("Persuasion," n.d.)

Global awareness: understands learning from and working collaboratively with individuals representing diverse cultures, religions and lifestyles ("P21 Framework Definitions," 2009)

Table 8

Instrument

1. The informed consent will be placed here.
2. Were or are you an MBA student in an MBA program based in the United States? If no, please discontinue the survey and thank you for your time. (If yes, participants will continue on with survey. If no, the instrument will say *please discontinue the survey and thank you for your time.)*
3. A capstone course is a course that is intended to synthesize learning from content in an academic program. Did you complete a capstone course as part of your MBA program? (If yes, participants will continue on with survey. If no, the instrument will say *please discontinue the survey and thank you for your time.)*
4. What year did you complete the MBA capstone course? (This was a drop down list containing years 1985 through 2014.)
5. We would like to ask you some questions about your experience in the capstone course you took during your MBA program. To what extent was this skill enhanced during your capstone course?
   1=was not enhanced

2
3= was somewhat enhanced
4
5= was moderately enhanced
6
7=was greatly enhanced

- Ability to assimilate new technology
- Ability to work in teams
- Accountability
- Analytical ability
- Computer problem-solving skills
- Computer word-processing skills
- Creativity and creative thinking
- Decision-making
- Ethical values
- Global awareness
- Interpersonal skills
- Oral communication
- Persuasive ability
- Presentation skills
- Project management
- Punctuality
- Responsibility
- Time management
- Written communications

6. Service-learning is where students participate in service activities with a community organization, the service is connected to a course, and students have an opportunity to reflect on their learning through the service. Did you complete a service-learning experience as part of this capstone course? (Yes, No)
7. In how many courses in your MBA program, or any other graduate business coursework you completed, did you participate in service-learning? 1=0 courses; 2=1-2 courses; 3=3-4 courses; 4=5 or more courses
8. In how many courses in your undergraduate coursework did you participate in service-learning? ? 1=0 courses; 2=1-2 courses; 3=3-4 courses; 4=5 or more courses
9. Reflection means intentionally considering an experience in light of particular learning objectives. In a course, reflection is often written or oral. Keeping that definition in mind, what was the frequency of the reflection in your MBA capstone course?

1=No reflection
2
3= Some reflection
4
5= Quite a bit of reflection
6
7=A lot of reflection

10. What is your gender? (0=male, 1=female; 2=I prefer not to respond)
11. What is your current overall GPA? (4.0-3.9; 3.8-3.0; 2.9-2.0; 1.9-1.0; less than 1.0; I prefer not to answer)
12. What is your race/ethnicity: American Indian or Other Native American; Asian, Asian American, or Pacific Islander; Black or African American; White (non-Hispanic); Hispanic or Latino; Multiracial; Other; I prefer not to respond?
11. What is your age? (1 = *18-29*, 2= *30-39*, and 3 = 40-49; 4=50-59; 5=60 and over)
13. What is your current work status? 1=full-time (40 or more hours per week), 2=part-time (fewer than 40 hours per work), 3= not currently working, 4=I prefer not to answer
14. What is your current level of employment? (1=manager, 2=non-managerial professional occupation; 3=technical occupation, 4=administrative/secretarial occupation, 5=other)
15. How many years have you been working at that level of employment? (1=0; 2=1-5; 3=6-10, 4=11-15, 5=16-20; 6=21 or more)
16. In what industry do you work? 1=not currently working; 2=business services or retail; 3=business manufacturing; 4=health care; 5=media/communications; 6=science/technology; 7=education; 8=government/non-profit; 9=agriculture/fishing/forestry; 10=other
17. At what college/university did you complete your MBA capstone course? (open ended question)
18. Would you be willing to be contacted for a follow-up interview regarding your experiences in this capstone course? 1=Yes; 2=No; 3=Maybe
19. If you answered yes or maybe, please provide your full name and an email address where you can be reached.

Thank you so much for completing this survey.

Table 9

Interview Protocol

Question #1: Give me examples of how you used [name the highest-ranked skill] in your service-learning experience?

Question #2: Give me examples of how you used [name the second highest-ranked skill] in your service-learning experience?

Question #3: Give me examples of how you used [name the third highest-ranked skill] in your service-learning experience?

Question #4: How did discussing your service-learning experiences in class contribute, if it did contribute, to your understanding of the skills necessary to do service-learning? Can you give me some examples?

Question #5: What assignments in the course were valuable to your learning and why?

Question #6: Do you think that reflecting on your service-learning experiences enhanced any skills that you use in your workplace? Can you give me some examples?

Question #7: Can you tell me how your capstone course has contributed to your current employment? Can you give me some examples of this?

Question #8: What else would you like to share with me about your service-learning experience in this course?

Q8: What assignments in the course were valuable to your learning and why?

Q9: Thinking back to the course, in what ways do you remember being asked to reflect on the service-learning experience? Please describe those reflection activities.

Q10: Do you think that reflecting on your service-learning experiences enhanced any skills that you use in your workplace? Can you give me some examples?

Q11: Can you tell me how your capstone course has contributed to your current employment? Can you give me some examples of this?

Q12: What else would you like to share with me about your service-learning experience in this course?

Table 10

Invitation to Participate in a Study for the Survey

Background Information

You are invited to participate in a research study titled *Enhancing Employability Skills in Graduate Business Programs: Service-Learning in Capstone Courses.* This study is being carried out by Molly Wickam, Ph.D. candidate at the University of Minnesota-Twin Cities.

The purpose of the study is to examine the alignment between the employability skills employers need and the employability skills that graduate business students gain through service-learning in business capstones. In addition, the study seeks to understand whether reflection, a stated requirement of service-learning, enhances the employability skills of graduate business students who participate in service-learning during a capstone. You do not have to have participated in service-learning to participate in this study. This research has received ethics approval from the University of Minnesota.

Procedures

If you agree to take part in this study, you will be asked to complete an online survey/questionnaire. This survey/questionnaire will ask you questions about your MBA capstone course and employability skills and will take approximately 15 minutes to complete.

Risks and Benefits

You may not directly benefit from this research; however, we hope that your participation in the study may help us better understand alignment between the employability skills employers need and the employability skills that graduate business students gain through service-learning in business capstones. There are minimal risks associated with this research study.

Confidentiality

To the best of our ability your answers in this study will remain confidential. As with any online related activity, confidentiality cannot be guaranteed while data are in transit over the Internet. However, your answers in this survey are anonymous and you cannot be identified, unless you choose to volunteer yourself to participate in follow-up interviews. You may choose to skip any questions that you do not wish to answer.

Contacts and Questions

- If you have questions about this project, you may contact the principal researcher, Molly Wickam, at wick0271@umn.edu. You may also contact my research advisor, Professor Andrew Furco, at afurco@umn.edu. If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher or my advisor, you are encouraged to contact the Research Subjects' Advocate Line, D528 Mayo, 420 Delaware St. Southeast, Minneapolis, Minnesota 55455; 612-625-1650.

Statement of Consent

By beginning the survey, you are making a decision whether or not to participate, and participation is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University of Minnesota. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships. If you are willing to participate, please continue to the next question.

Table 11

Invitation to Participate in a Study for the Interviews

Background Information

You are invited to participate in a research study titled *Enhancing Employability Skills in Graduate Business Programs: Service-Learning in Capstone Courses.* This study is being carried out by Molly Wickam, Ph.D. candidate at the University of Minnesota-Twin Cities. The purpose of the study is to examine the alignment between the employability skills employers need and the employability skills that graduate business students gain in business capstones. This research has received ethics approval from the University of Minnesota.

Procedures

If you agree to participate in this study, you will be asked to participate in an interview with the researcher that will take approximately 45 minutes. The interview will be recorded, and then transcribed to remove personal-identifying information. The recording will then be deleted.

Risks and Benefits

You may not directly benefit from this research; however, we hope that your participation in the study may help us better understand alignment between the employability skills employers need and the employability skills that graduate business students gain business capstones. There are minimal risks associated with this research study.

Compensation

There is no compensation associated with participating in this study.

Confidentiality

The records of this study will be kept private. In any sort of report we might publish, we will not include any information that will make it possible to identify a participant. Research records will be stored securely and only the researcher will have access to the records. Study data will be encrypted according to current University policy for protection of confidentiality. The researcher will be the only person with access to the recordings. Your file will be identified by a number rather than your name. Once the interview has been transcribed, the recording will be deleted.

Voluntary Nature of the Study

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with the University of Minnesota. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions

If you have questions about this project, you may contact the principal researcher, Molly Wickam, at wick0271@umn.edu. You may also contact my research advisor, Professor Andrew Furco, at afurco@umn.edu. If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher or my advisor, you are encouraged to contact the Research Subjects' Advocate Line, D528 Mayo, 420 Delaware St. Southeast, Minneapolis, Minnesota 55455; 612-625-1650.

In order to participate in this study, please sign and date this form and email it to me at wick0271@umn.edu. Or, you can mail the signed and dated form to Molly Wickam, 12960 32 Ave. N., Plymouth, MN 55112.

I have read the above information. I have asked questions and have received answers. I consent to participate in the study.

Signature: ______________________________________ Date: __________________

Please keep a copy of this information for your records.

Table 12

Advertisement on LinkedIn Groups and Google Groups

Because LinkedIn and Google Groups only show the first two or three sentences of a posting without requiring readers to click a button to view more text, the goal of this announcement is to be both informative and brief. Here is the proposed announcement:

I am looking for help from MBA alumni who recently (within the last five years) took a capstone course in their MBA program. I am studying the alignment between the employability skills employers need and the employability skills that graduate business students gain through service-learning in business capstones. You do not need to have done service-learning in your capstone in order to participate in the survey. Your answers will be anonymous, and it will take approximately 15 minutes to complete the survey. Please click here to begin the survey: (the survey link will be here).

The announcement on the Northern Illinois University LinkedIn will be slightly different because I am an alumnus of that university's MBA program. Hoping to attract the attention of fellow alumni, the first sentence of the announcement will begin as follows: *As a fellow NIU MBA alumnus, I am looking for help from MBA alumni…*

Table 13

Demographic comparison of gender: Service-learning and no service-learning
n=78 (one respondent declined to answer)

Characteristics	Service-learning		No Service-learning		Total	
Gender	Frequency	Percent	Frequency	Percent	Frequency	Percent
Male	14	33	28	67	42	100
Female	15	42	21	58	36	100
Total	29		49		78	

Table 14

Demographic comparison of overall GPA in MBA Program: Service-learning and no service-learning
n=79

Characteristics	Service-learning		No Service-learning		Total	
GPA	Frequency	Percent	Frequency	Percent	Frequency	Percent
3.4 to 4.0	27	36.5	47	63.5	74	100
2.4 to 3.3	3	60	2	40	5	100
Total	30		49		79	

Table 15

Demographic Comparison of Race/Ethnicity: Service-learning and no service-learning
n=79

Characteristics	Service-learning		No Service-learning		Total	
Race/ethnicity	Frequency	Percent	Frequency	Percent	Frequency	Percent
American Indian or Other Native American	0	0	0	0	0	0
Asian, Asian American or Pacific Islander	2	66.7	1	33.3	3	100
Black or African American	3	100	0	0	3	100
White (non-Hispanic)	22	32.4	46	67.6	68	100
Hispanic or Latino	2	66.7	1	33.3	3	100
Multiracial	1	100	0	0	1	100
Total	30		49		79	

Table 16

Demographic Comparison of Age: Service-learning and no service-learning
n=79

Characteristics	Service-learning		No Service-learning		Total	
Age	Frequency	Percent	Frequency	Percent	Frequency	Percent
18-29	10	55.6	8	44.4	18	100
30-39	7	22.6	24	77.4	31	100
40-49	7	46.7	8	53.3	15	100
50-59	5	35.7	9	64.3	14	100
60 and over	1	100	0	0	1	100
Total	30		49		79	

Table 17

Demographic Comparison of Current Work Status: Service-learning and no service-learning
n=77 (two respondents declined to answer)

Characteristics	Service-learning		No Service-learning		Total	
Current work status	Frequency	Percent	Frequency	Percent	Frequency	Percent
Full-time (40+)	26	36	46	64	72	100
Part-time (<40)	3	60	2	40	5	100
Total	29		48	100	77	100

Table 18

Demographic Comparison of Level of Employment: Service-learning and no service-learning
n=79

Characteristics	Service-learning		No Service-learning		Total	
Level of Employment	Frequency	Percent	Frequency	Percent	Frequency	Percent
Manager	17	40	25	60	42	100
Non-managerial professional	7	25	21	75	28	100
Technical	0	0	2	100	2	100
Administrative	2	100	0	0	2	100
Other	4	80	1	20	5	100
Total	30		49		7	

Table 19

Demographic Comparison of Type of Industry: Service-learning and no service-learning n=79

Characteristics	Service-learning		No Service-learning		Total	
Type of industry	Frequency	Percent	Frequency	Percent	Frequency	Percent
Business service or retail	4	26.7	11	73.3	15	100
Business manufacturing	3	27.3	8	72.7	11	100
Health care	6	42.9	8	57.1	14	100
Media/comm.	1	100	0	0	1	100
Science/tech.	1	12.5	7	87.5	8	100
Education	5	55.6	4	44.4	9	100
Gov./non-profit	6	75	2	25	8	100
Agriculture/fishing/forestry	0	0	1	100	1	100
Other	5	38.5	8	61.5	13	100
Total	30		49		79	

Note: Other responses, when given, included energy, telecommunications, electrical construction, finance and service (2), human services, science and technology, electronics, construction, consumer goods, own a business

Table 20

Descriptive Statistics-Factors

	Factor 1	Factor 2	Factor 3	Factor 4
Mean	44.81	36.65	19.05	13.26
SD	9.3	9.7	4.23	2.02
Variance	86.71	94.64	17.95	4.10
Skewness	-1.291	-.225	-1.700	-.526
Kurtosis	2.101	-.160	3.892	-.373