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**A CASE STUDY OF COMMUNITY COLLEGE FACULTY ATTITUDES  
TOWARD STUDENTS WITH DISABILITIES**

by

Mary C. Clark

A Dissertation

Submitted to the  
Department of Educational Services and Leadership  
College of Education  
In partial fulfillment of the requirement  
For the degree of  
Doctor of Education  
at  
Rowan University  
December 6, 2017

Dissertation Advisor: JoAnn Manning, Ed.D.

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### **Dedication**

This dissertation and all my academic achievements are dedicated to my mother,  
Mary Donaldson, whose example of courage and perseverance will always inspire me.

## **Acknowledgments**

I would like to express my sincere gratitude to my family and friends who have walked alongside me throughout this journey. Each of you has guided, supported, or encouraged me just when I needed it most. You have placed opportunities in my path, suggested I slow down, and given me the courage to find the strength within to achieve this lofty goal.

I would like to express my deepest appreciation to Dr. JoAnn Manning, my very understanding advisor, Dr. Mary Beth Walpole, and Dr. Catherine Chew for without your guidance, patience, and support this journey would certainly not have been impossible. I would also like to express my sincere thanks to Dr. Daryl Minus for the little push that got this journey started and to the faculty who made my study a reality. You all have a special place in my heart.

Most importantly, I would like to thank my husband for allowing me to be selfish with our time and money to pursue this dream and my boys for always being the right kind of distraction. I love you all so very much.

## **Abstract**

Mary C. Clark

### **A CASE STUDY OF COMMUNITY COLLEGE FACULTY ATTITUDES TOWARDS STUDENTS WITH DISABILITIES**

2017-2018

JoAnn Manning, Ed.D.

Doctor of Education

The purpose of this single case study was to explore the attitudes and experiences of faculty at one small, public, community college in the southeastern United States. Of the 180 faculty sampled, 35 completed the Attitudes Toward Disabled Persons survey, 13 participated in a one-on-one interview, and a review of 30 institutional documents was conducted. Using social constructivism, disability theory, and the researchers personal and professional experiences as the framework, the data collected helped to gain insight into the faculty's experiences with classroom accommodations and attitudes toward students with disabilities. Five key findings revealed that community college faculty in the present study generally have positive attitudes toward students with visible disabilities. Second, faculty in the present expressed significant concerns for the academic success of students with invisible disabilities. Third, faculty are less willing to provide accommodations they believe provide an unfair advantage for students with disabilities or do not adequately prepare students for the rigors of a university or workplace setting. Fourth, faculty expressed a desire for training regarding disabilities to have a better understanding of the impact of disabilities on students and how best to accommodate them. Fifth, faculty consistently used antiquated language when discussing students with disabilities. Community colleges should find the information in this study helpful in developing workshops and other training on disabilities to improve faculty understanding of students with disabilities and the use of classroom accommodations.

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## **Chapter 1**

### **Questions, Limitations, Context, Significance**

Accommodating students with disabilities is a growing concern of faculty in higher education. Colleges and universities in the United States have seen steady increases in enrollment of students with disabilities with more students with disabilities realizing a college education leads to better employment and an increased opportunity to provide for themselves (Raue & Lewis, 2011; Stodden & Dowrick, 2000). This motivation, along with increased access to higher education has led to growing numbers of students with disabilities pursuing a college education, and a growing concern of faculty on how to balance the rights of students with the integrity of the classroom (Stodden & Dowrick, 2000).

Students with disabilities who pursue a college education are protected under the American's with Disabilities Act of 1990 (ADA) and Section 504 of the Rehabilitation Act of 1973. Together, these civil rights laws prohibit discrimination against a student based on their disability, providing the disability substantially limits their ability to perform one or more major life activities. These laws provide greater access to higher education through the use of accommodations designed to lessen the effects of their disability and are considered a significant factor in the increased the number of students with disabilities enrolled in higher education (Office of Civil Rights, 2015).

Although many factors could be identified as barriers to quality education for students with disabilities at community colleges, one known barrier is negative faculty attitudes and perceptions of disabilities, which is often related to classroom accommodations (Leyser, Vogel, Wyland, & Brulle, 1998). As the number of students

with disabilities increases, many faculty are struggling with the fairness of accommodating the needs of students with disabilities as required by law and maintaining the integrity of their programs (Bourke, Strehorn, & Silver, 2006). Although many faculty generally believe it is appropriate to provide accommodations to students with disabilities, others have expressed a concern that some accommodations are ineffective and in fact lower academic integrity (Bourke et al., 2006). Still others have reported a disbelief that any accommodations are appropriate or even needed. As a result, they have a reluctance to provide them to students (Quick, Lehmann, & Deniston, 2003). The faculty member's attitude can influence how they implement accommodations in the classroom and impact the overall classroom environment.

Since the 1980's, colleges and universities have been experiencing steady increases in enrollment of students with disabilities (Raue & Lewis, 2011). According to the National Center for Educational Statistics, in AY 1995-1996, 6% of all college students nationally identified themselves as having a disability and requested accommodations with their institution, in AY 1999-2000 that number rose to 9%, jumped to 11.3% in AY 2003-2004, and rose again to 18% in AY 2007-2008 (Raue & Lewis, 2011). It is believed legislative mandates, an increased number of students with disabilities in college preparatory programs in high school, and innovations in educational and assistive technologies have contributed to this considerable increase in college enrollment by students with disabilities (McCallister, Wilson, & Baker, 2014).

Further, students with disabilities are attending community colleges at even higher proportions than other public postsecondary institutions (Treloar, 1999). Among students with disabilities in AY 2007-2008, an estimated 54% were enrolled at a

community college, compared to 36% of the student population in the higher education as a whole (Raue & Lewis, 2011). According to the American Association of Community Colleges (2014), the open-access model of community colleges, low tuition rates, community location, and flexibility and type of courses offered are the combination that entice students with disabilities to choose community college.

Regardless of the type of institution, faculty attitudes toward students with disabilities are often formulated through past experiences and the specific type of disability the student possesses (Beilke & Yssel, 1999). Beilke and Yssel (1999) reported that faculty attitudes tend to follow societal attitudes and suggest the most prejudicial attitudes expressed are toward students with non-visible disabilities. Faculty in their study perceived poor academic performance as a lack of ability rather than a symptom of a disability, suggesting accommodations were a way of using disability to gain preferential treatment or an advantage over classmates (Beilke & Yssel, 1999).

Panting and Kelly (2007) suggest, many students with non-visible disabilities believe disability labels influences faculty expectations and often feel pressure to keep their disability hidden or delay their request for accommodations until they are in academic trouble, perpetuating faculty bias toward students with non-visible disabilities. As a result, Kurth and Mellard (2006) found that on average only 0.7% of enrolled students identify themselves as having a disability to institutional staff in order to receive accommodations, suggesting it is imperative more students self-identify in order to receive a quality education and have equal opportunities entering the workforce as adults.

## **Problem Statement**

The number of students with disabilities enrolling in our nation's colleges and universities has been steadily increasing since the first formalized disability services were introduced in 1948 (Haller, 2006). As enrollment increases so does the concern faculty have with balancing the needs of students with disabilities with ensuring the rigor of the program and maintaining equity in the classroom (Bourke et al., 2006). These concerns can manifest themselves into negative attitudes or biases toward students with disabilities and can have an impact on the success of students with disabilities.

As faculty are responsible for academic instruction, the attitudes and behaviors of college faculty toward students with disabilities are important determinants of the quality of higher education experiences for students with disabilities (McCallister et al., 2014). Murray, Lombardi, Wren, and Keys (2009) studied attitudes toward students with disabilities by faculty, staff, and administrators and concluded that negative attitudes held by faculty had a greater impact on the educational experience of students with disabilities than those of staff and administrators. They further concluded that although many faculty were willing to implement accommodations, institutional disability policies do not necessarily lead to practice in the classroom (Murray et al., 2009).

Faculty attitudes of students with disabilities and the impact they have on student success have been thoroughly examined for many years, however little research has been conducted on the attitudes of community college faculty. As more students with disabilities choose to attend community college, it is important to understand the attitudes of community college faculty and how those attitudes influence the use of classroom accommodations. It is important because there is a strong relationship between a faculty



member's experiences with students with disabilities, their understanding of accommodations, and their willingness to provide them to students (Rao & Gartin, 2003). Several studies (Bourke et al., 2000; Burgstahler & Moore, 2009; Eckes & Ochoa, 2005; Kurth & Mellard, 2006; Wilson, Getzel & Brown, 2000) have been conducted on faculty development in relation to attitudes toward students with disabilities and their understanding of accommodation, however their studies have been restricted to university tenure-track and tenured faculty, excluding a significant portion of faculty in higher education. This includes community college faculty who are experiencing greater increases of students with disabilities than their university counterparts.

### **Purpose of the Study**

Under the supposition that faculty attitudes of accommodations are influenced by their experiences with students with disabilities, this study explored community college faculty attitudes of students with disabilities and explored how their experiences and attitudes influence the use of accommodations in the classroom. Using social constructivism theory, disability theory, and my personal and professional experiences as the conceptual framework of the study, a single case study research model was used to gather data from a 2-year, public, open-admission, rural community college in the southeastern United States. Data was collected using multiple data sources and included a survey, faculty interviews, and a review of institutional documents and data. Data collection took place during the spring 2017 semester.

For the survey portion of this study, all full-time and part-time faculty teaching during the spring 2017 semester, were asked to complete the Attitudes towards Disabled Persons Scale (ATDP) Form B, a 30-question survey, which measures attitudes toward

students with disabilities (Yuker & Block, 1986). Demographic information and two open-ended questions regarding faculty's overall experience with students with disabilities and classroom accommodations were included with the survey and scored separately. Survey participants were also asked to participate in an interview that consisted of more detailed questions regarding faculty experiences with students with disabilities and classroom accommodations as well as their opinions regarding what is required of or specific needs of faculty working with students with disabilities.

Document analysis was used to clarify or substantiate participants' statements during interviews and includes faculty syllabi, institutional policy regarding students with disabilities, examples of accommodation letters, and the college's website (Glaser & Strauss, 1967).

To add to the existing body of research on faculty attitudes of students with disabilities, the purpose of this study was to explore community college faculty attitudes of students with disabilities and explore how their experiences and attitudes influence the use of accommodations in the classroom. The following research questions guided this case study:

1. What are community college faculty attitudes toward students with disabilities?
2. How have community college faculty's experiences with students with disabilities influenced their attitudes toward students with disabilities?
3. How are those attitudes reflected in the community college faculty's use of accommodations in the classroom?
  - a. Which accommodations are community college faculty most likely to use in the classroom?

- b. Which accommodations are community college faculty least likely to use in the classroom?
4. What concerns and suggestions do community college faculty express regarding students with disabilities?

### **Conceptual Framework**

To understand better the attitudes of faculty regarding students with disabilities and how those attitudes were constructed, social constructivism, disability theory, and my personal and professional experiences comprised the conceptual framework of this study. Maxwell (2013) suggests there are four main sources for modules that can be used to construct a conceptual framework, the researcher's experiential knowledge, existing theory and research, the researcher's exploratory research, and thought experiments. This study is based on the notions that (1) disability can generally be viewed as a physical or social construct; (2) that attitudes of disability are typically based on one or the other construct and can have an impact on an individual's interactions with people with disabilities; and (3) attitudes are formed by our direct interactions with others or are modeled after others' experiences and are usually culturally influenced (Eagly & Chaiken, 1993; Shakespeare, 2006). The use of social constructivism, disability theory, and my own experiences provided major sources of insights, hypotheses, and validity checks for the study (Maxwell, 2013).

**Social constructivism.** Social constructivism provides the foundation for this study as it suggests individuals construct meaning through social interactions bound by cultural context. Social constructivism theory is a research practice that constructs theory through involvement and interaction with people and perspectives (Lauckner, Paterson, &

Krupa, 2012). Social constructivism suggests learning is the result of cognitive and social interaction and is heavily influence by the social environment (Green & Gredler, 2002). The interactions of faculty and students with disabilities was explored to create a broader understanding of community college faculty perceptions of students with disabilities and how those perceptions influence the use of classroom accommodations. Disability theory was used to focus the study by providing the cultural context.

**Disability theory.** Disability theory looks at disability through social constructivism, suggesting that because disability is a product of social interactions it cannot be understood outside the context where it arises and therefore provides context to the study (Denhart, 2008). Disability theory submits disability is socially constructed, part of the normal human variation which includes prejudice and bias, and as such requires voice to deconstruct it (Denhart, 2008). Using the analysis of faculty experiences with students with disabilities by means of survey and interview results and the evaluation of institutional documents, faculty attitudes toward students with disabilities were explored through the cultural context of disability.

**Researcher experiences.** I have both personal and professional experiences with the attitudes faculty can have toward students with disabilities. My son was diagnosed with a learning disability early on in his education and I worked closely with the school district to provide him with every opportunity to succeed. I advocated for classroom accommodations but also worked with his teachers on behavior modification so he could learn how to learn on his own. I was the ADA Coordinator for a community college, where I was responsible for awarding students' accommodations and working with faculty on best practices for implementing classroom accommodations. I have counseled

students and faculty on the use of classroom accommodations and listened to the frustrations from both. It is because of these interactions I became interested in studying faculty attitudes toward students with disabilities.

### **Limitations/Delimitation**

The major limitation of this study was researcher bias. As this study dealt with the phenomenon of faculty attitudes, the role of the researcher was to seek understanding through immersion in the culture of the study and therefore researcher bias was a concern (Creswell, 2014). I am employed by the community college used in this study where I work closely with faculty and I have worked as an ADA Coordinator at a nearby community college, situating me not only in the organization, but also in the culture. My previous work with students with disabilities is what drew me to this study and was also the greatest threat to researcher bias.

As a first step in addressing this bias, I changed employment moving to an institution where I have no ADA responsibility and no longer require faculty to implement accommodations. By resigning my position and changing schools, I feel I eliminated any concern faculty may have had working with me on this study. I believe that allowed them to be more open and honest in their participation in this study. I have been open with my colleagues, my dissertation committee, and anyone who may potentially be involved with this study about my experiences and interest in this field. I employed the services of the college's ADA Coordinator to engage in peer review to improve the accuracy of my data gathering and analysis and validate my final reporting (Creswell, 2014).

To reduce the potential of researcher bias in data gathering, purposeful sampling was used to identify the primary participants in the study (Creswell, 2014). Participants were chosen because of what they could contribute to the study (Creswell, 2014). Participants who responded to the ATDP survey, engaged in the interview portion of the study, and expressed prior experience with students with disabilities or who are currently teaching students with disabilities were used in the study. Keeping a journal that monitors my subjectivity and experiences throughout the study and member checking of faculty interviews was also used to identify and separate my perceptions from those of the participants (Patton, 2002). The triangulation of multiple points of data, including survey responses, coded interview responses, and institutional documents and data was also used to avoid researcher bias (Creswell, 2014).

Another limitation to this study was the small, rural nature of the community college. Although interview-based studies involving a small number of participants such as this study are becoming more common, there is still concern among the research community that only sizable samples are representative of the larger population and therefore are more valid (Crouch & McKenzie, 2006). The small size and rural setting for this study combined with researcher bias could have created a validity issue related to the interpretation of the interview results (Crouch & McKenzie, 2006).

### **Significance of the Study**

This case study examined the impact community college faculty attitudes of students with disabilities had on the provision of classroom accommodations. There have been many studies that have taken different approaches to examine faculty attitudes toward students with disabilities, including research regarding positive and negative

faculty attitudes toward students with specific physical or learning disabilities (Leyser et al., 1998). Some research exists about the difference in faculty attitudes of disability type and willingness to provide classroom accommodations (U.S. Department of Health & Human Services, 2003). Other research links faculty attitudes toward students with disabilities with other variables such as gender, faculty rank, years of teaching, and department (Murray, Lombardi, & Wren, 2011). Still other research provides evidence that faculty who receive training in disability awareness are more likely to demonstrate positive attitudes toward students with disabilities (Murray et al., 2011).

These studies acknowledge federal laws are one of several factors that have improved access to higher education for students with disabilities (Office of Civil Rights, 2015). Although faculty are bound by law to provide accommodations, in one study faculty perceived poor academic performance as a lack of ability rather than a symptom of disability, suggesting accommodations were a way to garner preferential treatment (Beilke & Yssel, 1999). Other studies have noted when students feel rejected, they are less likely to feel comfortable disclosing their disabilities and requesting and accessing accommodations (Houck, Asselin, Troutman, & Arrington, 1992).

These studies have provided faculty with important information, however very few of these studies have involved community college faculty. With the increasing number of students with disabilities enrolling at community colleges and the varying approaches of studying faculty attitudes, this study is important to better understand how community college faculty attitudes toward students with disabilities impacts their use of accommodations in the classroom. Armed with this deeper understanding, community

college faculty can begin to make changes that can improve the educational experience of students with disabilities.

### **Summary**

Many research studies have examined faculty attitudes towards students with disabilities and accommodations, but little research examines community college faculty attitudes toward students with disabilities. This single case study explored community college faculty attitudes toward students with disabilities and explored how their experiences and attitudes influence the use of classroom accommodations in a small, rural community college in the southeastern United States. Social constructivism, disability theory, and my personal and professional experiences provided a theoretical framework of the study. Multiple data sources including the ATDP scale to examine community college faculty attitudes toward students with disabilities; a semi-structured interview focusing on faculty experiences with students with disabilities and their opinions of the use of accommodations in the classroom; and a review of institutional documents regarding student with disabilities were used to explore faculty experiences and attitudes toward students with disabilities. Disability theory provided context, as data were analyzed and interpreted together to identify faculty attitudes. This study will provide community college faculty with a deeper understanding of the impact attitudes toward students with disabilities have on the implementation of accommodations.

*Key terms: accommodations, students with disabilities, community college*



## **Chapter 2**

### **Literature Review**

Disability is a complex concept and difficult to define. The term disability has historically been identified as an “inability” or a “limited ability” and it may refer to an individual’s physical attributes or limitations imposed on individuals by societal or environmental factors (Shakespeare, 2006). For this study, disability was regarded as a complex interaction between the inherent traits of an individual and the culture or environment the individual finds themselves (Shakespeare, 2006). It is within the context of these interactions where individual or cultural perceptions or attitudes toward individuals with disabilities can be formed (Beilke & Yssel, 1999).

The following definition of attitudes, proposed by Triandis, Adamopoulos, and Brinberg (1984), was used for this study: "an attitude is an idea charged with emotion which predisposes a class of actions to a particular class of social situations" (p. 21). Triandis, et al. (1984) suggest there are three components to attitudes including a cognitive component, an affective component, and a behavioral component, suggesting attitudes are not passive. Attitudes are formed by our direct interactions with others or modeled after others’ experiences and are usually culturally influenced (Eagly & Chaiken, 1993). Attitudes toward individuals with disabilities have long existed in our culture and have been examined extensively with the intent to develop a greater understanding of their impact.

### **Models of Disability**

Models of disability are frameworks that provide insight into the attitudes, beliefs, and prejudices of individuals regarding people with disabilities; however, they are not

definitions of disability since disability is a complex, individual experience (Shakespeare, 2006). The models are influenced primarily by two fundamental philosophies – the medical model and the social model – that reveal the ways in which our society views individuals with disabilities and how those views influence the treatment of individuals with disabilities (Shakespeare, 2006). The medical model of disability suggests disability is situated exclusively in the body caused by something physical such as disease, trauma, or other health conditions, and requiring sustained medical care by a professional (Langtree, 2010). The medical model of disability identifies the person as diseased or defective and strives to find cures through treatment (Langtree, 2010). The social model of disability suggests disability is caused by societal barriers, exclusions, and negative attitudes, rather than by an individual's impairment or difference (Langtree, 2010). The social model of disability equates disability with diversity and expects society to make the necessary environmental modification to allow people with disabilities to fully participate in all areas of social life (Langtree, 2010).

Models of disability can shape the self-identity of people with disabilities as labels, diagnoses, and attitudes of others can affect how a person with disabilities feels about themselves (Beilke & Yssel, 1999). The views by others can limit students with disabilities' access to higher education and their ability to be self-supporting (Beilke & Yssel, 1999). Models of disability can also cause prejudice and promote discrimination, as in the case of the medical model of disability, which views students with disabilities as inferior or "lacking". This model encourages accepting stereotypical labels, stigmatizing students with disabilities as inferior, and promoting discrimination (Panting & Kelly, 2007).

Juxtaposed to the medical model of disability, the social model of disability also sees the body as defective however; social constructivism suggests advances in social justice rather than medicine are needed to “fix” the disabled body (Siebers, 2011). Social constructivism is a change in discourse, which sees disability as being caused by an environment that is hostile to some bodies and not others and therefore a social construct (Siebers, 2011). This view of students with disabilities as being somehow lacking and incapable of performing the required coursework can result in oppression and discrimination and prevent students with disabilities from pursuing a college education (McCallister et al., 2014).

### **The Importance of a College Education for Students with Disabilities**

Despite how society views disability, a college education can be a major factor in determining an individual’s employability. Employment provides most individuals their primary means to achieve economic and personal independence, yet millions of individuals with disabilities cannot secure sufficient employment due to a variety of barriers, including education (Stodden & Dowrick, 2000). In the United States, unemployment rates of people with disabilities are two to three times higher and poverty rates are three to four times higher than those with no disabilities (Stodden & Dowrick, 2000). Furthermore, employed individual with disabilities are more likely to work in low wage jobs (Stodden & Dowrick, 2000).

Unfortunately, students with disabilities who enroll in postsecondary education, which may provide greater employment opportunities, are less likely to persist to graduation than their counterparts without disabilities (Horn & Bobbitt, 1999). Additionally, students with disabilities are more likely to delay entering postsecondary

education, more likely to have earned a GED, tend to be older, and often have dependents other than a spouse (Horn & Bobbitt, 1999). These traits are associated with lower persistence and degree attainment rates (Horn & Bobbitt, 1999). It is important to understand the importance of an education and improve these statistics so that students with disabilities receive a quality education and have an equal opportunity entering the workforce (Horn & Bobbitt, 1999). An education provides an important opportunity for individuals with disabilities to move out of poverty by providing them with the knowledge and skills needed to be employed in the workforce (Stodden & Dowrick, 2000).

### **Students with Disabilities and College Access**

Because employment options for qualified individuals with disabilities' are significantly limited without an education, colleges and universities provide support services to students with disabilities. Formalized disability services for college students began at the University of Illinois when Tim Nugent founded the Division of Rehabilitation Education Services in 1948 (Haller, 2006). The Division of Rehabilitation Education Services was designed to serve World War II veterans who had received disabilities with the opportunity to earn a college degree (Haller, 2006). Still in effect today, the university has a reputation as the most disability-friendly campus in America (Haller, 2006).

Another pioneer in disability services, the University of California at Berkeley has been providing disability services to college students since 1962 (Haller, 2006). Inspired by Ed Roberts, the founder of the independent living movement, the university was one of the first to employ services for students with physical disabilities including wheelchair

ramps, wheelchair repair services, and personal attendants (Haller, 2006). Today, the university's program does more than provide accommodations; their focus is on educating students on their independent living rights. Their successful two-semester program produces students who can continue their studies while living independently (Haller, 2006).

### **Federal Regulations**

With the intent of ensuring independence for individuals with disabilities, governments have used models of disability as the basis for legislation such as the Americans with Disabilities Act of 1990 (ADA) and Section 504 of the Rehabilitation Act of 1973. Until 1973, higher education institutions that provided disability services were the exception rather than the rule. Since then, students with disabilities in the post-secondary educational system are protected under Section 504 and the ADA. Both are civil rights laws that prohibit discrimination against a student whose "physical or mental disability substantially limits one or more major life activities, such as...learning" (Office of Civil Rights, 2015). The U. S. Office of Civil Rights (2015) enforces Section 504 in educational settings, which includes postsecondary institutions.

Section 504 is designed to level the playing field for students with disabilities by providing equal access to an education and barring discrimination based on the individual's disability (Office of Civil Rights, 2015). Section 504 further requires institutions of higher education that receive federal financial assistance to provide students with disabilities a means to receive accommodations (Office of Civil Rights, 2015). Postsecondary institutions must make reasonable accommodations in order to provide students with disabilities an equal opportunity to participate in courses,

programs, and activities (Office of Civil Rights, 2015). Accommodations can be in the form of academic adjustments and modifications such as extended time for test taking or as auxiliary aids and services such as adaptive equipment and note takers (Office of Civil Rights, 2015). Colleges and universities do not have to provide accommodations that impose an undue burden on the institution or would “fundamentally alter” the educational program or academic requirements essential to the program or to fulfill licensing requirements (Office of Civil Rights, 2015).

Even with the implementation of Section 504, many colleges and universities did little to accommodate students with disabilities. In 1990, the ADA was instituted and more highly publicized. Under Title II of the ADA, any public entity, such as public colleges and universities, cannot deny qualified people with disabilities the right to participate in its programs and activities (Office of Civil Rights, 2015). The ADA prohibits such institutions from excluding or discriminating based on the individual’s disability (Office of Civil Rights, 2015). Since the implementation of Section 504 and the ADA, the number of students who receive accommodations is increasing annually (Office of Civil Rights, 2015).

### **Increase Number of Students with Disabilities at Community Colleges**

Research has shown that since the 1980’s, colleges and universities have been experiencing a steady increase in enrollment of students with disabilities (Raue & Lewis, 2011). According to the National Center for Educational Statistics, in AY 1995-1996, 6% of all college students nationally, identified themselves as having a disability and requested accommodations with their institution, in AY 1999-2000 that number rose to 9%, jumped to 11.3% in AY 2003-2004, and rose again to 18% in AY 2007-2008 (Raue

& Lewis, 2011). It is believed these numbers are an underestimate of the actual numbers since many college students choose not to disclose their disability (Timmerman & Mulvihill, 2015).

This significant increase is due in large part to an increase in the number of students with disabilities participating in college-preparatory programs in high school, legislative mandates requiring postsecondary institutions provide reasonable accommodations for all academic programs and services, and an increase in educational and assistive technologies that allow students to compensate for their weaknesses (McCallister et al., 2014). The demand for a better-educated workforce and improved overall conditions to accommodate students with disabilities are also contributing factors in this overall increase (Baker, Boland, & Nowik, 2012).

A study conducted by Treloar (1999) suggests students with disabilities are attending community colleges at even higher proportions than other public postsecondary institutions. Among U. S. students with disabilities attending a post-secondary institution in AY 2007-2008, an estimated 54% were enrolled at a community college (Raue & Lewis, 2011). Of course, rates will vary by institution; however, according to the American Association of Community Colleges (2014), in addition to the aforementioned factors, the open-access model of community colleges, low tuition rates, community location, and flexibility or type of courses offered are the combination that entice students with disabilities to attend community college.

Not only are the number of students attending community colleges increasing, they are increasing at a more rapid rate than 4-year institutions (Sweener, Kundert, May, & Quinn, 2002). It is likely the number of students with disabilities attending community

college will continue to grow at its current rate and challenge how community colleges best serve this subset of their population (Sweener et al., 2002). As a result, faculty are challenged to provide classroom accommodations in an atmosphere that is supportive and encourages academic success for all students.

### **Faculty Perceptions Regarding Students with Disabilities**

The link between faculty attitudes, their experiences with students with disabilities, and their implementation of classroom accommodations is an important factor in the overall classroom climate. Subsequently, extensive research has been conducted on faculty attitudes toward students with disabilities and the impact those beliefs have on student success. One such study by Bourke et al., (2006) indicated faculty member's beliefs regarding the efficacy of and the need for accommodations can affect their implementation of accommodations in the classroom. The same study determined faculty members, although generally supportive of students with disabilities, tend to be concerned that accommodations lower academic integrity (Bourke et al., 2006).

Research regarding faculty attitudes toward students with disabilities has generated a variety of results. In their study, Houck et al. (1992) determined that many faculty members generally believe it is fair to students without disabilities to provide accommodation to those who have a documented disability. In the same study, Houck et al. (1992) also determined there are faculty who perceive certain accommodations such as examination and graduation requirement modifications as unfair to students who do not have accommodations. Minner and Prater's (1984) study and Gordon, Lewandowski, Murphy, and Dempsey's (2002) study suggested only some faculty



viewed students with disabilities unfavorably when compared to students without disabilities. In their study, faculty members reported working with students with mental and learning disabilities were more challenging than physical disabilities and they were more inclined to accommodate the latter (Sowers & Smith, 2004). In other studies, faculty exhibited severe behaviors such as directing negative statements toward students with disabilities in the classroom and publicly questioning the legitimacy of requested accommodations (Baker et al., 2012).

Barnard, Stevens, Siwatu, and Lan (2008) conducted research measuring attitudes of faculty toward students with disabilities and diversity. Using both the Attitudes toward Persons with Disabilities (ATDP) and the Miville-Guzman Universality Diversity Scale (M-GUDS) surveys, they suggest when faculty attitudes toward diversity are more positive, their attitudes toward students with disability are less positive (Barnard et al., 2008). Barnard et al. (2008) speculated that faculty do not appear to consider students with disabilities as members of a diverse population, rather students with disabilities have a problem that requires faculty to do more work. Other studies by Davies, Safarik, and Banning (2003) and Lehmann, Davies, and Laurin (2002), found that students with disabilities are very often portrayed by faculty as having a deficit and are viewed as “less-than” other groups on campus. In these studies, faculty participants viewed students with disabilities as inferior and unable to perform required tasks; further suggesting students with disabilities seek unnecessary accommodations as a means of garnering preferential treatment and an advantage over their classmates (Davies et al., 2003). Quick et al. (2003) found that faculty went so far as to blame students with disabilities for their

physical and academic inadequacies and for their reluctance or inability in self-advocating.

The overall attitudes of faculty regarding students with disabilities are broad and varied and present the opportunity for personal feelings to affect how faculty implement accommodations. Differences in attitudes toward students with disabilities based on faculty characteristics also seems to influence faculty's willingness to provide classroom accommodations.

**Faculty characteristics.** Many studies have identified faculty characteristics as a determining factor in the development of favorable attitudes toward students. Several studies (Baggett, 1994; Benhan, 1997; Rao, 2004) found that female faculty were more sympathetic toward students with disabilities than male faculty and Vogel, Leyser, Wyland, and Brulle (1999) found that younger faculty members were more willing to provide accommodations than were older faculty members. Additionally, Rao and Gartin (2003) determined that previous experience teaching students with disabilities led to an increase willingness of faculty to provide accommodations. Rao (2004) also suggests the specific disciplinary field may influence how faculty perceive college students with disabilities, identifying faculty in the fields of education, liberal arts, and architecture as having the most positive views regarding students with disabilities, whereas faculty in science, engineering, commerce, and industry tend to have the least positive attitudes toward students with disabilities.

The role of faculty rank has also been studied and considered a characteristic in identifying faculty behavior regarding students with disabilities (Rao, 2004). Rao (2004) and Vogel et al. (1999) determined academic ranking has no influence on

faculty attitudes, however a 1981 study by Fonosch and Schwab determined there was a connection, suggesting full professors had more negative attitudes toward students with disabilities. Looking at multiple faculty characteristics, Lombardi and Murray (2011) determined that faculty who are female, non-tenured, teach in the College of Education, and had prior disability training had the most positive attitudes toward providing classroom accommodations. As these studies regarding faculty characteristics span several decades, it suggests that faculty who were trained in more traditional teaching methods, such as lecture, have more negative attitudes toward students with disabilities and accommodations than those trained in methodologies that are more progressive.

**Institutional support for faculty.** Based on the research in this field, it can be inferred that faculty attitudes regarding students with disabilities are influenced by their knowledge of disability services and personal experiences with students with disabilities. To complicate the situation, regardless of the individual attitude toward teaching students with disabilities, there is often a lack of guidance from the institution for faculty in best practices for implementing modifications for students with disabilities into their teaching (Sweener et al., 2002). Faculty consistently report a desire for more information regarding the impact of disabilities in the classroom (Houck et al., 1992; Vasek, 2005). Many faculty indicate a lack of training in issues related to disabilities in higher education (Sweener et al., 2002). Faculty knowledge of disabilities and their perceived institutional support influence faculty attitudes and level of comfort in interacting with students with disabilities (Zhang, Landmark, Reber, Hsu, Kwok, & Benz, 2010).

Institutional support for faculty teaching students with disabilities is necessary for providing a classroom environment conducive to learning. Ongoing training in disability services plays a significant role in providing institutional support. Much research regarding training and faculty perceptions demonstrates that providing training on disability issues to faculty increases their knowledge of disability law, awareness of the impact of disabilities on learning, teaching methods that are ADA compliant, and willingness to provide accommodations (Murray et al., 2009; Sowers & Smith, 2004). Increasing faculty education, and therefore awareness and acceptance, has been demonstrated to improve the classroom climate for students with disabilities.

***Universal design.*** As a result, some colleges and universities have used the concept of Universal Design (UD) to lead their training effort. The term universal design was coined by the architect Ronald Mace who, from his personal experiences with access, developed a design foundation for “the design of products and environments to be useable to the greatest extent possible by people of all ages and abilities” (Mace, 2008). There are seven principles of UD (a) equitable use, (b) flexibility in use, (c) simple and intuitive, (d) perceptible information, (e) tolerance for error, (f) low physical effort, and (g) size and space for approach and use (Story, Mueller, & Mace, 1998). UD is used by post-secondary institutions to create a culture of acceptance and accessibility through changes in planning, architecture, landscapes, technology, and services (Burgstahler & Moore, 2009).

Many colleges and universities also use this framework as an instructional foundation to faculty professional development training. UD principles are embedded into faculty training and encourage faculty to acknowledge and utilize inclusive

instructional strategies in their courses and programs. Universal Design for Learning (UDL) or Universal Design for Instruction (UDI) as it is also known, applies the principles of UD to curriculum development to meet the needs of students with a wide range of abilities, learning styles, and preferences, and reflects an awareness of the unique nature of each learner and the need to address differences (Burgstahler & Moore, 2009). UDL curriculum provides learners various ways of acquiring information and knowledge; provides alternatives for demonstrating understanding and mastery of content; and by focusing on learner interests, offers appropriate challenges and increased motivation to all students (Burgstahler & Moore, 2009).

The use of UD principles in the classroom can improve the classroom climate. Unlike classroom accommodations, which are designated for individuals, UD benefits all students, including those not receiving accommodations. Provisions made through UD remove the stigma often associated with classroom accommodations and improve the overall climate. UD principles do not eliminate the need for classroom accommodations; however, with the use of UD principles in the classroom, faculty may experience a decrease of specific accommodations from students with disabilities as a more inclusive learning environment is promoted (Story et al., 1998).

### **Faculty Use of Accommodations**

Research in faculty use of accommodations has revealed growing concerns that faculty may have preconceived stereotypes regarding students with disabilities (Baker et al., 2012). The relationship between faculty and students with disabilities can be affected by the nature of the disability, as faculty have reported more negative attitudes toward accommodating students with mental health conditions and attention disorders than

toward students with physical or learning disabilities (Baker et al., 2012). Additionally, faculty have reported that providing accommodations for students with disabilities creates additional work and added responsibility on the faculty and could potentially compromise the quality of learning for all students as well as the integrity of the course (Barker et al., 2012). Subsequently, faculty are challenged to provide a classroom atmosphere that is supportive and conducive to academic success (Baker et al., 2012).

There is also a growing concern that a disability label may influence a faculty member's expectations of students with disabilities and create a general lack of sensitivity to their individual needs (Baker et al., 2012). Students have reported in a survey conducted by Houck et al. (1992) faculty are often unreceptive to requests and have even denied accommodation. In that same study, faculty identified a lack of information regarding the impact of accommodations in the classroom as a reason for denying accommodation requests (Houck et al., 1992). This is further emphasized in a survey conducted by Bourke et al. (2006) which indicates a faculty member's belief regarding the efficacy of and the need for accommodations can affect whether the faculty administers the accommodation or the extent with which the accommodation is administered. Wendell (1996) posits faculty in certain fields, such as healthcare, have specific standards and expectations of performance for their programs and suggest students with disabilities are unable to fully participate in their programs because of their disabilities and therefore less likely to have a positive attitude toward accommodations. Baker et al. (2012) concluded the academic progress of students with disabilities is significantly affected by the attitudes of faculty and their willingness to provide accommodations.

**Which accommodations are used.** Surveys regarding attitudes toward classroom accommodations suggest the large majority of faculty are willing to accommodate students with disabilities, but claim they lack sufficient understanding of disabilities and strategies to provide appropriate accommodations in the classroom (Quinlan, Bates, & Angell, 2012). Faculty report a willingness to provide teaching accommodations such as permission to record lectures or note takers and extended time on tests and assignments (Sharpe, Johnson, Izzo, & Murray, 2005). However, they are less willing to provide accommodations that appear to affect the integrity of the course such as alternative assignments or extra credit (Sharpe et al., 1992). Faculty are also unwilling to provide accommodations that lower academic or workplace standards (Wendell, 1996). As a result, faculty struggle with ethical concerns in balancing the rights of students with disabilities, the academic integrity of the course, and preparing students for the rigors of a university or workplace environment (Bourke et al., 2006; Langtree, 2010; Wendell, 1996). This balance is especially difficult for faculty when the disability is not easily seen, such as those experienced by students with mental health conditions or learning disabilities (Bourke et al., 2006).

**Faculty attitudes as barriers.** A study conducted by Quinlan et al. (2012) suggests faculty efforts to provide accommodations to students with disabilities falls into one of three categories: no accommodations (e.g., denial of accommodations), formal accommodations (e.g., required by law), and accommodations for all (e.g., accommodations above and beyond the law). When a faculty member begins a course with a rigid first-impression, suggesting they are neutral about accommodations in that no one will get them; Quinlan et al. (2012) refer to this as a no accommodations

attitude. No accommodations attitudes can be expressed when faculty refuse to provide accommodations, suggesting there is either no need for accommodations or no disability exists (Quinlan et al., 2012).

Denial of accommodations is an obvious barrier, however more subtle barriers such as providing accommodations because faculty are required to, as in the case of formal accommodation, may affect the way accommodations are enacted in the classroom (Quinlan et al., 2012). Participants in the Quinlan et al. (2012) study indicated that faculty who enact formal accommodations have done so in a way that singles out or isolates students with disabilities. Non-accommodations and formal accommodations can have a negative effect on the success of students with disabilities.

### **Academic Environment and Classroom Accommodations**

Classroom climate and the use of accommodations are affected by faculty expectations as well. Houck et al. (1992) reported faculty participants in their study often held the belief that a disability limits a student's ability to perform in certain majors such as engineering and nursing. A study of nursing faculty attitudes toward students with disabilities by Sowers and Smith (2004) indicated nursing faculty consistently expressed low expectations of students with disabilities. Faculty participants in that study suggested students with disabilities were unlikely to become successful nurses, citing patient safety as a primary concern (Sowers & Smith, 2004). Collins and Mowbray's (2005) study revealed faculty attitudes toward certain disabilities, such as mental health conditions, can prevent a student from degree attainment, regardless of the major. These perceptions result in low expectation for students with disabilities and influence the use of accommodations in the classroom



(Baker et al., 2012).

**Student requests for accommodations.** When faculty perceive disability in a negative light, many students will express reluctance to disclose their disabilities (Timmerman & Mulvihill, 2015). Negative attitudes regarding accommodations can result in students with disabilities choosing not to disclose their disability and attempting classes without accommodations (Timmerman & Mulvihill, 2015). It was revealed in that same study, that 35% of students with disabilities were actually denied accommodations (Timmerman & Mulvihill, 2015). The National Center for Educational Statistics (2003) found that 22% of all college students with disabilities in the U. S. did not receive the services and accommodations either by denial of services or from choosing not to disclose their disability.

A 2006 study on promoting disability-friendly campuses revealed students often attempt classes without requesting accommodations for fear of the stigma, discrimination, or low expectations that sometimes accompanies their disability label (Haller, 2006). In 2010, Marshak, Van Wieren, Ferrell, Swiss, and Dugan explored potential barriers to student use of accommodations and five categories emerged: (a) identity issues (wanting to shed the disability label), (b) desire to avoid negative social reaction both in and out of the classroom, (c) insufficient knowledge of institutional procedures for requesting accommodations, (d) perceived quality and usefulness of services both in and out of the classroom, and (e) previous negative experiences with professors. Building on the Haller (2006) study, May and Stone (2010) explored reasons for low self-identification rates among undergraduates and suggest the fear of stigma may be founded. In their study, students with disabilities

reported faculty often viewed them as lazy, or deficient in social/interpersonal skills, and generally disliked by their peers (May & Stone, 2010). Why a student chooses not to disclose their disability is as complex and multivariate as the disability itself, however the desire to avoid negative interactions with faculty appears to play a significant role in the student's decision.

### **Theoretical and Conceptual Considerations**

Disability offers a challenge to the representation of the individual and how others perceive them. Disability can be considered a medical issue; however, it can also be understood as a social and political issue. As a social issue, the attitudes of college faculty toward students with disabilities directly affects the way a student sees him or herself and may impact the student's ability to be successful in college (Quinlan et al., 2012). Faculty attitudes toward students with disabilities also appear to be influenced by many factors including gender, age, years of teaching, and department. However, their experiences with students with disabilities can also influence their willingness to implement classroom accommodations (Leyser et al., 1998). To create a broader understanding of community college faculty perceptions of students with disabilities, this single case study utilized social constructivism, as a theoretical approach to research to explore how faculty experiences with students with disabilities impact the implementation of classroom accommodations.

**Social constructivism.** Social constructivism is a research practice that constructs theory through involvement and interaction with people and perspectives (Lauckner et al., 2012). A variety of cognitive constructivism, social constructivism suggests all cognitive functions are bound by cultural context and are products of an

individual's social interactions (Derry, 2013). In social constructivist classrooms, the focus is placed on student learning, suggesting knowledge cannot be produced in isolation, suggesting it is a series of mental and social processes that create a reality through community (Green & Gredler, 2002).

Social constructivism places an emphasis on context with respect to knowledge, learning, and reality. Disability theory also places an emphasis on context, suggesting that disability cannot be understood outside the context of where it arises because it is a product of social interactions and is often referred to as the social construction of disability (Denhart, 2008). There are three functional ideas from the core of disability theory: (a) it is socially constructed, (b) it is part of the normal human variation, which includes prejudice and bias, and (c) it requires voice to deconstruct it (Denhart, 2008). Disability theory provides an alternative to the medical model of disability where as social constructivism makes it possible to see disability as the effect of environment requiring social justice rather than medicine (Siebers, 2001).

***Social construction in the classroom.*** Social constructivism is an evolution of Piaget's cognitive theory and Vygotsky's constructivism, which emphasizes the influence culture and social context has on an individual's observations and perceptions when constructing new knowledge (Young & Collins, 2003). However, social constructivism places a greater emphasis on the influence of the classroom environment, defining learning as socially shared cognition (Green & Gredler, 2002). In the social constructivism classroom, the role of the teacher is one of community member whose responsibility is to create discourse communities (Green & Gredler, 2002). As a result, faculty attitudes toward students with disabilities will influence the basic values and

assumptions for the group.

Huang (2002) used social constructivism to explain why online educators should know how adults learn best because of their special characteristics. He understood adult learners had unique learning needs and instructors needed to engage distance education students in a variety of interactions between each other and the instructor to create a different kind of learning environment (Huang, 2002). Huang (2002) placed an emphasis on activities that connected the students to one another and the instructor in order to maintain the social cognitive aspect of social constructivism.

As with distance learning instruction, students with disabilities, irrespective of accommodations, often require a classroom structure that differs from the traditional lecture model. Since social constructivism is an educational theory that emphasizes teaching approaches requiring active participation by the students to demonstrate their knowledge, it is important for faculty to create learning experiences within a social context where students work with one another and where faculty often participate as a member of the class (Keengwe, Ochwari, & Agamba, 2013). It is therefore important for faculty to acknowledge the diversity of their students' backgrounds, interests, and abilities and to create a learning environment open to all.

Moreno, Gonzales, Castilla, Gonzales, and Sigut (2007) studied engineering education and determined that engineering students learned best in a classroom based on social constructivism. Their study suggests engineering students learn best in an environment that is flexible, experiential, and build on the student's collective knowledge (Moreno et al., 2007). As a methodological approach, researchers embedded constructivist and collaborative activities such as computer simulations in

the engineering curriculum (Moreno et al., 2007). The results included a learning experience in which the student participants demonstrated a deeper understanding of the material as well as a higher level of motivation than their non-participant peers (Moreno et al., 2007). These and other co-participation activities such as small group, whole class, and specialized research teams provide students with a collaborative learning environment and reflect the definition of learning in social constructivism (Green & Gredler, 2002).

Nursing is an ever-changing field requiring students to collaborate with peers, absorb an extensive body of knowledge, and demonstrate the ability to problem-solve, all of which are interactions between a student's cognitive and social environments (Kantar, 2013). Nurse educators have been identified as having some of the most negative attitudes toward students with disabilities, suggesting students with disabilities lack the ability to perform the required duties of a nurse (Rao, 2004). Social constructivism provides a framework for nurse educators to create a collaborative learning environment, requiring active participation by all students that is conducive to the rigors of nurse education, and mindful of the diversity within the classroom (Green & Gredler, 2002).

**Disability theory.** Disability theory looks at disability from a social constructivism perspective suggesting that because disability is a product of social norms and values, it cannot be understood outside the cultural context (Denhart, 2008). Like social constructivism, disability theory acknowledges disability is socially constructed and as such, is a part of normal human variation (Denhart, 2008). Where disability theory differs from social constructivism is in how the human body is perceived (Siebers,

2001). Social constructivism sees the disabled body as defective whereas disability theory sees the disabled body as a variation or diversity, suggesting all bodies are alternative forms (Siebers, 2011).

Disability theory posits that disability offers a challenge to the representation of the body; that all bodies are socially constructed but not all bodies are reflective of society (Siebers, 2011). Furthermore, it is the social construction of disability, consisting of social attitudes and institutions, which determine our culture's representation of the human body (Siebers, 2011). For example, in a society where everyone used a wheelchair, stairs would not exist. The fact that stairs are prominent in buildings across the country suggests the disabled body is not a reflection of the human body in our society. This lack of representation results in selective stigmatization of the physical and mental limitations of people with disabilities (Siebers, 2001). The physical structures and social organizations of society, including our classrooms, create a context, which discriminates against students with disabilities (Wendell, 1996).

In this context, disability is socially constructed due to the failure of society to provide individuals with disabilities the type and amount of help they need to fully participate in all major aspects of life (Siebers, 2001). In this sense, faculty who fail or are unwilling to provide accommodations to students because the help they need is different from that of students without disabilities impacts not only the way the student sees themselves, but how others perceive them (Wendell, 1996). Through an understanding that different bodies require different representations, the social constructs that make up our community college classrooms would change (Wendell, 1996). This process would begin to deconstruct biases and expose the constraints

social codes and norms impose on those with disabilities (Siebers, 2011).

**Researcher identity memo.** I have had both personal and professional experiences with the attitudes faculty can have toward students with disabilities. I have a son who was diagnosed with a learning disability early on in his education and I worked closely with the school district to provide him with needed accommodations but also to ensure my son was responsible for his own learning. I have also held the position of ADA Coordinator for a community college, where I was responsible for awarding students' accommodations and working with faculty on best practices for implementing classroom accommodations. I have counseled students and faculty on the use of classroom accommodations and listened to the frustrations from both. It is because of these interactions I became interested in studying faculty attitudes toward students with disabilities.

My oldest son was diagnosed with attention deficit disorder (ADD) when he was in third grade and struggled throughout school. Each year, I would listen to his teachers tell me how smart he was but that he was lazy and would not complete his homework. This frustrated me because I would work with him every night ensuring his homework was completed and he followed directions only to be told he never turned in the work.

When my son was in junior high school, I asked his teachers to change the way they questioned him about his homework; to ask him to give them the work rather than asking if he had the work. This was met with indignation and refusal. Later that year, the school district refused to provide him with accommodations stating he did not qualify for them because his IQ was too high. After several attempts to work with the school district I reported this action to the state, which resulted in mediation where the school

district was forced to provide the accommodations we requested, including asking for his homework in a different way. His last year of junior high school was so difficult for him because of the mediation and the way he was treated by many of his teachers, we elected to remove him from the district and put him in parochial school for his high school years.

Professionally, I have taught many high school students with disabilities and with great success. Throughout my teaching career, I taught significant numbers of students with disabilities and often taught with an in-class support teacher. I found the key to success with such diverse classes was to create an atmosphere where all students could learn from one another, including the teachers. I found out early on in my career that if one student needed an accommodation, it was a good idea to provide all students with the option to use it or not. This eliminated the stigma that accompanies accommodations and improved overall student achievement and the classroom atmosphere.

I have also been the ADA Coordinator for a community college where I worked with faculty and staff to determine which students were entitled to accommodations and which accommodations were appropriate. In this role, I worked with faculty providing professional development training on the laws governing students with disabilities and how best to implement accommodations into their teaching practices. I listened to faculty complain about students with disabilities and how they philosophically disagreed with the notion of accommodations. I also worked with students to help them understand better their rights and responsibilities, especially when to ask for accommodations and which accommodations were appropriate for the college setting. I listened to their complaints about poor treatment and on occasion was required to mediate a dispute between faculty and student. As an educator who has taught students with disabilities for many years and



a parent of a child with a learning disability, it was important to me to help faculty and students with disabilities to work together.

By examining the experiences of faculty regarding students with disabilities through the lenses of social constructivism, disability theory and my personal and professional experience, this study will endeavor to develop a greater understanding of community college faculty attitudes toward students with disabilities. The results should provide community college faculty with insight as to how their attitudes toward students with disabilities influence the way they implement classroom accommodations. An increased awareness of the impact their attitudes have should bring about changes in how faculty work with students with disabilities.

## **Chapter 3**

### **Methodology**

Qualitative research is characterized by its intent to better understand some aspect of a specific organization or event rather than a broad description of a larger sample of a population (Creswell, 2014). Through observations and interviews of participants in their environment, qualitative researchers aim to develop an understanding of how participants derive meaning from their surroundings and how their meaning influences their behavior (Creswell, 2014). A type of qualitative research, a single case study, was used for this study.

According to Yin (2003) a case study design should be considered when (a) the study attempts to answer “how” and “why” questions; (b) the behavior of those involved in the study cannot be manipulated; (c) the study will cover contextual conditions relevant to the phenomenon under study; or (d) the boundaries are not clear between the phenomenon and context. For this study, a case study allowed for an exploration of how faculty attitudes influence their decisions regarding students with disabilities and how those decisions impact the use of accommodations (Yin, 2003). Because the study took place where the faculty work and while they were teaching, a case study also provided me with context and the opportunity to be involved in the experience of participants (Yin, 2003). This produced insight into the effects of faculty attitudes on their behavior and produced new learning regarding its impact on students with disabilities (Yin, 2003).

### **Purpose Statement and Research Questions**

The purpose of this study was to explore community college faculty attitudes toward students with disabilities and explore how their experiences and attitudes influence the

use of classroom accommodations. The following research questions guided this case study:

1. What are community college faculty perceptions of students with disabilities?
2. How have community college faculty's experiences with students with disabilities influenced their attitudes of students with disabilities?
3. How are those attitudes reflected in the community college faculty's use of accommodations in the classroom?
  - a. Which accommodations are community college faculty most likely to use in the classroom?
  - b. Which accommodations are community college faculty least likely to use in the classroom?
4. What concerns and suggestions do community college faculty express regarding students with disabilities?

### **Rationale for and Assumptions of Methodology**

Qualitative research began to be widely used in the 1960s and is often considered an array of attitudes toward and strategies for conducting inquiry that are aimed at discovering how human beings understand, experience, interpret, and produce the social world (Sandelowski, 2004). While difficult to define, qualitative research presents basic characteristics. Qualitative research differs from quantitative research in that it does not seek to solve a problem; rather it views social phenomena holistically (Creswell, 2004). Qualitative research takes place in a natural setting, which provides the researcher with context and the opportunity to be involved in the experience of participants (Rossman & Rallis, 1998). Using multiple methods of data collection, qualitative research allows the

researcher to interpret the meaning of the data in the context of the study (Rossman & Rallis, 1998).

Long considered a social research methodology, qualitative research has many forms each influenced by a methodological philosophy, including interpretivism, critical research, and constructivism (Hammersley, 2013). Constructivism, widely used in social science, suggests that perception and cognition are active processes, which enable individuals to construct meaning of the world (Hammersley, 2013). Social constructivism is a version of constructivism that views social phenomena as being constructed through shared processes of communication and social interaction rather than individual perceptions (Hammersley, 2013). There are two major stances within social constructivism that influence qualitative research: (1) research that focuses on studying the methods or practices people use to collectively construct their worlds and (2) research that focuses on identifying new or novel methods or practices people use to construct their worlds (Hammersley, 2013).

There are several varieties of qualitative research methods. However, there are five qualitative methods that generally use similar data collection techniques ethnography, narrative, phenomenological, grounded theory, and case study (Creswell, 2004). Although the five methods generally use similar data collection techniques, the purpose of the study differentiates them (Creswell, 2004). Ethnography research with its roots in cultural anthropology, attempts to understand the goals, culture, challenges, and motivation of a particular culture, whereas narrative research focus on individual experiences to illustrate the life influences that created it (Patton, 2002). Phenomenological research focuses on describing the essence of an activity or event;

whereas grounded theory research focuses on providing an explanation or theory behind the event (Patton, 2002). Lastly, case study research focuses on developing a deep understanding of an event, situation, organization, or social unit using multiple types of data sources (Patton, 2002). Case studies can be explanatory, exploratory, or descriptive (Yin, 2003).

### **Strategy of Inquiry**

A case study is a detailed and intensive analysis of a particular event, situation, organization, or social unit as defined by a particular space and timeframe (Yin, 1994). This strategy of inquiry investigates phenomenon within its real-life context and seeks to understand the problem investigated (Yin, 1994). A case study approach affords the researcher the opportunity to gain insight into a complex situation such as faculty perceptions of students with disabilities and to ask “how” and “why” questions while taking into consideration the influences that affects those perceptions (Miles & Huberman, 1994). This insight or deeper appreciation for the phenomenon should result in new learning about the real-world behavior associated with the phenomenon and its meaning (Yin, 2003). Additionally, this approach provides the opportunity for participants to express their attitudes through their experiences and to probe deeper in the causes of their behavior (Baxter & Jack, 2008). As a result, case studies allow the researcher to report findings using rich descriptions and insightful explanations (Baxter & Jack, 2008).

By emphasizing the study of phenomenon within the context of its real-world context, the case study strategy favors data collection in its natural setting (Yin, 2003). Multiple data sources allow the researcher to explore the phenomenon through a variety

of lenses providing for a more in-depth study (Yin, 1994). Multiple data sources also provide rigor and enhance the credibility of the data (Yin, 2003). There are six common sources of evidence; however, this is not a limiting list (1) direct observations, (2) interviews, (3) archival records, (4) documents, (5) participant-observations, and (6) physical artifacts (Yin, 2003).

Unlike other qualitative research methodologies, case study research allows for the collection of quantitative data from instruments such as surveys, to enhance the understanding of the phenomenon being studied (Baxter & Jack, 2008). In case study research, qualitative and quantitative data are converged and analyzed together, adding rigor to the findings as the convergence promotes a greater understanding of the phenomenon in context (Baxter & Jack, 2008).

There are two philosophical approaches to case studies based on the work of Robert Stake (1995) and Robert Yin (1994), both of whom base their approach on the constructivist paradigm. Constructivism claims that truth is relative and predicated on human construction of meaning through social interaction (Baxter & Jack, 2008). One of the advantages of this approach is the interaction of participants and researcher. Because case study research takes place within the context of the phenomenon, the researcher is embedded in the study, creating a type of collaboration that gives a voice to the participants and their stories (Baxter & Jack, 2008). The participant's stories are their interpretation of their truth or reality and the researcher is their scribe. This collaboration enables the researcher to better understand the participants' actions (Baxter & Jack, 2008).

Yin (2003) categorizes case studies as explanatory, exploratory, or descriptive based on the type of research questions. Because this study has no clear set of outcomes and looks to evaluate the experiences and attitudes of the faculty regarding students with disabilities at a small, rural community college in the southeastern United States, this study is well suited for an exploratory case study design (Baxter & Jack, 2008). Using social constructivism, disability theory, and my personal and professional experiences as its conceptual framework, the present study is an in-depth exploration of how faculty experiences with students with disabilities have influenced their attitudes regarding students with disabilities and how those attitudes influence their use of accommodations in the classroom. The present study took place in spring 2017, while classes were in session. Both qualitative and quantitative data was used, including a survey to assess the attitudes of faculty with respect to students with disabilities, faculty interviews, and a review of institutional documents.

### **Study Setting**

The present study took place at County Community College in the southeastern United States. Established in the early 1960's, County Community College is a small, 2-year, public community college that is a member of a state community college system. Although one of the largest counties geographically, the county's population is historically one of the smallest in the state, seeing only a 3% increase in the last five years. Seasonal employment opportunities and other factors cause the population numbers to fluxuate; however, the annual population for the county is less than 70,000.

Today, there are only three employers in the county that have more than 500 employees and half of the major employers in the county are in manufacturing, trade,

transportation, and tourism. The unemployment rate is 6.5% and more than half of those unemployed are female. The county has a significant second homeowner and retirement population, which has been attributed to its climate, location, and cost of living. The median household income is \$47,179.

County Community College is one of the smallest members of the community college system, enrolling approximately 2000 students annually. Located in an area near an active military base, the college has seen an increasing number of students with traumatic brain injury (TBI), post-traumatic stress disorder (PTSD), loss of limbs, and other related disabilities. A typical student at County Community College is White, female, between the age of 20 and 29, resides in the county, and is either unemployed or employed part-time. Additionally, the college's enrollment tends to fall into one of three categories: first-generation students, students interested in entering or re-entering the workforce, and university transfer students.

Programs of study include but are not limited to marine science and manufacturing, tourism and trades, nursing and allied health, and university transfer. The college's enrollment in traditionally gender dominant programs, such as nursing, is consistent with state and national enrollment trends. To enhance the educational experiences of its students, the college has relationships with several state universities, offering a wide variety of post-secondary experiences to its students, making research at this site appropriate for a case study (Field, 2008).

### **Participant Sample**

The college employs annually, 161 full-time employees, of which 60 are faculty, and 210 part-time employees, of which approximately 120 are faculty. Approximately



60% of all faculty are female and 40% are male, divided evenly among the Arts and Sciences, Applied Sciences, and Health Sciences divisions. A significant majority of the faculty are White, between 40 and 50 years old, and have taught at the college for less than 15 years. The average full-time faculty salary at the college is \$47,000 annually and the average part-time faculty makes \$29 per hour.

Faculty have no research requirements and tenure is not available. All full-time and part-time faculty teaching university transfer courses are required to have at least a master's degree in the field of study. Faculty teaching non-transferable courses leading to an associate in applied sciences degree have a combination of education and industry experience appropriate to the discipline. Because of its small size, full-time faculty are also required to engage in non-teaching duties such as academic advising, standing committee assignments, ad hoc committee participation, and club advising. As a result, full-time faculty spend significant time with students both in and out of the classroom.

**Sampling strategy.** To reduce the potential of researcher bias in data gathering, purposeful sampling was used to identify the participants in the study (Patton, 2002). Purposeful sampling is used when participants are chosen because of what they can contribute to the study and can be used in two different forms – stratified purposeful sampling and purposeful random sampling (Creswell, 1998). Stratified purposeful sampling focuses on particular characteristics of a subgroup and requires a small sample size whereas purposeful random sampling is most useful when the initial sample is larger than one can handle (Creswell, 1998). Because of the small number of faculty at County Community College, stratified purposeful sampling is recommended. Participants who

responded to the ATDP survey, engaged in the interview portion of the study, and expressed experience with students with disabilities, were used in the study.

**Sample size.** Many factors can determine sample sizes in qualitative studies and as a result, many researchers are reluctant to identify what constitutes a sufficient sample size (Morse, 2000). Morse (2000) suggests for ethnography and grounded theory studies, 30-50 interviews are necessary, but phenomenology studies need between six and 25. However, there are no recommendations for sample size in case study research, except that a single case study should focus on a single individual, organization, or phenomenon. The present study took place at a single community college with fewer than 200 full-time and part-time faculty, teaching during the spring 2017 semester. Assuming a 20% response rate, which is typical for this institution, I anticipated approximately 40 respondents to the ATDP survey and between 8 and 10 faculty agreeing to participate in the interview portion of the study.

There is a long-standing belief held by the research community that questions the validity of studies with this type of small sample size, however exploratory studies that are interview-based and involve a small number of respondents are becoming more common in social science (Crouch & McKenzie, 2006). Crouch and McKenzie (2006) suggest studies that use interviews to target the respondents' perceptions, attitudes, or feelings, as this study does, it is not only reasonable to have a relatively small number of respondents, but may even be advantageous. Dreher (1994) further suggests studies conducted in their natural setting, with small samples that permit repeated contacts with participants, will increase researcher involvement and enhance validity and reliability.

**Recruitment strategy.** Successful participant recruitment is an important aspect of conducting qualitative research (Patton, 2002). For the present study, face-to-face recruitment with participants was the primary recruitment strategy (Patton, 2002). Recruitment began in fall 2016 with a meeting with the college president and vice president of instruction to explain the study, ask permission to include the faculty, and identify an estimated timeframe. I was open with colleagues and the college's administration regarding my research and asked faculty I work most closely with to participate. Through my interactions with faculty, I built trust and used that trust as a recruitment strategy as well (Patton, 2002).

Stratified, purposeful sampling was used to identify potential participants and included the following criterion: (1) employed at County Community College as a full-time or part-time faculty member in spring 2017 and (2) experience working with students with disabilities. Potential participants consisted of the college's 60 full-time and 120 part-time faculty. In January 2017, an email containing a letter introducing me as the researcher, the purpose of the study, and an outline of the procedures was sent to all potential participants. The email also included a link to the Attitude Toward Disabled Persons survey and a request to participate. A follow-up email was sent one week later to again request faculty to participate and to address a question regarding anonymity. Two more emails, one a week after the follow-up email and one the day before the survey closed, were sent to remind faculty there was still time to take the survey and to encourage faculty to participate in the interview portion of the study.

At the conclusion of the three-week period, 35 surveys were completed and scored resulting in a return rate of 19.44%. Of the 35 survey participants, 16 faculty or

45.71% volunteered to engage in an interview. Contact was made with each of the 16 using the contact information provided in the survey. Thirteen face-to-face interviews were conducted, and three individuals declined to continue their participation in the study. Of the three who declined, two of the individuals refused to schedule an interview stating their schedules were too full and they did not have time to participate. One participant agreed to participate in an interview but did not show up at the scheduled time and did not reply to subsequent attempts to reschedule the interview.

### **Data Collection**

The procedures used for collecting data in the present study included: using multiple data sources, maintaining a database, and establishing a chain of evidence. To meet the objectives of the present study, data collection consisted of multiple qualitative and quantitative data sources including Attitudes Toward Disabled Persons Scale, semi-structured interviews, and institutional documents.

Nvivo 11 computer software was used to establish a chain of evidence of data collected, and organized the data (Silverman, 2010). Nvivo 11 is computer software that supports qualitative research, allowing users to organize, classify, and code, qualitative or unstructured data such as interviews, open-ended survey questions, field notes, and journal entries (QSR International, 2016). Nvivo 11 can enhance the rigor of the research by providing a comprehensive record of decisions made during data collection and analysis (Silverman, 2010). Nvivo can also increase the dependability and confirmability of the data by running text search, coding, and matrix queries within the software (Silverman, 2010). This is especially helpful in determining whether faculty are producing socially acceptable answers as the text search queries were able to identify

repeated references and discussions using socially acceptable language (Silverman, 2010).

I intended to use Nvivo 11 software to code the open-ended survey questions and interview transcripts to increase accuracy and reduce potential bias. However, the Nvivo 11 software proved to be too difficult for me to use with any relative consistency so it was used primarily for data storage and security. I was able to produce a few codes in the open-ended survey questions and interview transcripts and compared them to the codes I identified coding the documents by hand.

Data collection resulted in the triangulation of multiple data sources and included results from the 30-question ATDP survey, four demographic and two open-ended questions included with the survey; responses to nine prepared interview questions asked during a semi-structured, face-to-face interview; and a review of 30 institutional documents regarding students with disabilities. By examining information collected by these different methods, triangulation assisted in the corroboration of findings across data sets and assisted in the development of a deeper understanding of faculty attitudes toward students with disabilities (Bowen, 2009). Triangulation also reduced the impact of potential bias that can exist in a single case study (Patton, 2002). Accuracy and potential bias was further addressed by soliciting input from individuals well acquainted with the college's faculty throughout the data collection process. Member checking was also used throughout the study to increase the reliability of the data collected and to monitor any potential for researcher bias (Creswell, 2014).

The college's Disability Services Coordinator was periodically consulted to monitor researcher bias and provide additional information or context with respect to

document analysis. A meeting with the Disability Services Coordinator was scheduled at the beginning of the study to explain the study's purpose and the procedures used to collect data. A request for institutional documents regarding students with disabilities was made at that meeting. The Disability Services Coordinator provided the documents within two weeks of the request. On three occasions, the Disability Services Coordinator was consulted to answer questions regarding wording used in the documents and to explain enrollment data, which was used only to provide context for the study.

**ATDP survey.** The Attitudes Toward Disabled Persons Scale (ATDP), Form B was chosen for the present study (see Appendix A). Widely accepted as a standard tool in measuring attitudes toward people with disabilities, the ATDP scale has been used in more than 300 studies since 1970 (Yuker & Block, 1986). In a review of validated instruments used to measure attitudes toward people with disabilities, Lam, Gunukula, McGuigan, Isaiah, Symons, and Akl (2010) determined that the ATDP has been the most widely used and tested instrument of its kind.

The scale has also been consistently found reliable and possesses both content and construct validity (Lam, et al. 2010). As a result of multiple reliability studies, the average reliability coefficient for the ATDP scale is .80 (Yuker & Block, 1986). In addition to its wide acceptance and use, the ATDP scale validity is based on its high correlation with other attitude scales, in particular, other scales of similar length and format that measure attitudes toward people with disabilities, where the correlation is approximately .80 (Yuker & Block, 1986). Questions regarding the validity of the self-reporting nature of the ATDP scale has resulted in additional testing to determine the ability for participants to respond favorably to items that were socially acceptable (Yuker

& Block, 1986). In four independent studies, the Edwards' Social Desirability Scale and the ATDP scale was administered to a test group and the results were compared (Yuker & Block, 1986). In all four studies, results from the two scales were not found to be significantly different, concluding that the ATDP scale measures something other than socially acceptable responses as defined by Edwards (Yuker & Block, 1986).

Developed from an extensive literature review and discussions with psychologists, the ATDP scale focuses on the general concept of disability in that it does not address specific categories of disability such as visual, physical, or mental health conditions (Yuker & Block, 1986). Three versions of the ATDP are available, Form O is the original form with 20 items and Forms A and B are improved versions of Form O with 30 items each (Yuker & Block, 1986). All three forms take approximately 15 minutes to complete (Yuker & Block, 1986).

This study used Form B, a 30-item survey using a six-point Likert-type scale ranging from +3 (I strongly agree) to -3 (I strongly disagree), there is no "0" or neutral response. An example of a positively scored item is "disabled workers can be as successful as other workers" whereas "most disabled people expect special treatment" is an example of a negatively scored item (Yuker & Block, 1986). Scoring the ATDP scale involved four steps:

1. Change the sign of the following items:

Form O: 2, 5, 6, 11, 12

Form A: 5, 9, 12, 14, 17, 19, 22, 23, 24, 25, 29

Form B: 1, 3, 4, 6, 7, 10, 12, 13, 22, 26, 28

2. Sum the scores, subtracting those with negative signs.

3. Change the sign of the sum.
4. Add 60 to the sum obtained for Form O, add 90 to the sum for Forms A and B (Yuker & Block, 1986).

A survey was considered unscorable when 10% or four or more questions were left blank (Yuker, et al., 1970). If fewer than three questions are left blank, only answered questions were scored and a neutral value (0) was assigned to the blanks to create a score that was consistent with completed surveys (Yuker, et al., 1970).

Scores on the ATDP scale can range from 0 – 180 where higher scores reflect positive attitudes and negative attitudes are reflected in lower scores (Yuker, et al., 1970). Interpreted in terms of acceptance of or prejudice toward persons with disabilities, acceptance attitudes viewed persons with disabilities as the same as everyone else and prejudice attitudes viewed persons with disabilities as different or requiring special treatment (Yuker, et al., 1970). To provide context since scores were interpreted as an attitude, I quantified the possible scores into six equal ranges. A score of 0-30 was considered an extremely negative attitude or an extremely prejudice attitude, 31-60 moderately negative, 61-90 mildly negative, 91-120 mildly positive or accepting attitude, 121-150 moderately positive, and 151-180 extremely positive.

To gain relevant demographic and descriptive data from participants, two qualitative, open-ended questions that focus on examining the participants' opinions about the use of accommodations in the classroom and prior experiences with students with disabilities and four sociodemographic questions that identify faculty characteristics were added to the ATDP survey. The four characteristics were gender, age, number of years teaching, and academic division (Arts & Sciences, Applied Sciences, and Health



Sciences). Participants were also asked to identify their willingness to participate in a 30-minute interview by including their name and contact information. This information was kept confidential and not associated with any other questions in the survey.

**Administration of survey.** To begin, a group consisting of the college's three deans, the librarian, and a research technician were asked to provide feedback on the ATDP survey. A brief meeting was held, and the group was provided with the purpose and procedures for conducting the study and asked to provide feedback on the content and appropriateness of the survey questions, length of the survey, and to verify the survey link was working properly. The next day the group was sent an email outlining the survey protocols. The email included an explanatory letter, the ATDP survey, open-ended questions, and demographic questions. Input was received from the librarian, research technician, and one dean and based on the feedback the survey was deemed acceptable and was included in the study.

A retiree of the college was initially asked to participate only in a mock interview, however after a careful consideration was permitted to also take the ATDP survey. The retiree's feedback included a suggestion to reword some of the questions in the ATDP survey to avoid offending some of the faculty. The retiree also suggested a neutral or not applicable response be included in the Likert scale. After a discussion where I explained the intent of the survey and how the use of language and forced-answer responses on the survey were intentional, the retiree stated she had a better understanding but reiterated her concern that some faculty might be offended and not participate.

In January 2017, the ATDP survey was conducted online, using Class Climate software as the survey delivery method. The survey was distributed via email to all

spring 2017 faculty at County Community College. Included in the email was an introductory cover letter, which explained the reason and rationale for the study, that participation in the study was voluntary yet important to the study, assured confidentiality, and indicated that consent was given when participation in the survey occurred. The survey was scheduled to be opened for two weeks however, due to a weather event which closed the college for 2 days, the survey remained open for a third week.

When the survey closed, 35 surveys were completed and scored using the prescribed scoring guidelines and recorded in an Excel spreadsheet. Neither the open-ended nor the sociodemographic questions were scored with the ATDP scale. Participants were identified by the numbers 1 through 35 to maintain confidentiality and only after the scores were tabulated was the demographic information added to the spreadsheet. Responses to all sections of the survey: the ATDP scale, the open-ended questions, and sociodemographic questions were collected and reported in aggregate to maintain anonymity. To ensure the accuracy of the scores, I calculated them twice and asked the research technician, who provided initial feedback regarding my study, to verify the results. Results of the open-ended questions and participant contact information indicating their willingness to participate in the semi-structured interview were collected separately and not provided to the research technician.

**Semi-structured interviews.** To explore the attitudes of faculty toward students with disabilities and classroom accommodations, I conducted 13 semi-structured interviews with faculty volunteers (Taylor & Bogdan, 1998). Participants were asked at the end of the ATDP survey, to indicate their willingness to participate in and provide

verbal answers during a one-on-one interview. Of the 35 survey participants, 16 indicated they would be willing to participate in an interview, however only 13 interviews were conducted. Two participants, who initially agreed to participate in the face-to-face interview declined once contacted, reporting their schedules had recently changed leaving them no time to participate in the interview. The third participant, when contacted, scheduled a time for the interview but did not show up and did not respond to my subsequent attempts to reschedule.

The semi-structured interviews consisted of nine open-ended questions I created used to guide the discussion, which ensured each participant was asked the same questions, and provided opportunity for the participant and me to ask and answer questions (Taylor & Bogdan, 1998). Content validity was established by reviewing questions posed in similar published studies regarding faculty attitudes toward students with disabilities (Turner, 2010). Questions were modified based on literature regarding disabilities and feedback from research experts, the Disability Services Coordinator, and the retired faculty volunteer who participated in a mock interview (Turner, 2010). Prior to their use, the interview questions were reviewed by a small group consisting of the college's three deans, the librarian, and research technician to determine question clarity, provide suggestions for making questions more straightforward, provide impressions regarding the tone of each question, and offer other recommendations for improvements (Houck, et al, 1992). Additionally, a mock interview was conducted to determine any flaws or limitations in the interview design or to refine the research questions (Turner, 2010).

**Conducting the interviews.** Initially, two retired faculty members were asked to participate in a mock interview to ensure the interview questions were appropriate to guide the interview and would facilitate open, detailed responses. However, one retiree fell ill and could not participate. The other, who works part-time at the college, asked if she could also take the ATDP survey prior to the interview so she could get a better understanding of the context for the interview questions. Uncertain of the appropriateness of having one person complete the protocol for data collection, I conducted a small-scale literature review regarding the use of pilots in case studies. I concluded it would be beneficial and appropriate if the retiree took the ATDP survey since the purpose of having a mock interview and receiving feedback from others regarding the survey was to examine the feasibility of the instruments in gathering data for this study. According to Leon, Davis, and Kraemer (2010), a pilot study, which can be used in all types of research studies, examines the feasibility of an approach to data collection to be used in a larger study. A pilot can also identify necessary modifications that could enhance the probability of success and remove obvious barriers to the approach (Leon, et al., 2010).

Two days after completing the ATDP survey, the retiree participated in a mock interview. The mock interview lasted for 40 minutes and included a discussion about the purpose and procedures of the study, informed consent including the consent form, and a request for permission to record the session. After the mock interview concluded, the volunteer indicated the questions were appropriate, in the correct order, and facilitated honest, thorough responses.

The retiree was provided with a copy of the transcribed interview to ensure the transcript accurately described the session and to suggest the time commitment required of faculty participants. A brief meeting was scheduled where the retiree provided feedback on both the survey and the interview. The retiree suggested the interview protocols would be useful for gathering information regarding faculty attitudes toward students with disabilities and that the time commitment was reasonable at less than one hour for participation in both the survey and interview.

Each interview was conducted where the faculty felt most comfortable and took place in either the faculty's office or mine (Creswell, 2014). The Interview Protocol (see Appendix B) included an introductory statement indicating the nature of the study, an explanation of how the interviewee was selected, the anticipated duration of the interview (30 minutes), and a statement that participation was strictly voluntary and that the participant could stop at any time. Each participant was asked for permission to record the interview, whether they had any questions, and to sign the consent form. All participants agreed to have the interview recorded and a copy of the consent form, signed by both the participant and researcher, was provided to each participant. Lastly, faculty participants were given my contact information after the interview and informed they would receive a copy of the interview transcript to ensure the accuracy of the transcription and make clarifications as needed (Rubin & Rubin, 2012). By engaging in member checking, the credibility of the data was increased, and researcher bias reduced (Sandelowski, 2004).

All 13 interviews took place during a two-week period in February 2017, each lasting at least 30 minutes. Three interviews lasted more than 45 minutes with the longest

interview lasting 53 minutes. A set of prepared questions was used to guide the interview however; the interview followed the lead of the participant who was asked to speak openly and freely (Taylor & Bogdan, 1998). Faculty participants were asked to share stories about their experiences with students with disabilities and to relay their feelings regarding those experiences (Rubin & Rubin, 2012). Faculty participants were also asked to describe how those experiences have shaped their attitudes toward students with disabilities. Faculty participants were asked to discuss their attitudes toward and experiences with ADA accommodations. Lastly, faculty were provided an opportunity to express any concerns and make suggestions regarding students with disabilities.

I transcribed each interview into a Word document and provided each participant a copy for review. Participants were asked to verify the accuracy of the transcription and to suggest changes. One participant added comments to clarify a statement made regarding community college students and another indicated that a statement made, while telling a story during the interview, was made to herself and not to the class as transcribed. Except for a few spelling and typing errors, no other changes were made to the transcriptions. All interviews were transcribed, reviewed by the participants, and returned to me by the end of February 2017.

**Dealing with unexpected results.** It is important to note that at the time of the interview, one participant was experiencing difficulty with a particular student with disabilities. The participant's frustration with the situation consumed the interview and although all interview questions were asked, the participant's responses were only related to this one student. Responses from this participant were transcribed and using the same protocols. However, after careful analysis, I omitted this participant's responses to the

interview questions from the study. I believe this participant's responses, although associated with their experiences with students with disabilities, are too specific to a single student and are not essential to this case study. According to Yin (1994), secondary data or data that is not essential for understanding or evaluating the case study analysis or conclusions should be omitted.

**Institutional document review.** Data collection for the present study also involved a review of 30 institutional documents, including 20 faculty syllabi, five accommodations awards, and four institutional policy and procedure manuals and the college's website. The document review was used to clarify or substantiate participants' statements during interviews (Glaser & Strauss, 1967) and provide a rich description of the case study (Merriam, 2002). The document review also helped me uncover meaning, develop understanding, and discover insights regarding faculty attitudes toward students with disabilities (Bowen, 2009). Document analysis entailed finding, selecting, evaluating, and synthesizing information contained in the documents (Bowen, 2009). After reading and interpreting the documents, I took a closer look at selected sections of the documents and performed coding and category construction based on the data's characteristics (Bowen, 2009). Because the document analysis was considered supplementary to the other research methods employed in the present study, the descriptive codes generated by the interview transcripts were used to identify similarities in the content of the documents (Bowen, 2009). Evaluating the documents this way revealed patterns and produced a deeper understanding of the context for faculty responses (Bowen, 2009).

I intended to also review institutional data regarding students with disabilities for the past five years however, this data had only been collected since the summer of 2015 when the Disability Coordinator was hired. Prior to 2015, ADA requests were reviewed and, where appropriate, accommodations were implemented but no student information was documented. Since 2015, the total number of student receiving accommodations increased from 25 to 85, representing 6.23% of the student population. The average number of students with disabilities returning each year was 56, leaving an average of 29 students annually who did not return.

A review of 20 random faculty syllabi also provided little information regarding students with disabilities. The college's Faculty Manual indicates all syllabi must include the following disabilities statement:

County Community College abides by Section 504 of the Rehabilitation Act of 1973, which stipulates that no student shall be denied the benefits of an education solely by reason of a disability. Disabilities covered by law include, but are not limited to, learning disabilities, psychological disabilities, health impairments, hearing, and sight or mobility problems. If you have a disability that may have some impact on your performance in this class and for which you may require accommodations, please contact the Disability Services Coordinator. The Disability Services Coordinator will be able to provide additional information regarding requirements for arranging accommodations.

All 20 syllabi included the required statement but no other information important to students with disabilities such as where to go for disability services, how to contact the



Disability Services Coordinator, or where to find student rights and responsibilities were found on any of the syllabi.

Five random accommodation letters were provided for review. The accommodation letters listed only five different accommodations including: extended time on tests at 150% of time; recommended tutoring; testing in a quiet, distraction-free setting; stepping out for breaks as needed; and extended time for math at 200% of time. After consulting with the Disability Services Coordinator, additional accommodation letters were pulled and after a cursory review, no additional accommodations were found. As a result, these award letters were not included in the study.

The college website was the only location that discussed services for students with disabilities but was difficult to find. There was no direct link to disability services from the college's main page and a search for "disability services" on the website was the only way to access the information. Additionally, the college website and College Catalog and Student Handbook were the only documents that describe the process to be used by students for requesting accommodations. There were no documents that discussed faculty responsibilities regarding students with disabilities; however, the Faculty Handbook described a behavioral intervention team, which deals with disruptive behavior in the classroom and students in crisis.

Documents can serve a variety of purposes, however for this study, the manuals, handbooks, and website were examined to provide context for participants' responses to the open-ended survey questions and to clarify and substantiate participants' statements during interviews (Bowe, 2009). The review of faculty syllabi and accommodation awards provided insight into faculty responsibilities regarding student accommodations,

verified findings from the other data sources, and provided greater confidence in the trustworthiness of the findings (Bowen, 2009). Together the documents provided a better understand the organization, its procedures, and cultural expectations regarding students with disabilities.

**Triangulation.** Data derived from document analysis, the ATDP survey, and faculty interviews was used as a means of triangulation. Triangulation is the establishment of converging lines of evidence, from multiple sources of data, to develop a comprehensive understanding of phenomenon and test validity (Patton, 2002). By triangulating data, I attempted to strengthen credibility and reduce the impact of potential biases that can exist in a single case study (Bowen, 2009).

Four types of triangulation have been identified: (a) method triangulation, (b) investigator triangulation, (c) theory triangulation, and (d) data source triangulation (Patton, 2002). Method triangulation was used in this study as both qualitative and quantitative data sources were used to study the same phenomenon (Patton, 2002). The convergence of the three data points of this study using method triangulation provided the insight into the attitudes of faculty toward students with disabilities and ensured that the accounting of the results was comprehensive and well-developed (Maxwell, 2013).

### **Data Analysis**

According to Hartley (2004), data collection and analysis in case study research are developed together in an iterative process, which allows for theory development. Yin (2003) maintains that data analysis consists of examining, categorizing, tabulating, testing, or otherwise recombining both qualitative and quantitative data to address the initial propositions of a study. Based on the notion that the ultimate goal of a case study is to uncover patterns, determine meaning, construct conclusions, and build theory, Yin

(2003) suggests there are three general analytic strategies for analyzing case study evidence: (a) relying on theoretical propositions, (b) thinking about rival explanations, (c) developing a case description.

Data analysis for this exploratory single case study was conducted primarily by hand to develop a case description and included descriptive statistical analysis of participant responses to the ATDP survey and content analysis of the open-ended survey questions. Descriptive coding was used in the analysis of faculty interview responses and a review of institutional documents. Descriptive statistics were calculated using the results of the ATDP survey and provided specific information about the sample. The quantitative data achieved through this analysis was used to enhance the meaning of the qualitative data and develop a richer understanding of the meaning of the results (Yin, 2003).

Yin (2003) suggests the use of content analysis as a strategy to provide a systematic process of interpreting meaning from qualitative data collected and was used to analyze and interpret the contents of the open-ended survey questions. Through content analysis, I focused on the characteristics of the language used in the open-ended survey questions and paid attention to the content and contextual meaning of the data (Hsieh & Shannon, 2005). Although, content analysis often uses pre-set codes, I used emergent codes to protect against potential researcher bias, which is also an acceptable practice (Hsieh & Shannon, 2005). After reading the responses to the open-ended survey questions several times to gain an understanding of the responses as a whole, I read each response word for word to derive codes by highlighting the exact words that were in each response (Miles & Huberman, 1994). Notes were taken, questions asked, and researcher

impressions were noted during each round of coding. After two rounds, codes were sorted into categories based on similarities (Miles & Huberman, 1994).

Descriptive coding was used in the analysis of the faculty interview responses. Using descriptive coding, I assigned labels to passages in the transcripts that summarized the basic topic of the passage (Saldana, 2013). Descriptive coding provided an inventory of attitudes and experiences described by the participants and an index of the substance of each passage's message (Saldana, 2013). I had initially thought to use pre-set codes during this analysis but again was concerned about researcher bias so I decided to rely on emergent codes (Saldana, 2013). This coding process included the recognition of similar words or phrases used by the participants. For example, when asked to describe their overall experiences with students with disabilities, the most common phrases included "generally positive," "very positive," and "more positive than negative."

I conducted two rounds of coding through which patterns emerged and were explored. Patterns within the codes were then organized into categories. A coding matrix was developed to help organize the categories and to identify any connection to the research questions stated in the study (Saldana, 2013). The codes produced through this analysis were also used in the document review and helped to integrate the data and uncover themes (Bowen, 2009). As patterns continued to emerge among the data points, the resulting categories were condensed into themes to further organize the data and accurately identify the relationship between the data rather than just their similarities or differences (Maxwell, 2013).

The present study collected a large amount of text in verbal, print, and electronic forms through open-ended questions, interviews, and institutional documents. As a

result, different methods of analysis were employed to build explanations as I refined and revised the descriptions of how faculty attitudes toward students with disabilities influences their use of accommodations in the classroom. Each source of text, ATDP open-ended survey questions, semi-structured interviews, and institutional documents was analyzed separately using two rounds of coding and then cross-examined. Cross-examination of the data sources was used as a connecting strategy to identify patterns, provide context, and gain deeper insight into the participant's attitudes toward students with disabilities and classroom accommodations (Maxwell, 2013). To avoid losing focus during data analysis, I frequently referred to the research questions and propositions developed prior to the start of the study (Yin, 2003).

**Propositions.** According to Yin (2003) the most important strategy in data analysis for a case study is to follow the theoretical propositions that led to the case study. Propositions are based on literature, personal or professional experiences, theories, or generalizations based on empirical data (Yin, 1996). Propositions allowed me to place limits on the scope of the study and increase the feasibility of completing the study (Yin, 1996). Propositions were used during data analysis to focus the most relevant data, organize the entire case study, and define alternative explanations (Yin, 2003). The propositions for this study were:

1. Faculty attitudes toward students with disabilities are influenced by their experiences with students with disabilities.
2. Faculty attitudes toward students with disabilities will be reflected in their use of classroom accommodations.

The study's propositions were compared against the case study data and were deemed to reflect a reasonable relationship between the propositions and data results (Yin, 2003).

### **Developing a Case Description**

The present study's propositions were also utilized in developing a case description. An important feature of case study research is the way qualitative and quantitative data is analyzed together to develop a case description. In developing a case description through data analysis, three steps are involved: describing, coding, and comparing (Yin, 2003). By processing the data this way, patterns or themes emerged and were used to describe how faculty attitudes toward students with disabilities influence their use of accommodations in the classroom.

I began developing a case description by reviewing the descriptive statistics generated by the ATDP survey analysis. This was followed by an analysis of the open-ended survey questions. The responses for each question were read word for word to derive codes first by highlighting the exact words from the text that appear to capture key thoughts and concepts (Miles & Huberman, 1994). Next, I read the question responses again making notes of my impressions, thoughts, initial analysis and the initial codes that emerged (Patton, 2002). An analysis of the interview transcripts followed. The recordings of each interview were transcribed by hand, allowing me to listen to each interview more than once. I took notes with the first review of each recording using descriptive terms to relay the context of the statements made during the interview (Yin, 2003). Once all the interviews were transcribed and verified by the participant, I read each one repeatedly to achieve immersion and obtain a sense of the context for each participant's views (Miles & Huberman, 1994). Codes generated during this analysis

were used during a review of institutional documents. I conducted two coding cycles for each analysis method. The use of emergent codes and multiple analysis methods ensured individual stories were relayed in the description of the case study and the development of themes (Saldana, 2013). These themes were related to the research questions and the experiences of the participants and used to refine the case study description.

Lastly, a comparison across all data points, quantitative and qualitative were made. Since the data was analyzed at the same time, a comparison of categories reflected any unusual or unexpected data, which allowed me to collect additional data needed to refine the case description (Yin, 2003). Analysis of both the qualitative and quantitative data provided a deeper understanding of the data and a richer case description.

### **Role of the Researcher**

There was one researcher in this case study. As the researcher, I was responsible for administering the ATDP survey, conducting the semi-structured interviews, and reviewing institutional documents. As the present study was a qualitative case study, I was an instrument of data collection (Denzin & Lincoln, 2003). My role started as an insider, a confidant who faculty felt comfortable discussing their attitudes and experiences. During the interviews, I listened to their stories and asked more probing questions to gain a deeper level of understanding of the faculty attitudes. As the study unfolded, specifically through the data analysis phase of the study, I became more of an objective viewer who by acknowledging my personal biases and attitudes was able to interpret faculty responses and accurately express the results using the voice of the participants (Denzin & Lincoln, 2003).

## **Evidence of Trustworthiness**

Case study research provides a mechanism for an intensive, in-depth method of inquiry focusing on real-life using a variety of sources for data collection (Bassey, 1999). Analysis of the data collected from these sources results in case description that may include theory-seeking, theory-testing or storytelling (Bassey, 1999). As a result, the trustworthiness of data in case study research is a major concern.

Guba (1981) suggests a model of trustworthiness of data for case study research that includes four criteria (1) truth value, (2) applicability, (3) consistency, and (4) neutrality. These criteria are similar to Lincoln and Guba's (1985) criteria for qualitative research (1) credibility, (2) transferability, (3) dependability, and (4) confirmability. The criteria from both models were used to address evidence of trustworthiness in the present study.

**Truth value.** Truth value addresses how confident the researcher is in the truth of the study's findings. Activities such as peer review and respondent validation or member checking were used to increase the trustworthiness or credibility of the study's findings (Guba, 1981). Reflexivity acknowledges the place of the researcher in data analysis and allowances are made throughout the study for potential researcher influence and triangulation can also increase the trustworthiness and credibility of findings (Guba, 1981).

For the present study, triangulation was achieved with the use of data from the ATDP survey, semi-structured interviews, and document review. Individuals with knowledge and experience with the college's faculty were engaged in peer review during the development of the survey and interview instruments, data collection, and data



analysis. The open-ended and demographic survey questions and the interview questions used in the study were based on extensive literature review, expert recommendations, and reviewed by a small committee of institutional staff for relevance and accuracy. Additionally, a retired faculty member participated in a mock interview to test the interview questions and protocols. Respondent verification and member checking was used to verify transcriptions and data analysis in this study as well. Constant comparison analysis of the results was also conducted by the researcher and through member checking with the Disability Services Coordinator to improve the trustworthiness, quality, and rigor of the data analysis. Reflection on how my characteristics and experiences with students with disabilities played a part in my interactions and understanding of the participants were addressed through journaling (Guba, 1981).

**Credibility.** Major threats to credibility include researcher bias and an inaccurate representation of the phenomenon (Yin, 1994). This study deals with the phenomenon of faculty attitudes and my role was to seek understanding through immersion in the culture of the study, creating an opportunity for researcher bias (Creswell, 1998). As such, the major threat to credibility for the present study was researcher bias. As a first step in addressing this bias, I was open with my colleagues, my dissertation committee, and anyone who may potentially be involved with this study about my personal and professional experiences. By sharing my personal feelings regarding students with disabilities with others, I understood where those feelings were rooted and was more conscious of them, which allowed me the opportunity to separate my feelings from those of the faculty in the study (Creswell, 1998). Engaging in peer review with the college's Disability Services Coordinator improved the accuracy of my data gathering and analysis,

and validated my final reporting thereby further reducing researcher bias (Creswell, 1998).

A second step in addressing researcher bias was paying careful attention to my own subjectivity, or my personal qualities that may affect the results of my study (Peshkin, 1988). Because subjectivity is always present, I methodically identified my subjectivity throughout the course of this study (Peshkin, 1988). I monitored my feelings throughout the study, identifying when I had positive and negative feelings and when I felt I was getting too close to the research and moving out of my role as researcher (Peshkin, 1988). When these feelings occurred, I wrote them down in a journal identifying when these feelings occurred and what I was doing with the study (Peshkin, 1988). Journaling provided another method to capture ideas, connections, and patterns or themes in the data, which I believe facilitate a deeper understanding of the attitudes of faculty towards students with disabilities (Yin, 1994). By monitoring myself this way, I managed my subjectivity throughout the study, increased reflexivity and credibility, and avoided presenting a study that was biased (Peshkin, 1988).

To reduce the potential of researcher bias in data gathering, purposeful sampling was used to identify the primary participants in the study based on what they contributed to the study (Creswell, 1998). Participants who responded to the ATDP survey, engaged in the interview portion of the study, and expressed experience with students with disabilities, were used in the study. The use of member checking to verify the accuracy of interview transcripts further enhanced the credibility of the data (Hartley, 2004).

**Applicability.** Applicability addresses the degree to which findings can be applied to other contexts or groups (Guba, 1981). Purposeful sampling was used in

consideration of the characteristics of the faculty population to identify participants for the present study (Guba, 1981). Because the purpose of this single case study addressed a specific institution with a small population, it would be difficult to apply the results to a wider population. Purposeful sampling supports the generalization of the study findings to other situations and context, where context defines data and contributes to the interpretation of data (Lincoln & Guba, 1985). Corcoran, Walker, and Wals (2004) suggest the interpretation of case study data is introspective however if the purpose of the study is to transform practice in one setting, then introspection may be appropriate to satisfy applicability. Yin (1994) further suggests case studies are used to expand and generalize theories, which can be used by the broader research population, which would satisfy applicability. The present study addresses faculty attitudes with students with disabilities at a community college. The present study's findings can add to the current body of knowledge in the field and provide community college faculty with information to transform their understanding of students with disabilities and the use of classroom accommodations.

**Consistency.** Consistency addresses dependability and suggests findings should be consistent if the study were replicated (Guba, 1981). Lincoln and Guba (1985) suggest the use of an audit trail to ensure accurate data collection. For the present study, an audit trail was used to document the methods used in data collection and analysis and to create a chain of evidence.

**Neutrality.** Neutrality addresses the extent to which findings are the result of the participants in and conditions of the research and not the result of other influences, biases, or perspectives (Guba, 1981). To address neutrality, the present study used

triangulation and reflexivity to control bias and establish valid propositions. The use of propositions helps to create a clear definition of the case study and improve neutrality (Yin, 1994).

In addition to the qualitative criteria for ensuring trustworthiness for the present study, quantitative criteria were also used. For example, the survey used in the present study was an established instrument with high reliability and validity. The Attitudes Toward Persons with Disabilities scales (ATDP) has a Cronbach's  $\alpha = .80$  which is the preferred coefficient indicating a strong reliability and is above the acceptable coefficient of  $\alpha = .70$ . This survey was chosen rather than developing one specific to the study because it has been successfully used in many studies since the 1970's and is the most tested survey on the subject.

**Transferability.** Transferability is an important consideration for case study research as it provides external validity for the study. Transferability is a process of applying the results of research in one situation to other similar situations (Lincoln & Guba, 1985). If there are enough similarities between the two studies, it is suggested that the results of one can be transferred to the other context (Lincoln & Guba, 1985). One way to accomplish this is to create a detailed description of the study through the use of the data. Known as a thick description, the present study provided specific information including a detailed description about the participants, location, methodology, and conceptual framework (Lincoln & Guba, 1985). Another way to increase transferability is to use instruments that have been used broadly or for many years in similar studies. This study used the Attitudes toward Persons with Disabilities survey as one of its data points

because it is the most widely used and tested instrument of its kind, having been used in more than 300 similar studies since 1970 (Yuker & Block, 1986).

Triangulation was used to establish validity through verification of the survey, semi-structured interviews, and institutional documents, which allowed me to develop a comprehensive description of the case (Yin, 1994). Purposeful sampling and an established chain of evidence was also used to establish credibility and ensure transferability thereby providing rigor to the study (Yin, 1994).

### **Ethical Considerations**

There are four ethical considerations in human subject research that were addressed in the present study including informed consent, fidelity/trust in the researcher/participant relationship, personal dignity, and confidentiality (Ogloff & Otto, 1991). The first issue, informed consent was addressed through the use of a written consent form. Faculty participants were asked to sign a written consent form to provide proper informed consent for participation in and recording of each semi-structured interview (Ogloff & Otto, 1991). Participants received an overview of the study along with an explanation their participation was voluntary and that they could withdraw from the study at any time.

Because the present study examined faculty attitudes towards students with disabilities, special care was taken to protect the dignity of the participants and create a trusting relationship between the participants and me. A trusting relationship was necessary so participants felt comfortable in sharing their stories in a truthful manner (Ogloff & Otto, 1991). To maintain trust, personal information of participants was kept confidential (Ogloff & Otto, 1991). All participants were assigned a number based on

when they answered the ATDP survey and interview participants were given a pseudonym. Participants were referred to by either their number or pseudonym throughout the study. To further protect the participants, the college's name was changed and the location of the college was referred to in generic terms. This provided for greater confidentiality and re-enforced the trust between the researcher and the participants (Ogloff & Otto, 1991). Additionally, all reasonable attempts were made to protect participants from physical or mental discomfort as a result of participation in the present study.

Lastly, all Rowan University IRB protocols were followed and approval was obtained before any research took place. I completed all required CITI training for IRB approval and received written approval from County Community College to conduct the research at the institution. Since the Attitudes towards Disabled Persons (ATDP) scales are in the public domain, no permission was needed to use any of the forms, however credit has been given to Drs. Yunker and Block in the study.

## **Conclusion**

As the number of students who enroll in community colleges increases and societal conditions impacting students change, so does the concern of faculty with accommodating the needs of students with disabilities and maintaining the integrity of their classes. This single case study explored the attitudes of faculty toward students with disabilities and how those attitudes influence the use of accommodations in the classroom. The present study is important to not only provide community college faculty with relevant research regarding the influence their attitudes toward students with disabilities has on the use of classroom accommodations, but to provide community

colleges a platform to evaluate how students are being served and to educate and support faculty teaching students with disabilities. Knowing how their attitudes influence their behavior in the classroom will inspire some faculty to make a change and that change can make a difference in the success of a student with disabilities.

## **Chapter 4**

### **Results**

Chapter three, Methodology, describes the qualitative research method used in this study including the delivery of the survey, interview process, document review, and data collection and analysis procedures. This chapter presents the results of the data collection and analysis that was conducted in spring 2017. The results, used to develop a case description, provide a portrayal of the participants and setting while addressing the research questions posed for this study.

The purpose of this single case study was to explore community college faculty experiences and attitudes toward students with disabilities and explore how their experiences and attitudes influence the use of accommodations in the classroom. The following research questions guided this study:

1. What are community college faculty attitudes toward students with disabilities?
2. How have community college faculty's experiences with students with disabilities influenced their attitudes toward students with disabilities?
3. How are those attitudes reflected in the community college faculty's use of accommodations in the classroom?
  - a. Which accommodations are community college faculty most likely to use in the classroom?
  - b. Which accommodations are community college faculty least likely to use in the classroom?
4. What concerns and suggestions do community college faculty express regarding students with disabilities?



This research study included collecting data from results of the Attitude Toward Disabled Persons scale, open-ended questions included with the survey, and semi-structured interviews with community college faculty in the Spring of 2017. Also included in this study, was the review of 30 institutional documents including institutional policy and procedures manuals, faculty syllabi, accommodation letters, and the college's website. Triangulation was achieved through the collection, analysis, and review of the data produced by the survey, open-ended questions included with the survey, semi-structured interviews, and institutional documents used in the study.

This chapter is divided into two sections. The first section uses descriptive statistics to develop a profile of the participants. The second section uses content analysis to present the analyzed data collected and provide a description of the responses to the survey, interview questions, and institutional documents.

### **Description of Sample**

The descriptive statistics calculated for this study provide specific information about the sample and are the foundation of the case description. After the data collection period, the final sample consisted of 35 survey participants, 13 interviewees, and 30 documents. The overall survey response rate was 19.44% and 37.14% of survey participants agreed to an interview. This response rate is consistent with response rates of similar studies involving university faculty attitudes toward students with disabilities (Bourke, et al., 2000; Houck, et al., 1992; Murray et al., 2011; Vogel et al., 1999). Faculty participation across the divisions was fairly even, averaging a 19.15% response rate and representative of the faculty populations at the college. The highest response rate, at 21.92%, was from the Division of Arts and Sciences, whereas Applied Sciences

had a 17.78% and Health Sciences had a 17.74% response rate. Table 1 lists the faculty response rate by division and includes all participant responses.

Table 1

*Response Rate by Division*

	<u>Faculty</u>		<u>Sample</u>		Response Rate
	N	%	N	%	
Academic Division					
Arts and Sciences	73	40.56%	16	45.71%	21.92%
Applied Sciences	45	25.00%	8	22.86%	17.78%
Health Sciences	62	34.44%	11	31.43%	17.74%
Total	180	100.00%	35	100.00%	

In addition to academic division, participants were asked to report gender, age, and years teaching. Demographic information was consistent with previous studies (Bourke, et al., 2000; Houck, et al., 1992; Murray et al., 2011; Vogel et al., 1999). Table 2 lists the response rate by gender, with all participants responding. The highest response rate, 68.57% was from female participants. Although more females responded to the survey, the response rate by gender is representative of faculty distribution within the institution. Figures 3 and 4 illustrate the difference between institutional population and representative samples.

Table 2

*Response Rate by Gender*

	<u>Faculty</u>		<u>Sample</u>		Response Rate
	N	%	N	%	
Gender					
Male	72	40.00%	11	31.43%	15.28%

Table 2 (continued)

	<u>Faculty</u>		<u>Sample</u>		Response Rate
	N	%	N	%	
Gender					22.22%
Female	108	60.00%	24	68.57%	
Total	180	100.00%	35	100.00%	

Because the college is small and does not offer tenure, age groups used by the institution to collect demographic data was used, to maintain the confidentiality of responses. To represent faculty rank, years of teaching experience was used to compare the results of this study with similar university studies. Table 3 lists the response rate of participants by age, with 34 of 35 participants responding. Results indicate older faculty, specifically those over age 50 were more likely to participate in the survey. Table 4 lists the response rate by years of teaching experience and suggests faculty with at least 11 years of teaching experience were more likely to participate in the study.

Table 3  
*Response Rate by Age*

	<u>Faculty</u>		<u>Sample</u>		Response Rate
	N	%	N	%	
Age					
20-30 years	8	4.44%	1	2.94%	12.50%
31-40 years	42	23.33%	2	5.88%	4.76%
41-50 years	46	25.56%	5	14.71%	10.87%
50+ years	84	46.67%	26	76.47%	30.95%
Total	180	100.00%	34	100.00%	
Did not respond = 1					

Table 4

*Response Rate by Years of Experience*

	<u>Faculty</u>		<u>Sample</u>		Response Rate
	N	%	N	%	
Years of Teaching					
0-5 years	57	31.67%	3	9.10%	5.26%
6-10 years	40	22.22%	9	27.27%	22.50%
11-20 years	63	35.00%	11	33.33%	17.46%
20+ years	20	11.11%	10	30.30%	50.00%
Total	180	100.0%	33	100.00%	
Did not respond = 2					

After subjective assessment of the tables representing the college faculty population and participant samples with respect to age, gender, academic division, and years of teaching experience, I determined the study sample was an adequate representation of the faculty population with some overrepresentation of older faculty with more than 10 years of teaching.

To determine whether faculty participants in the semi-structured interviews were an adequate representation of the college's faculty population, participants were disaggregated by gender and academic division. Table 5 represents the faculty, by academic division, who participated in the semi-structured interviews and Table 6 represents the faculty interview participants by gender.

Table 5

*Interview Participants by Academic Division*

	<u>Faculty</u>		<u>Sample</u>		Response Rate
	N	%	N	%	
Academic Division					
Arts and Sciences	73	40.56%	5	38.46%	6.85%

Table 5 (continued)

	<u>Faculty</u>		<u>Sample</u>		Response Rate
	N	%	N	%	
Academic Division					
Applied Sciences	45	25.00%	4	30.77%	8.89%
Health Sciences	62	34.44%	4	30.77%	6.45%
Total	180	100.00%	13	100.00%	

Table 6

*Interview Participants by Gender*

	<u>Faculty</u>		<u>Sample</u>		Response Rate
	N	%	N	%	
Gender					
Male	72	40.00%	6	46.15%	8.33%
Female	108	60.00%	7	53.85%	6.48%
Total	180	100.00%	13	100.00%	

Due to the sample size and the equal representation of interview participants by academic division and gender, I determined the interview sample was an adequate representation of the faculty population with some overrepresentation of males and applied sciences faculty. Apart from the three faculty who initially indicated they would be available for a face-to-face interview and subsequently declined, no participants dropped out of the study.

**ATDP survey results.** To further develop a description of the participant sample, statistical data was evaluated within each data point. ATDP scores are interpreted in terms of acceptance of or prejudice toward persons with disabilities. To better understand participants' scores, I developed a rubric that quantified the possible scores into six equal ranges 0-30 extremely negative, 31-60 moderately negative, 61-90 mildly negative, 91-120 mildly positive, 121-150 moderately positive, and 151-180 extremely

positive. Participant scores in the ATDP scale ranged from a high of 143 to a low of 78, suggesting faculty participants' attitudes toward individuals with disabilities range from moderately positive to mildly negative. The highest score was recorded by a faculty member who is female, 50+ years old, with 6 to 10 years of teaching experience in the Arts and Sciences division. The lowest score was also recorded by a female faculty member, 50+ years old, but with 11-20 years teaching experience in the Applied Sciences division. The mean score for the 35 participants was 115 and the median score was 117, suggesting faculty at County Community College have a mildly positive attitude toward disability in general.

Faculty scores were disaggregated by age, gender, academic division, and years of teaching to identify potential trends and provide insight into faculty attitudes toward students with disabilities. Table 7 presents the mean, median, and mode of ATDP scores by gender. When disaggregated by gender, female participants recorded both the lowest and highest ATDP scores. The mean scores for male participants (mean = 114.45) and female participants (mean = 115.63) indicates both male and female faculty have a mildly positive attitude toward individuals with disabilities. These scores would also suggest that faculty attitudes toward disability were consistent among male and female faculty.

Table 7

*ATDP Scores by Gender*

	N	Mean	Median	Mode
Gender				
Male	11	114.45	116	115, 128
Female	24	115.63	117.5	118
Total	35			

ATDP scores were then analyzed by Academic Division and the mean, median, and mode were calculated. A faculty member in the Applied Sciences division recorded the lowest score of 78 on the ATDP and a member of the Arts and Sciences division recorded the highest score of 143. Table 8 expresses the mean, median, and mode of ATDP scores by Academic Division. The results suggest faculty in the Applied Sciences faculty have a less positive attitude toward disability with a mean score of 108 than their counterparts in Arts and Sciences and Health Sciences with a mean score of 116 and 118, respectively. The mean scores for each division suggest faculty participants have a mildly positive attitude toward individuals with disabilities.

Table 8

*ATDP Scores by Academic Division*

	N	Mean	Median	Mode
Academic Division				
Arts & Sciences	16	116	118	95, 115, 118, 121
Applied Sciences	8	108	114	78, 81, 107, 113, 115, 123, 125, 128
Health Sciences	11	118	117	116
Total	35			

Due to the small number of participants and the need to maintain confidentiality, the demographic information for participant age and years of teaching experience was collected using a range. In addition to maintaining confidentiality, the use of a range for participant age aligns with how the data is collected by the institution. Furthermore, because the institution does not offer faculty tenure, years of teaching experience was used to reflect faculty rank. As a result, the actual age and years of teaching for each

participant was not collected and although not as precise, the grouped mean was calculated and are reflected in Tables 9 and 10 respectively.

The grouped mean scores for faculty participants, suggest faculty regardless of age, have a mildly positive attitude toward students with disabilities, with scores ranging from 102-120. However, faculty between 41 -50 years, appear to have the least positive attitude toward students with disabilities.

Table 9

*ATDP Scores by Age*

	N	Grouped Mean
Age Ranges		
20-30	1	118
31-40	2	120
41-50	5	102
50+	26	119
Total	34	
1 = did not answer		

When disaggregated by years of teaching experience, the mean ATDP scores suggests faculty with more than 20 years of teaching experience, with a grouped mean of 119, have a more positive attitude toward students with disabilities than their peers. However, faculty with 5 years of experience or less have a grouped mean score of 118, suggesting they have relatively the same attitudes toward individuals with disabilities. Faculty with 11 to 20 years of teaching experience have the least positive attitude toward disability as demonstrated by a grouped mean of 106. All grouped mean scores suggest faculty have a mildly positive attitude toward individuals with disabilities.



Table 10

*ATDP Scores by Years of Experience*

	N	Grouped Mean
Years of Experience Ranges		
0-5	3	118
6-10	9	112
11-20	11	106
20+	10	119
Total	33	
2 = did not answer		

In addition to the descriptive statistics described above, content analysis was used to further describe faculty attitudes toward students with disabilities and classroom accommodations. Faculty responses to the open-ended survey questions were analyzed using content analysis and focused on the language for the purpose of classifying the data into categories that represent similar meaning (Hsieh & Shannon, 2005).

**Responses to open-ended question one.** In total, 34 of the 35 participants responded to this question resulting in a 97.14% response rate to this question. The participants included 16 from Arts and Sciences, 8 from Applied Sciences, and 10 from Health Sciences. One participant from Health Sciences did not answer the question.

Twenty-one of the 34 respondents or 61.76% indicated their overall experiences with students with disabilities were positive. Participant responses included general statements such as “my overall experiences with students with disabilities have been positive” and “they were all positive experiences both for me and my students.” Several participants provided more detailed responses such as “my experiences with disabled students has been generally positive after they learn the environment and expectations of the college and my class” and “having many experiences with students with disabilities

and a sibling who has special needs, it is hard to draw a generalization; it depends upon the individual in the same way as with other populations.” When describing students with disabilities, faculty frequently used terms such as “hard-working,” “upbeat,” and “motivated.” The use of these terms would suggest faculty in the present study have positive perceptions of students with disabilities.

On the other hand, seven of the 34 respondents or 20.59% indicated their overall experiences were negative and included statements such as “unfortunately my experiences have been mostly negative” and “many (not most) disabled people expect special treatment over and above what their disability requires.” Lastly, six of the 34 respondents or 17.65% indicated they had both positive and negative experiences with students with disabilities. Responses included “my experiences with students with disabilities has been as varied as my experiences with students in general.”

Faculty responses to the open-ended survey question one would indicate faculty also view students with and without disabilities similarly. Responses included statements such as “students with disabilities are as diverse as non-disabled students.” Other statements such as “some experiences with students with disabilities have been positive and some have been negative, just like students without disabilities; it depends on the student” further suggests faculty view students with and without disabilities similarly.

**Responses to open-ended question two.** In total, 34 of the 35 participants also responded to this question, which resulted in a 97.14% response rate to this question. The participants included 16 from Arts and Sciences, 8 from Applied Sciences, and 10 from Health Sciences. One participant from Health Sciences did not answer this question as well. Responses to this question were similar to responses regarding students with

disabilities however, more faculty indicated they had overall negative experiences with classroom accommodations than negative experiences with students with disabilities. For this question, 10 of 34 or 29.41% indicated their overall experiences were negative. This is represented by “I find them negative, how does providing an EMS or nursing student with extra time in a low distraction setting prepare them for the workplace?” Additional statements regarding negative feelings toward classroom accommodations include “generally negative – I spend more time working with one student with special accommodations than all the other students in my classes combined” and “in my opinion, classroom accommodations are ridiculous.” Twenty-one of the 34 respondents or 61.76% indicated their overall experiences with classroom accommodations were positive. For example, one participant stated, “accommodations are generally positive, and I would make accommodations for (almost) any student if they needed it regardless of disability.” Additionally, three of 34 or 8.82% of the participants indicated their experiences with classroom accommodations were neither positive nor negative including “I find classroom accommodations as neither positive nor negative but in essence an attempt to individualize the needs of all students.”

**Responses to the interview questions.** Faculty participants were active and engaged, providing thorough and honest answers to the questions asked. Faculty shared stories and examples to illustrate their feelings and provided additional information regarding their personal experiences with individuals with disabilities and classroom accommodations. Faculty responses also included personal background information, which provided context and insight into their attitudes toward students with disabilities. For example, four of the 13 or 30.77% of interview participants had other family

members who were educators. Additionally, five of the 13 or 38.46% indicated they became instructors because always wanted to teach, which could explain their natural concern for all students and their willingness to provide accommodations.

Five of the 13 or 38.46% of participants grew up in the area and six of 13 or 46.15% had personal experience with individuals with disabilities. These six indicated they had at least one family member with a disability, which may explain why their responses regarding their experiences with students with disabilities were generally positive. However, six of the 13 interview participants reported having negative experiences with students with disabilities. Lastly, when asked what would help faculty to better work with students with disabilities, 11 of 13 or 84.62% indicated faculty needed more training. Participant responses indicated the need for specific training on the different types of disabilities as well as teaching techniques for each disability, indicating a desire to improve the learning experience for students with disabilities.

***Dealing with unexpected results.*** It is important to note that at the time of the interview, one participant was having trouble with a particular student with disabilities. The participant's frustration with the situation consumed the interview and although all interview questions were asked, the participant's responses were only related to this one student. I omitted this participant's responses to the interview questions from the study as I believe this participant's responses, although associated with their experiences with students with disabilities, are too specific to a single student and are not essential to this case study. This participant did however make an interesting statement, which at the extreme, seems to summarize the attitudes of many of the participants regarding classroom accommodations.

Accommodations are a good idea in theory, just like welfare and Pell grants; they are all good ideas with good intentions but are now being abused. I'm never against providing accommodations but under these terms I do! How are these accommodations reasonable? I know there are privacy issues and I'm not privy to more information but anxiety and depression don't seem to justify untimed tests with no proctor and two additional days for assignments. These accommodations create an advantage for this student and I'm not going to lose my job over this but I don't care about this student anymore.

### **Data Analysis**

Data analysis for this exploratory single case study was conducted primarily by hand to develop a case description and included descriptive statistical analysis of participant responses to the ATDP survey and content analysis of the open-ended survey questions. Descriptive coding was used also in the analysis of faculty interview responses and a review of institutional documents. Descriptive statistics were calculated using the results of the ATDP survey and provided specific information about the sample. The quantitative data achieved through this analysis was used to enhance the meaning of the qualitative data and develop a richer understanding of the meaning of the results (Yin, 2003).

Each qualitative source of data, ATDP open-ended survey questions, semi-structured interview transcripts, and institutional documents were analyzed separately using two rounds of coding. Each data source was then cross-examined. Cross-examination of the data sources was used as a connecting strategy to identify patterns,

provide context, and gain deeper insight into the participant's attitudes toward students with disabilities and classroom accommodations (Maxwell, 2013). Through the process of coding and connecting strategies, five themes emerged (a) faculty attitudes toward accommodations for students with visible versus invisible disabilities, (b) faculty concerns for workplace expectations, (c) faculty concerns for academic integrity, (d) need for training, and (e) institutional use of antiquated language.

**Faculty attitudes toward accommodations for students with visible versus invisible disabilities.** Faculty responses regarding classroom accommodations were divided, where faculty had more positive attitudes toward providing accommodations for students with visible disabilities than students with nonvisible disabilities. When asked to describe a positive experience with classroom accommodations, faculty responded with phrases such as “achieve goals,” “overcome obstacles”, and “finding an alternative.” These positive phrases were consistently attributed to students with visible disabilities. In their responses, faculty often described students with visible disabilities as being able to overcome obstacles or faculty could find an alternative teaching method to assist the student in achieving their educational goals. For example, one participant stated, “Nothing warms my heart more than to see a student with a disability like a loss of limb or a blind or deaf student to use accommodations to overcome their obstacles and graduate.” Another participant suggested, “My best experience with students with disabilities was when this young man with CP walked across the stage, with assistance, to receive his diploma. I believe his accommodations were the reason he was successful.” These responses suggest faculty have a positive attitude toward accommodations for students with visible disabilities.

However, when asked to describe a negative experience with classroom accommodations, faculty responded with negative phrases such as “seeking extra accommodations,” “disrupting class,” and “using accommodations to cheat.” In their responses, faculty often described students with invisible disabilities as seeking extra accommodations, or disrupting class. These negative responses suggest faculty have negative attitudes toward accommodations for students with invisible. For example, one participant stated:

I’ve had a lot of experience with students with disabilities. I’ve had some with physical disabilities; one had a birth defect and another older lady with a cane. I’ve had some with PTSD, but I’ve had a lot of students with ADHD and what gets me is that most of them refuse to take their medication and then they disrupt the class. They wouldn’t need accommodations and would do so much better in class if they would just take their medication.

Another participant described her experiences with a student with an invisible disability as follows:

I have a student who supposedly has a disability. I say supposedly because the student only needs accommodations when it comes time for test. She wants to take her tests in a separate setting so she can cheat. I gave a test the other day and I forgot to include a formula with one of the problems. She was the only student to do the problem properly and her test was the only one that had the formula.

How did that happen?

Another participant described students with invisible disabilities this way.

My experiences with students with disabilities such as ADHD or PTSD have not been pleasant. They are disruptive and impact the experience for the rest of the class and me for that matter. And what makes dealing with them even more frustrating is that they always want extra accommodations. They ask for extended time on assignments past the already extended time they get all the time. They also want to take their tests in a distraction free room; when what they really want is to have a space where no one will bother them so they can cheat.

Together, these responses would suggest faculty members seem to be more accepting of students with visible disabilities than invisible disabilities (Baggett, 1994, Houck et al., 1992). These responses could also suggest faculty hold a medical model view of disability since their responses focus on the body. Responses could also suggest faculty perceive students with visible disabilities as being just as capable as their peers are when classroom accommodations are employed, yet view students with invisible disabilities as less than their peers regardless of accommodations.

Results further suggest faculty with positive experiences with and attitudes toward students with disabilities are more likely to have a positive attitude toward classroom accommodations whereas faculty with negative experiences with and attitudes toward students with disabilities are more resistant to classroom accommodations. On the open-ended survey questions, most of the participants (62%) in the present study indicated they had positive experiences with classroom accommodations and expressed a willingness to provide various types of minor accommodations such as recorded lectures, accessible furniture, assistive technology, and extended time on tests for students with documented



disabilities. One participant stated, “My students and I view accommodations as almost benign, copies of class notes, extra time on tests are no big deal.” Other accommodations such as a quiet or low distraction setting had both positive and negative comments. One participant summed accommodations this way,

I have two minds on that subject. First, if a student requires extended times on tests or assignments or if they require a quiet setting for testing, I believe it is mandatory/compulsory for the student’s success. However, by removing them from the common testing environment, you do bring the spotlight to that and remove the student from the teacher.

**Faculty concerns for workplace expectations.** There were some faculty however, who viewed accommodations as relaxing of standards. Faculty in the Health Sciences and Applied Sciences division frequently expressed concerns with classroom accommodations citing workplace expectations as the primary reason for their concern. Phrases such as “unfairly prepare student for a workplace or university setting,” and “allow students to perform below standards” were frequently expressed in faculty responses to the open-ended survey and interview questions. Faculty expressed concerns with accommodations that enable students with disabilities to perform at levels below the standards established by their professional fields, the college, or society (Wendell, 2008).

One participant stated, “I think that accommodations are necessary, but I sometimes wonder what will happen when they enter the workforce where accommodations are not generally offered. Are we unfairly preparing them for the workplace?” Another participant described accommodations in the following way:

In my opinion, accommodations are ridiculous. For example, I get these notes from our Disability Services Coordinator that I need to give a student very clear and step by step instructions on how to do assignments. This is absurd! To be successful in my program, there are expectations. Students must develop analytical thinking skills because they need to use analytical thinking skills in the workplace. If I give them step-by-step directions on assignments, I am teaching them nothing and doing their work for them. They will never develop those analytical thinking skills and will never succeed in a workplace setting.

Faculty in the Health Sciences further expressed concerns regarding the ability of students with disabilities to fully participate in their programs without the use of accommodations, suggesting some disabilities are intolerant of high-risk working conditions. One participant stated, “Accommodation in our field do the student a disservice. They will not be afforded extra time in the real world because we deal with life and death situations.” Another participant suggested accommodations allow students to perform below industry standards stating, “You are required to perform at a certain level in our field. Accommodations tell our employers this student cannot perform at that level and unless you lower the level they will not be able to do the job.” One participant, when asked to describe her overall experiences with students with disabilities stated:

Usually students with psychological disabilities or mental disabilities are difficult. I have had students that were not mentally capable of handling the rigor of the class or program and they couldn’t handle constructive criticism. This is a problem because we have an obligation to prepare

students for the workplace and there is an expectation of certain behavior and if you can't handle a little criticism you're in the wrong profession.

**Faculty concerns for academic integrity.** In addition to expressing concern accommodations do not adequately prepare students for the rigors of a university or workplace, faculty appear to perceive accommodations as a threat to the integrity of the program. Phrases from the open-ended survey questions such as “fairness to all students,” “reasonable accommodations,” and “ethical considerations” were identified and similar phrases were also identified in the interview transcripts. Many of the concerns faculty had with accommodations with respect to expectations and adequately preparing students for the rigors of university or workplace settings were echoed in their discussion of academic integrity. However, faculty also expressed frustration and perceived some students used accommodations to circumvent program requirements or to gain an advantage over other students. For example, one participant stated:

This happens a lot. ADHD students don't ask for accommodations until they are failing. I am forced to make changes in the middle of the semester for them, which I do but then they want extra accommodations. They always want more than what is given; it's never enough. They always ask for extensions on top of their already given extra time. I already give every student a week to complete assignments so no one should need extra time in the first place but they get it and you know this is difficult because they are always behind the other students. Those two extra days could be used on the next week's assignment but anyhow they

still ask for extensions. And I don't time my tests but they want extra time for them too. How can you give somebody extra time on an untimed test?

Faculty expressed significant concerns with accommodations they believed were unfair to other students. Accommodations which reduced or eliminated program requirements for students were deemed unfair by many of the participants. Faculty frequently referenced reducing the number of math problems in homework assignments and eliminating the physical fitness requirement of running a mile in under 20 minutes as areas of concern. One participant suggesting,

Accommodations are supposed to be reasonable. If you are unable to perform all the requirements of the program then you cannot be in the program. In our program, if you cannot run a mile in under 20 minutes, you cannot do the job.

Another participant stating,

Do you think I want students to answer so many questions because I like grading them all? No, they are given for a reason, because they need the practice, and if a student can't do them all because of a disability, then they can't be in my class.

Lastly, faculty expressed concerns regarding the ethics of providing students with accommodations in certain situations. Most faculty concerns involved adequately preparing students with disabilities for the rigors of a university or workplace. However, several faculty expressed concerns with providing students with false hope as expressed by one participant.

I don't generally have a problem with accommodations. They are usually easy to implement and the other students don't question them. But sometimes administration wants us to implement accommodations that in my opinion are not fair to the student with disabilities. As a faculty member, I have an ethical problem with setting my students up for failure and I believe that some accommodations do just that. For example, I have this student who is blind due to an accident while in the military. They were a corpsman in the military and now that they are stateside, they want to work in the healthcare field. I have been asked to identify accommodations that will allow this student to proceed in the field. I can't do that, it's not fair to the student! I don't know of a single doctor, nurse, or EMT that is blind! Wouldn't it be more ethical to help this student find another route in the healthcare field? I'm not trained on how to deal with this. I want to help this student but I don't want to do something that will set them up for failure either.

**Need for training.** Nearly every participant expressed a need for training with much of the training requested focused on students with specific disabilities. Additionally, the majority of faculty in the present study (84.62%) expressed a desire for more information on their legal responsibilities regarding students with disabilities and the college's requirements for providing disability services. This suggests faculty are aware they have a legal responsibility but does not address the faculty's level of understanding disability legislation or the needs of students with disabilities. Participants consistently used phrases related to training such as "disability-specific,"

“accommodations training,” “training on the laws,” and “training for all”. When asked what faculty needed to work with students with disabilities, one participant put it this way,

In our area, most of the faculty are not trained educators. We come from industry, often times an industry where accommodations do not exist. So, what we need is training. Training on what the different disabilities are and how they manifest in our classes. We need training on different teaching techniques for each disability so that when a student with autism comes into my class I know what to do. We need training on how to deal with bad behaviors in class that are a result of a disability and we need training on what to look for in our classes since some disabilities are not visible. Most of all we need regular updates on the laws. None of us want to do something that is going to jeopardize our livelihoods.

Another participant expressed the need for training in the following manner,

We need disability-specific training. What I mean is we need training on how to deal with students with disabilities based on their disability. In my opinion, psychological disabilities are the overwhelming majority of the disabled students I have taught. After I get them to disability services, the greatest challenge I have as a faculty member, is how to get them to behave in the classroom. While I am not a physician and have zero medical training, I can easily spot these students. They are the ones who refuse to stop talking in class, blurt out strange things at random times, are

so nervous they cannot sit still and will change seats 4 different times during a 1-hour class, and the list goes on and on.

Many faculty also requested training on how best practices to implement accommodations and training on different teaching methods to would reduce the stigma of classroom accommodations. Several faculty requested regular training on the federal laws that govern accommodations as well as updates in state and institutional changes regarding students with disabilities.

Lastly, faculty requested training for faculty, staff, and students. Many participants suggested they were uncertain where students with disabilities could obtain information regarding their rights and responsibilities. They further suggested students were equally uncertain. One participant suggested,

I've been employed by the college for many years and until [the Disability Services Coordinator] was hired, I had no idea where to send students who wanted accommodations. The college does a good job of making sure faculty know their responsibilities and are aware of the laws that govern us. But it [the college] does a terrible job of letting students know where they should go if they feel they need and are eligible for accommodations. I think in addition to training faculty, (the Disability Services Coordinator) should conduct training for staff, students, and their parents on what the college offers and who is responsible for what. And I think the college should make it easier for disabled students to find the information on our website – it's very difficult and I would think more so if you are disabled.

**Institutional use of antiquated language.** There were faculty requests for many types of training, however none of the faculty participants suggested the need for training in disability etiquette. Data analysis suggests faculty in the present study often use antiquated or problematic language when discussing students with disabilities. According to Siebers (2011), use of such language is an expression of the expectations of the student with disabilities that is focused on the disabled body. The use of such language is also a key component in the social construction of disability for the institution (Shakespeare, 2006).

Faculty participants in the open-ended survey and interviews questions frequently referred to students with disabilities as “disabled students”, “wheel-chair bound students”, and “special needs students.” One participant described their experience with a student this way

There was one special needs student with physical disabilities. He was wheelchair-bound, just graduated from high school, and was in a remedial computer course. He was a special ed. student and had an IEP in high school. Because of how he was treated in high school, he was used to and expected much more than what is offered here.

Another participant shared the following:

I’m usually good with handicapped students or as we call them in my program, “handicapable students”, but I had this one student that was really difficult and didn’t want my help. This special-needs student had emotional difficulties and the harder I tried to help the more they pulled



back. That really hurt because the student dropped out of the program and I know they would have been good if they just would have accepted help.

The use of problematic language was also used in institutional documents. Four institutional documents, the Operations Manual, Employee Policy and Procedure Manual, College Catalog and Student Handbook, the Faculty Handbook and the college website all contain similar antiquated language. Three documents, the Operations Manual, the Faculty Handbook, and the college's website used the terms "disabled student" and "special-needs student" when describing students with disabilities and seem to reinforce faculty use of such language. Additional analysis of these documents found that it has been more than 10 years since these documents have been updated and could account for the consistent use of antiquated language by faculty.

Faculty participants also seemed to use problematic language when describing students' disabilities. The terms "psychologically disabled," "emotionally disabled" and "mentally disabled" were often used by faculty participants. Similar terms "psychological disabilities," "emotional disabilities," and "mental disabilities" can be found in the disability statement on each faculty's course syllabi and the college website. Consistent use of such phrases could also suggest that because the same antiquated language is used in institutional documents, faculty may not recognize the impact such language has on the students.

The language used by faculty when describing students with disabilities and disabilities themselves may be reinforced in institutional documents, however the language itself is antiquated and in some cases considered offensive. The language used by faculty participants suggests students with disabilities are defined by their conditions

or diseases, which is an outdated notion (Brault, 2012). This lack of awareness about disabilities can lead to unintended stereotypes and discrimination. Current disability etiquette suggests using “people first” language where faculty would use generally accepted terms such as “a student who uses a wheelchair” rather than a “wheel-chair bound student” (Brault, 2012).

## **Summary**

Chapter four was divided into two sections and included participant sample and data analysis. The first section used descriptive statistics to develop a profile of the participants using the results from the ATDP survey, interview transcripts, and institutional documents. The second section uses content analysis and descriptive coding to present the analyzed data collected and provided a description of the responses to the survey, interview questions, and institutional documents. Connecting strategies assisted in the development of a deeper understanding of faculty attitudes toward students with disabilities. Data analysis, including statistical analysis of participant responses to the ATDP survey and content analysis through coding of open-ended questions, interview responses, and institutional documents further strengthened that understanding. This section also included a description of the major themes that emerged as a result of the data analysis: (a) faculty attitudes toward accommodations for students with visible versus invisible disabilities, (b) faculty concerns for workplace expectations, (c) faculty concerns for academic integrity, (d) need for training, and (e) institutional use of antiquated language.

## **Chapter 5**

### **Discussion of Findings and Recommendations**

This single case study was designed to explore community college faculty attitudes toward students with disabilities and how their attitudes influence the use of classroom accommodations. Using social constructivism, disability theory, and the researcher's personal and professional experiences with students with disabilities, this study took place at a small rural community college in the eastern United States. The study was conducted during a time when more students with disabilities understand the value of a college education and pursue that education at community colleges with increasing rates. With the increasing number of students with disabilities enrolling at community colleges and the varying approaches of studying faculty attitudes, this study is important to better understand how community college faculty attitudes toward students with disabilities impacts their use of accommodations in the classroom. Armed with this deeper understanding, community college faculty can begin to make changes that can improve the educational experiences of students with disabilities.

#### **Purpose of the Study**

The purpose of this study was to explore community college faculty attitudes of students with disabilities and explore how their experiences and attitudes influence the use of classroom accommodations. The purpose of this exploratory case study was based on two propositions (a) faculty attitudes toward students with disabilities are influenced by their experiences with students with disabilities and (b) faculty attitudes toward students with disabilities will be reflected in their use of classroom accommodations. It was expected that faculty attitudes toward students would vary based on their prior

experiences with individuals with disabilities. Responses from faculty participants were also expected to provide insight into how their attitudes influence their willingness to provide accommodations in the classroom.

The propositions were used to assist in the analysis of the data produced in the present study. Data analysis resulted in the identification of five themes (a) faculty attitudes toward accommodations for students with visible versus invisible disabilities, (b) faculty concerns for workplace expectations, (c) faculty concerns for academic integrity, (d) need for training, and (e) institutional use of antiquated language. Theme development produced several key findings:

1. Faculty generally expressed positive attitudes toward students with visible disabilities.
2. Faculty expressed significant concerns for the academic success of students with invisible disabilities.
3. Faculty were willing to provide various types of accommodations however, they were less willing to provide accommodations they believed provided an unfair advantage for students with disabilities or did not adequately prepare students for the rigors of a university or workplace setting.
4. Faculty expressed a significant need for disability-specific training to understand better the needs of students with disabilities, expand teaching strategies, and improve the use of classroom accommodations.
5. Faculty consistently used antiquated language when discussing students with disabilities. This problematic language was also present in several institutional documents.

Four research questions, which focused on faculty experiences and attitudes toward students with disabilities and classroom accommodations, guided the present study and aligned its design, instruments, and results.

1. What are community college faculty attitudes toward students with disabilities?
2. How have community college faculty's experiences with students with disabilities influenced their attitudes toward students with disabilities?
3. How are those attitudes reflected in the community college faculty's use of accommodations in the classroom?
  - a. Which accommodations are community college faculty most likely to use in the classroom?
  - b. Which accommodations are community college faculty least likely to use in the classroom?
4. What concerns and suggestions do community college faculty express regarding students with disabilities?

The research questions reflect the propositions and focus on faculty attitudes toward students with disabilities and the use of classroom accommodations. The quantitative results of the ATDP survey and a qualitative assessment of the faculty responses to the open-ended survey questions, interview questions, and institutional documents were used to answer these questions and explore facets of faculty attitudes toward students with disabilities.

### **Interpretation of Findings**

Throughout the analysis of the data, the study's conceptual framework social constructivism, disability theory, and the researcher's personal and professional

experiences were aligned with the propositions and research questions. As the study progressed, results were analyzed through the lens of the conceptual framework, especially social constructivism and disability theory to make abstract distinctions and organize ideas (Maxwell, 2013). This process provided context for the study based on literature, organized the data by linking it around common themes, and facilitated the interpretation (Miles & Huberman, 1994). Additionally, study results were compared to results of previous studies to increase the rigor and provide external validation (Yin, 1994). The result was a more comprehensive understanding of the data.

Findings suggest that although faculty in the present study indicated they had a positive attitude toward students with disabilities, interview and open-ended responses reflect the use of antiquated language, negative attitudes toward students with invisible disabilities, and a lack of understanding of what is considered a disability. Faculty responses also suggest faculty in the present study lack an understanding of what is needed to effectively assist students with disabilities in the classroom. For example, one participant defined a student with a broken leg as disabled and another faculty member described non-English speaking students as disabled. The same participant suggested it was the student's responsibility to learn English if they wanted to work in the area because "people around here can't understand what you're saying when you have such a heavy accent," further suggesting this faculty member holds a flawed definition of disability.

Some interview participants and three institutional documents, including the Faculty Handbook, used antiquated language when referring to students with disabilities. When asked to describe students with disabilities, some faculty used terms such as

“disabled students,” “wheel-chair bound students,” and “special needs students”. For example, one participant stated, “I have a wheel-chair bound student who does very well in my class.” Another participant described students with disabilities “With us being close to a military base, I teach disabled students every semester.” The use of such antiquated language suggests faculty participants lack training in current disability etiquette. Despite faculty participants’ understanding of key civil rights laws such as the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, their use of antiquated language suggests many misunderstandings about people with disabilities persists (Brault, 2012).

The label of disability may also lead to misunderstandings, stereotypes, and influence faculty’s expectations of students with disabilities. Disability theory suggests the label of disability is reproduced in ideas and actions that may be well intentioned yet lower faculty expectations of students with disabilities (Siebers, 2001). When asked what faculty need to work with students with disabilities, faculty in the present study frequently mentioned patience and the need to provide extra time and care to students with disabilities. The same faculty also suggested students with disabilities should be treated the same as students without disabilities. These faculty appear to express good intentions when stating all students should be treated equally however, they seem to have a general lack of understanding of the needs of students with disabilities when they suggest the use of patience, extra time, and care (Murray, et al., 2011).

Responses in the present study would suggest the label of disability, coupled with a general lack of understanding of the needs of students with disabilities, has been reproduced in the attitudes and actions of faculty participants. These attitudes may have

manifested in stereotypes and lower expectations of students with disabilities. Minner and Prater (1984) concluded that university faculty might be susceptible to frequently held stereotypes and lower expectations of students with disabilities, such as those expressed by the faculty in the present study. These stereotypes and lower expectations may in turn influence university faculty attitudes toward students with disabilities and be a barrier for students' success (Minner & Prater, 1984). The present study suggests this may also be the case for community college faculty.

The key findings of this case study confirmed several other conclusions presented in the literature review regarding university faculty attitudes toward students with disabilities and add to the existing body of research by addressing community college faculty attitudes and experiences. For example, the present study suggests community college faculty have generally positive attitudes toward students with disabilities but express concerns about the academic ability or success of students with non-physical or invisible disabilities. Baggett (1994) and Houck et al. (1992) conducted similar studies with university faculty and posit university faculty express different levels of acceptance of students with disabilities depending upon the type of disability. Their studies suggest faculty have more positive attitudes toward students with visible or physical disabilities and less positive attitudes toward students with invisible or non-physical attitudes (Baggett, 1994; Houck, et al., 1992). Additional studies conducted by Barnard (2008) and Rao (2004) also suggest university faculty have less positive attitudes towards students with non-physical disabilities. Sowers and Smith (2004) further suggest university faculty have greater concerns for the academic success of students with invisible disabilities than visible disabilities.



Several studies (Fonosch & Schwab, 1981; Houck et al., 1992; Lombardi & Murray, 2011) suggest university faculty, in general, have a positive attitude toward classroom accommodation. These same studies further suggest university faculty express concerns regarding the efficacy of accommodations that they deem create an unfair advantage for students with disabilities or inadequately prepare the students for the rigors of academic life (Fonosch & Schwab, 1981; Houck et al., 1992; Lombardi & Murray, 2011). The present study suggests community college faculty are also willing to provide classroom accommodations. However, they too expressed concerns regarding accommodations they deem present an unfair advantage for students with disabilities. Such accommodations included unproctored tests, untimed tests, and the waiving of program requirements, which participants believe inadequately prepare students for the rigors of the workplace.

Lastly, the present study suggests community college faculty expressed a significant need for and could benefit from disability-specific training. Several studies (Murray et al., 2011; Sweeney et al., 2002; and Vogel et al., 2008) would support this finding. In their studies, university faculty who participated in disability-specific training had a greater understanding of the needs of students with disabilities and expressed more positive attitudes toward students with disabilities (Murray et al., 2011; Sweeney et al., 2002; Vogel et al., 2008).

A discussion of the research questions as well as the limitations and implications of the study; recommendations for future research, practice, and leadership; and conclusions are presented in detail next.

**RQ 1 - What are faculty attitudes toward students with disabilities?** Faculty attitudes toward students with disabilities is an important factor in faculty's willingness to provide classroom accommodations. According to several studies, most faculty demonstrate a positive attitude toward students with disabilities (Fonosch & Schwab, 1981; Houck et al., 1992; Lombardi & Murray, 2011). The present study also demonstrated community college faculty express generally positive attitudes toward students with disabilities. Faculty scores on the ATDP scale ranged from 78 to 143 and indicates faculty in the present study have a mildly positive attitude toward students with disabilities. When describing students with disabilities, faculty frequently used terms such as "hard-working," "upbeat," and "motivated." The use of these terms would suggest faculty in the present study have positive perceptions of students with disabilities.

Faculty responses to the open-ended survey questions would indicate faculty also view students with and without disabilities similarly. Responses included statements such as "students with disabilities are as diverse as non-disabled students." Other statements such as "some experiences with students with disabilities have been positive and some have been negative, just like students without disabilities; it depends on the student" further suggests faculty view students with and without disabilities similarly.

At first glance, the responses from faculty regarding students with disabilities appear to be positive, however several factors can influence these results. The present study was conducted at a community college with a small number of faculty participants and where participation was voluntary. The voluntary nature of the study could have resulted in more participants interested in the issues pertaining to students with disabilities. Faculty responses in the ATDP survey could also have been skewed by

faculty's interest in identifying with socially acceptable responses known as social desirability bias (Paulhus, 1991). Social desirability bias is a type of response bias that results in the tendency for survey questions to be answered in a manner that will be viewed favorably by others (Paulhus, 1991). Such bias may have resulted in more positive responses to questions and an overall more positive attitude toward students with disabilities.

Faculty responses also could have been effected by certain faculty characteristics such as program of study, faculty rank, gender, and age. Several studies (Baggett, 1994; Bourke et al., 2000; Fonosch & Schwab, 1981; Rao & Gartin, 2003; and Vogel et al., 1999) have examined differences in attitudes toward students with disabilities based on these faculty characteristics. Because of the small sample used in this study and the need for confidentiality, only four characteristics were analyzed: gender, age, years of teaching experience, and academic division. Additionally, years of teaching and age were expressed using ranges to further ensure confidentiality and align with institutional data.

Research examining attitudes toward students with disabilities by male and female faculty have produced inconsistent results. Studies by Baggett (1994) and Fonosch & Schwab (1981) found that female faculty have more positive attitudes toward students with disabilities than their male counterparts. However, studies by Bourke et al. (2000) and Vogel et al. (1999) found that faculty attitudes toward students with disabilities by gender resulted in no significant difference. The present study supports the latter findings and suggests there is no significant difference between male and female participants. The mean score on the ATDP scale for male participants was 114 and 116 for female participants. These scores indicate that both male and female respondents

have a mildly positive attitude toward students with disabilities. However, these results also may be influenced by sampling bias as the study sample consisted of a higher percentage of female participants over the age of 50.

A more positive attitude toward students with disabilities has been linked to a faculty member's age, years of experience, and academic division. Vogel et al. (1999) found that younger faculty members were more likely to express a positive attitude toward students with disabilities than their older counterparts. Findings in the present study differ and suggest faculty over the age of 50 are likely to have the same attitude as younger faculty. With a mean ATDP score of 119, faculty over 50 show little difference in mean scores with faculty in the 20 to 30 (118) and 31 to 40 (120) age groups. They do however demonstrate a more positive attitude toward students with disabilities than their counterparts in the 41 to 50 age group (102). Again, these findings may be the result of sampling bias and were not tested for statistical significance.

Results from the present study regarding years of experience and its influence on faculty attitudes toward students with disabilities did not provide much consensus. Since the college does not offer faculty tenure, years of teaching experience was used in the present study to represent faculty rank. Results from the present study were varied and provided inconsistent results. Faculty with 11 to 20 years of experience had the lowest mean score of 106 on the ATDP scale and faculty with more than 20 years of experience had the highest mean score of 119. Faculty with 6 to 10 years of experience had a mean ATDP score of 112 and faculty with 0 to 5 years of experience had a mean score of 118. These results would suggest that years of teaching experience has little influence on faculty attitudes toward students with disabilities. These results differ from Rao and

Gartin's (2003) findings which suggest faculty rank does influence attitudes toward students with disabilities and that full professors had more negative attitudes toward students with disabilities than associate or assistant professors.

Another characteristic that may influence faculty attitudes toward students with disabilities is the disciplinary field with which faculty are affiliated (Rao, 2004).

University faculty in education, liberal arts, and architecture have been shown to have the most positive attitudes regarding students with disabilities, whereas faculty in science, engineering, commerce, and industry tend to have the least positive attitudes (Rao, 2004).

In the present study, faculty mean ATDP scores confirm previous study findings regarding faculty in liberal arts and business and industry however differ when it comes to faculty in the health sciences. In the present study community college faculty in health science had the highest mean ATDP score with 118 and liberal arts faculty followed closely behind with a mean ATDP score of 117. These scores would indicate that faculty in these divisions have more positive attitudes toward students with disabilities. Applied Sciences faculty's mean ATDP score of 109 would also suggest this faculty have the least positive attitudes toward students with disabilities.

Further analysis revealed that community college faculty in the Applied Sciences division typically entered teaching from successful careers in industry such as business and manufacturing. These faculty were hired, in part, because of their workplace experiences. Faculty participants in these fields frequently suggested in the open-ended survey and interview questions, that there were performance expectations within their respective industries. The mention of these expectations could suggest a belief students

with disabilities are unable to fully participate in their programs because of their disability and would explain their low ATDP scores.

Health Science faculty seem to hold a similar view with respect to students with disabilities and their ability to fully participate in their programs. In the open-ended survey and interview questions, health science faculty participants repeatedly expressed concerns regarding students with disabilities and accommodations. However, health science faculty had the highest mean ATDP scores. The faculty's expectations and negative attitudes toward classroom accommodations seem to contradict the mean ATDP score. Healthcare faculty's high mean score on the ATDP would suggest they have a positive attitude toward students with disabilities yet their negative comments suggests they have concerns with a student's ability to perform in their field.

A study of nursing faculty attitudes toward students with disabilities by Sowers and Smith (2004) indicated nursing faculty consistently expressed low expectations of students with disabilities. Faculty participants in that study suggested students with disabilities were unlikely to become successful nurses, citing patient safety as a primary concern (Sowers & Smith, 2004). Health science faculty's views of disability in the present study also appears to be constructed on several workplace expectations and standards, and regard students with disabilities as unable to fully participate in the world of healthcare (Wendell, 1996). Although health science faculty in the present study expressed positive attitudes toward students with disabilities, it is the faculty's workplace experiences and classroom experiences with students with disabilities that appear to have the greatest impact on their attitudes toward students with disabilities.

## **RQ 2 - How have faculty's experiences with students with disabilities**

**influenced their attitudes toward students with disabilities?** Some of the same studies that examined faculty attitudes toward students with disabilities based on faculty characteristics (Baggett, 1994; Fonosch & Schwab, 1981; Houck et al., 1992) have also investigated how disability type influence faculty attitudes toward students with disabilities. In their studies, faculty members seem to be more accepting of students with physical or visible disabilities such as mobility disabilities due to paralysis or pain than invisible disabilities such as mental health or learning disabilities (Baggett, 1994; Houck et al., 1992). Adding to the findings from these studies, Zhang et al. (2010) concluded in their study that positive attitudes toward students with disabilities could be linked to prior positive experiences with students with disabilities. Additionally, Fonosch & Schwab (1981) reported that positive attitudes toward students with disabilities by community and technical college faculty are also linked to positive experiences with one or more students with disabilities.

The present study supports the findings in Zhang et al. (2010) and Fonosch and Schwab (1981) and suggests that faculty with more positive experiences with students with disabilities had more positive attitudes. Additionally, findings in the present study suggest faculty experiences with students with disabilities influence how they perceive students as individuals. For example, when interview participants were asked to describe any differences between students with and without disabilities, six of the 13 interview participants reported having negative experiences with students with disabilities and further suggested there were obvious differences between students with disabilities and students without disabilities. Interview respondents described experiences with students

waiting until the final exam to ask for accommodations, using accommodations to cheat, and exhibiting disruptive behavior in the classroom. The same respondents described the students with disabilities as “lazy,” “cheats,” and “unpleasant.” The remaining seven participants either indicated they had never experienced a negative situation with students with disabilities or only describe positive experiences. The same faculty described students with disabilities as “no different than students without disabilities” with one participant stating, “we judge them as individuals just like we would any student.”

The present study also supports the findings in Baggett (1994) and Houck et al. (1992) with respect to the type of disability. Six interview participants who reported negative experiences with students with disabilities also expressed concerns regarding students with invisible disabilities. These participants suggested the differences between students without disabilities and students with invisible disabilities were difficult to identify and even more difficult to deal with. One participant explained her position by stating,

In some cases, there is an obvious difference, I can see the wheelchair or the service dog but there are times when the differences aren't obvious. For example, students with Autism might not look different at first but pretty quickly you can see the differences. Then there are times when there are no obvious differences, the student is doing well and then you get an accommodation sheet.

Findings in the present study suggest there is a direct link between the type of disability and faculty experiences with students with disabilities. Results also suggest faculty are less confident in the abilities of students with invisible disabilities. Less



visible or hidden disabilities, such as ADHD, autism, or mental health disabilities may evoke less positive characterizations by faculty because the faculty do not perceive the student as disabled (Barnard, et al., 2008). This perception is reinforced when students choose not to ask for accommodations until later in the semester or until they are in crisis. These actions may cause faculty to feel deceived by the student and evoke a negative attitude toward the student and classroom accommodations (Barnard, et al., 2008). This finding suggests faculty who feel deceived are less likely to have a positive attitude toward students with disabilities.

**RQ 3 - How are those attitudes reflected in the faculty's use of accommodations in the classroom?** The laws that protect student rights and the faculty's personal beliefs regarding students with disabilities are the two strongest predictors of use of accommodations in the classroom (Zhang et al., 2010). All faculty participants in the present study indicated they were aware of and had a general understanding of the federal laws and the use of classroom accommodations. However, the faculty's level of understanding varied, as did their attitudes toward students with disabilities. Faculty in the present study with positive attitudes toward students with disabilities were more likely to have a positive attitude toward classroom accommodations whereas faculty with negative attitudes were more resistant to classroom accommodations.

Rao (2004) suggests that previous positive experiences with students with disabilities will result in a more positive attitude toward students with disabilities. Murray et al. (2011) suggest faculty with positive perceptions of students with disabilities and faculty with high expectations of students with disabilities were more likely to be

supportive of students with disabilities and provide classroom accommodations. University faculty in the Murray et al. (2011) study expressed a greater willingness to provide minor accommodations such as recorded lectures, and extended time on tests rather than major accommodations such as alternative assignments or waiving graduation requirements. One explanation for this finding could be faculty perceive major accommodations as undermining the academic integrity of the course and compromising the overall rigor of the program.

Findings in the present study confirm the results in Murry et al., (2011) adding community college faculty also expressed a greater willingness to provide minor accommodations rather than major accommodations. On the open-ended survey questions, most of the participants (62%) in the present study indicated they had positive experiences with classroom accommodations and expressed a willingness to provide various types of minor accommodations such as recorded lectures, accessible furniture, assistive technology, and extended time on tests for students with documented disabilities. One participant stated, “My students and I view accommodations as almost benign, copies of class notes, extra time on tests are no big deal.” Other accommodations such as a quiet or low distraction setting had both positive and negative comments. One participant summed accommodations this way,

I have two minds on that subject. First, if a student requires extended time on tests or assignments or if they require a quiet setting for testing, I believe it is mandatory/compulsory for the student’s success. However, by removing them from the common testing environment, you do bring the spotlight to that and remove the student from the teacher.

Some participants in the present study expressed frustration with student expectations regarding the use of accommodations. This finding suggests student expectations regarding the use of accommodations also influences a faculty's willingness to implement classroom accommodations. One participant stated, "This happens a lot, students with accommodations want extra accommodations, more than what they already have, it's never enough." Another participant posed the following, "I do find sometimes that students tend to not want to use them (accommodations), which makes me question why they have them in the first place." A few respondents also expressed concerns with the amount of time needed to implement the accommodations stating, "Some accommodations can be negative especially if they are burdensome."

There were some faculty however, who viewed accommodations as relaxing of standards and 29% of faculty respondents in the present study expressed concerns regarding their use. These respondents indicated they would be less willing to provide accommodations they considered excessive or inappropriate for the course or program (Siebers, 2001). Faculty further expressed concerns with accommodations that enable students with disabilities to perform at levels below the standards constructed by society or the workplace (Wendell, 2008). Results from the present study regarding academic integrity align with responses in similar studies with university faculty (Houck et al., 1992; Murray et al., 2011). In their studies, university faculty were less likely to provide accommodations such as alternative assignments or waiving program requirements as they deem them disproportionate and unfair to other students (Houck et al., 1992; Murray et al., 2001).

Results from the present study seem to indicate community college faculty attitudes toward students with disabilities also influence their willingness to implement classroom accommodations. Faculty in the present study consistently expressed an understanding of their legal obligation to provide classroom accommodations to students with disabilities, yet it seemed to have minimal influence on faculty's willingness to implement classroom accommodations other than to acknowledge that faculty are required to do so.

**RQ 4 -What concerns and suggestions do faculty express regarding students with disabilities?** With an understanding of their legal obligations, faculty in the present study expressed concerns regarding their ability to teach and make appropriate accommodations for students with disabilities. Faculty participants also expressed an awareness of their level of understanding regarding students with disabilities. When asked what would help faculty to better work with students with disabilities, participants consistently requested additional training.

The majority of faculty in the present study (84.62%) expressed a desire for more information on their legal responsibilities regarding students with disabilities and the college's requirements for providing disability services. This suggests faculty are aware they have a legal responsibility but does not address the faculty's level of understanding disability legislation. This is important because previous studies by Rao (2004) found knowledge was a significant predictor of faculty willingness to provide classroom accommodations. In the present study, a lack of understanding or specific knowledge about disability, student rights, or faculty's responsibilities did not appear to deter faculty from working with students with disabilities. In fact, faculty responses included

significant requests for in-depth training on teaching methods for specific disabilities and implementing accommodations while ensuring the integrity of the course.

Participants also requested training on invisible disabilities, especially emotional and mental health disabilities. Participants frequently described concerns regarding students with invisible disabilities, with one participant stating, “Some disabilities, and usually not the physical disabilities, need more one-on-one time with faculty not accommodations.” A second said, “Usually mental health issues are difficult to handle, especially in certain programs and I’ve never had an accommodation work for these students.” These concerns align with Rao’s (2004) findings and suggest a lack of knowledge and understanding of the impact invisible disabilities have on the student impacts the faculty’s willingness to provide accommodations.

Faculty also raised concerns regarding accommodations that conflicted with workplace conditions. Faculty in the Health Sciences expressed concerns certain accommodations such as extra time on assignments or tests were unrealistic. As one participant suggested “Giving students with disabilities extra time just gives them false hope. We work in life or death situations and you don’t get extra time. If you need extra time people are going to die.” Health Science faculty have specific performance expectations and standards for their programs and suggest students with disabilities are unable to fully participate in their programs because of their disabilities. Healthcare faculty further suggest that, depending on the disability, students with disabilities are not able to fully participate in the healthcare workplace (Wendell, 1996). This finding suggests there is a need for additional research regarding the use of accommodations in educational fields where such standards exist. Studies that include clinical instructors and

apprenticeship or internship supervisors could explore more deeply the foundation of the faculty's concerns and identify more suitable accommodations for students with certain disabilities.

### **Limitations of the Study**

Despite the efforts to ensure trustworthiness, there are several limitations to this case study that may affect generalizations and should be considered in the interpretation of these findings. This study used a purposeful sample of community college faculty who volunteered to participate and therefore the results cannot be generalized beyond the parameters of the sample. This study also did not include any longitudinal data from a cohort of faculty that could provide more information of faculty attitudes and willingness to provide accommodations throughout a student's experience at the institution. Despite these limitations, the information obtained in this study is important in understanding faculty attitudes toward students with disabilities and classroom accommodations. It is equally important to understand the biases that may influence the interpretation of the results.

First, there is potential sampling bias. This study was conducted at a single community college in the southeastern United States using a small number of faculty participants and where the college's faculty make-up includes a rather high percentage of white females over the age of 50. However, participants in this study were consistent between the instruments and representative of the college's faculty. Further, the survey response rate at 20% was less than ideal however, consistent with response rates for surveys at the institution and with other studies involving university faculty and students with disabilities (Bourke et al., 2000; Murray et al., 2011; Vogel et al., 1999).

Additionally, participation in the survey and interview were voluntary therefore the sample included only those faculty willing to participate or were more interested in the issues pertaining to students with disabilities than those who did not. Because the study took place at a small community college, there may have also been a few faculty who participated out of a sense of obligation to help a colleague with their dissertation. As a result, sampling bias is important to consider as the findings may not accurately reflect the attitudes of all faculty at the institution or may not be relevant to other colleges and universities whose faculty make-up differs.

The second limitation, important to consider when interpreting the results of this study, is respondent bias. The survey instrument used in this study was self-reporting, which allows the potential for dishonest responses. Due to the sensitive nature of the study and that interviews were conducted face-to-face, it is possible that participants engaged in socially acceptable bias and provided less than honest responses. However, this is difficult to determine as no classroom observations were made to support participant answers. To avoid this bias, participants were assured throughout the study that all responses were confidential.

A third limitation is researcher bias. Research in general is a human activity and as such bias can occur at any phase. The researcher must be aware of their own experiences and beliefs regarding the subject of the study and the ways they influence the quality of the data collected and reported (Baxter & Jack, 2008). Additionally, case study research is typically conducted by one researcher which can lead to biases in data collection and interpretation (Baxter & Jack, 2008).

I am aware that my personal and professional experiences with students with disabilities and the faculty participants has the potential for researcher bias. As a result, the potential for research bias was a significant consideration, especially during the study design, data collection, and data analysis phases of this study. To avoid bias, I kept a journal where I would identify my thoughts and feelings throughout the study. I also engaged in member checking by asking participants to review interview transcripts and the college's Disability Services Coordinator to review my data analysis and provide clarification where needed. Through journaling and member checking I remained aware of the sources of my biases and ensured my interpretations of findings were true to the respondents.

### **Implications of the Study**

Multiple studies (Murray et al., 2011; Sweeney et al., 2002; Vogel et al., 2008) have examined faculty attitudes toward students with disabilities, classroom accommodations, and the importance of training. Findings in these studies emphasize the need for training for university faculty however, they did not include community college faculty (Murray et al., 2011; Sweeney et al., 2002; Vogel et al., 2008). Conducted at a small community college in the southeastern United States, the results of the present study add to the existing body of knowledge regarding faculty attitudes toward students with disabilities by providing information and insight into community college faculty attitudes and perceptions of students with disabilities and classroom accommodations.

Faculty in the present study had a variety of experiences with students with disabilities and drew on these experiences to describe faculty needs when working with students with disabilities. Results from the present study suggest that although faculty



have a generally positive attitude toward students with disabilities, faculty have concerns with their understanding of the needs of students with disabilities and the use of accommodations. Comments from participants in the present study focused on the need for improved knowledge and increased training on how best to work with students receiving accommodations. Findings from the present study also emphasize the importance of training on the use of accommodations in the classroom. Lastly, the present study has revealed the need for disability etiquette training for all members of the college community. Such training would not only improve the classroom climate but the overall culture of the institution.

Given the limitations and the nature of this study and the variation in faculty experiences with students with disabilities, several follow-up studies could be conducted to explore these variations and provide action steps to improve institutional practice.

**Recommendations for further research.** Further research that more closely examines the basis for the results of the present study could include a follow-up study using a larger sample obtained through random sampling procedures or multiple community colleges. A follow-up study that included questions associated with student diversity such as gender, ethnicity, sexual orientation, and socioeconomic status would enhance the understanding of faculty attitudes toward diversity as it relates to students with disabilities. A follow-up study that focused on disabilities associated with the military population would shine a light on the impact of disabilities in a military environment and further enhance the understanding of faculty attitudes toward students with visible and invisible disabilities. A comparative study examining faculty attitudes toward students with disabilities in 2-year and 4-year institutions would enhance the

understanding of any differences that may exist between community college and university faculty attitudes toward students with disabilities. Finally, a longitudinal study examining the actual use of classroom accommodations and other disability services on student success throughout college would round out the body of knowledge regarding faculty attitudes toward students with disabilities.

With the increase in access to higher education for students with disabilities, studies (Gibbons, Cihak, Mynatt, & Wilhoit, 2015; May & Stone, 2010; Patel & Rose, 2013) focus on student attitudes toward individuals with disabilities. These studies were conducted at universities and add to the body of knowledge regarding disabilities in higher education by adding the student perspective. A study that examined community college student attitudes toward students with disabilities would further add to the body of knowledge. Lastly, comparative studies that look at community colleges based on institutional size, geographic location, and type could identify differences in professional development resources associated with these characteristics and would add to the existing body of knowledge with respect to faculty training.

**Recommendations for policy.** Regardless of the institution's type, size, or geographic location, all policy manuals should be updated to include current laws and use acceptable language and practices. This is especially true for County Community College where several institutional documents, including the policy manual contain antiquated language and policies that do not support a positive culture for all students.

For example, a review of institutional documents at County Community College revealed a lack of policy regarding accessibility. Accessibility is defined as an institution's charge to ensure access to all instruction, services, spaces, and activities

provided by the institution regardless of disability (Mace, 2008). Accessibility is addressed in key provisions of the Americans with Disabilities Act of 1990 regarding program accessibility and equally effective communications (Americans with Disabilities Act of 1990). Program accessibility requires that colleges and universities ensure all programs, services, and activities, including communication, are accessible to people with disabilities (Mace, 2008). Equally effective communication requires colleges and universities ensure their communications with students with disabilities are as effective as communications with others (Mace, 2008). It is therefore recommended the college work with their Board of Trustees to develop such a policy that ensures program accessibility and effective communication for all students.

It is further recommended such a policy include universal design in the instruction, services, information technology, and physical spaces of the institution as universal design builds on the legal requirements of accessibility but with a much broader approach (Story, Mueller, & Mace, 1998). Universal design is the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design (Story, Mueller, & Mace, 1998). Implementation of universal design can include a statement on faculty syllabi that invites students to meet with the faculty to discuss individual learning needs; counters at service areas that are at heights accessible from both a seated and standing position; comfortable access to computers for both left-handed and right-handed students; and clear directional signs with large, high-contrast print (Story, et al., 1998).

The current policy regarding classroom accommodations at County Community College also lacks an inclusive mindset and suggests students bear the responsibility for

identifying their disabilities and for requesting the necessary accommodations. Furthermore, it is the responsibility of the disability services office to approve the accommodations and faculty's responsibility to ensure that the accommodations are provided to the student in a timely and responsive manner. This policy adheres to the laws that govern classroom accommodations but does not include faculty nor address the concerns faculty have regarding students' ability to meet classroom and workplace standards. It is recommended the current policy for determining classroom accommodations be revised to include a collaboration with faculty, the student, and the Disability Services Coordinator wherever possible, especially with programs that have stringent workplace standards. Such a collaboration would require student permission to protect their rights under the law, however could lead to more creative or innovative ways to accommodate the students and provide faculty with a better understanding of the student's needs.

By including universal design into the institution's policy regarding accessibility and creating a collaborative accommodation process, the institution would create more inclusive policies and procedures. Such policies and procedures would provide equal access to the college's educational services, programs, and activities in accordance with federal and state laws to all its students, including students with disabilities. Such policies, in combination with training and transformational leadership, could change the institutional climate regarding students with disabilities and improve the learning environment for all students.

**Recommendations for practice.** The results of the present study suggest that not only should the institution improve its policies and procedures, it should increase faculty

awareness of instructional practices and behaviors to improve the climate for students with disabilities. It further suggests faculty require meaningful training on several disability-related issues. Faculty in this study consistently requested additional training on the effects disabilities have on student performance in school, best practices in providing accommodations, and disability-specific teaching methods to improve the educational experience for all students. Institutional leadership should support such training and should empower the Disability Services Coordinator to provide information and meaningful training to all faculty, staff, and students regarding disability etiquette. Training should be grounded in disability theory where the social cause of disability is identified, normal human variation is recognized, and the voices of students with disabilities informs the training (Zhang et al., 2009). Disability awareness and sensitivity training, including disability etiquette and the use of person first language for faculty should also be incorporated more thoroughly into professional, course, and program development (Quinlan et al., 2012). Similar training for staff and administrators is also recommended, especially for individuals responsible for creating institutional policy.

Students at this institution should also participate in workshops that bolster self-advocacy so students request accommodations early and not wait until they are in crisis to acknowledge their disability. A review of current curriculum and online teaching practices to ensure accessibility and to eliminate any language that is discriminatory to students with disabilities would also be prudent, as it would begin to reshape the institutional narrative regarding disability (Quinlan et al., 2012). The Disability Services Coordinator should continue to review institutional documents and suggest changes that reflect a positive attitude toward students with disabilities. The creation of academic

support within the Disability Services Coordinator's office to assist faculty with requests for accommodations is strongly recommended. Lastly, college leadership should evaluate the location of disability services to ensure the most effective placement in either academic affairs or student services. Effective placement could improve faculty attitudes toward the use of classroom accommodations as they work with peers to improve their understanding of students with disabilities

**Recommendations for leadership.** Quality leadership and a positive institutional climate are critical in transforming faculty attitudes toward students with disabilities (McCarley, Peters, & Decman, 2014). A transformational leader provides that quality leadership by developing individuals and building teams with the values that create a climate conducive to learning for all students (Denhart, 2008). Transformational leadership facilitates educational change and contributes to organizational improvement, quality, effectiveness, and institutional culture (McCarley et al., 2014). Leaders should employ five core change strategies to facilitate comprehensive change; change that is intentional and pervasive; affects the values, beliefs, and structures of the institution; affects numerous units across the institution; and occurs over time (Kezar & Eckel, 2002). The core change strategies include (a) senior administrative support, (b) collaborative leadership, (c) robust design, (d) staff development, and (e) visible action (Kezar & Eckel, 2002).

To facilitate comprehensive change, senior administrative leadership should begin by providing needed value statements, resources, and structures (Kezar & Eckel, 2002). Additionally, institutional leadership should work collaboratively with faculty, staff, and the Board of Trustees to update institutional policies using appropriate language that

promotes awareness of disability and other diversity issues (Dehart, 2008). Leadership should also articulate a clear vision that describes a desirable yet flexible picture of the future of the institution (Kezar & Eckel, 2002). This vision should outline a set of goals and objectives. Leadership should engage in change activities that are collaborative, visible, and shared so individuals throughout the institution can see the change. This is important for the change to build momentum and continue (Kezar & Eckel, 2002).

To create improvement in the institutional culture, leadership should also focus on relationships and promote awareness of disability and other diversity issues, by engaging disability theory to inform new policies and revise existing ones (Siebers, 2011). For example, institutional leaders, with a strong commitment to the development of their employees, should require faculty and staff engage in disability training, including the laws that govern students with disabilities and disability etiquette (McCarley et al., 2014). Lastly, leaders should ensure the quality of instruction for students with disabilities by collaborating with faculty, staff, and students to develop training that addresses best practices for working with students with disabilities.

Quality leadership using these basic transformational practices can improve the understanding, acceptance, and inclusion of students with disabilities and remove existing barriers to success (Denhart, 2008). Leaders at County Community College could transform the culture regarding students with disabilities in three ways (1) support faculty and staff training, (2) revise existing policies using appropriate disability etiquette, and (3) create new policy regarding accessibility.

## **Conclusion**

Understanding faculty attitudes toward students with disabilities and the influence those attitudes may have on the implementation of classroom accommodations is still an area of significant research potential. This study was designed to explore faculty attitudes toward students with disabilities at a small rural community college in the southeastern United States. Guided by four research questions, the present study demonstrates faculty attitudes are socially constructed and those attitudes are influenced by faculty experiences with students with disabilities. The findings demonstrate community college faculty generally have positive attitudes toward students with disabilities and their experiences with students with disabilities will influence their willingness to use accommodations in the classroom. Faculty in the present study are willing to provide diverse types of accommodations to meet student needs, however they are less willing to provide accommodations they believe do not adequately prepare students for the rigors of a university or workplace setting.

The present study aligns with a similar study by Zhang et al. (2010) and suggests faculty experiences with students with disabilities and their attitudes toward students with disabilities are key indicators of the use of accommodations. Faculty in the present study expressed a desire for training regarding disabilities so they have a better understanding of disability's impact on the student and how best to accommodate them. With an increased knowledge of disabilities and the use of proper disability etiquette, this study suggests faculty may enjoy more positive experiences and express more positive attitudes toward students with disabilities.



## References

- American Association of Community Colleges (2014). *Students at community colleges*. Retrieved from: <http://www.aacc.nche.edu/AboutCC/Trends/Pages/studentsatcommunitycolleges.aspx>
- Americans with Disabilities Act of 1990, Pub. L. No. 101-336, 104 Stat. 328 (1990).
- Baker, K. Q., Boland, K., & Nowik, C. M. (2012). A campus survey of faculty and student perceptions of persons with disabilities. *Journal of Postsecondary Education and Disability*, 25(4), 309-329.
- Baggett, D. (1994, March). *A study of faculty awareness of students with disabilities*. Paper presented at the annual conference of the National Association for Developmental Education, Kansas City, MO. Washington, DC: ERIC Clearinghouse.
- Barnard, L., Stevens, T., Siwatu, K. O., & Lan, W. (2008). Diversity beliefs as a mediator to faculty attitudes toward students with disabilities. *Journal of Diversity in Higher Education*, 1(3), 169-175.
- Bassey, M. (1999). *Case study research in educational settings*. Philadelphia, PA: Open University Press.
- Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report*, 13(4), 544-559.
- Becker, M., Martin, L., Wajeeth, E., Ward, J., & Shern, D. (2002). Students with mental illness in a university setting: Faculty and student attitudes, belief, knowledge, and experiences. *Psychiatric Rehabilitation Journal*, 25, 359-367.
- Beilke, J. R., & Yssel, N. (1999). The chilly climate for students with disabilities in higher education. *College Student Journal*, 33, 364-372.
- Benham, N. E. (1997). Faculty attitudes and knowledge regarding specific disabilities and the Americans with Disabilities Act. *College Student Journal*, 31(1), 124-125.
- Brault, M. (2012). *Americans with disabilities: 2010 Household economic studies*. Retrieved from <https://www2.census.gov/library/publications/2012/demo/p70-131.pdf>

- Bourke, A. B., Strehorn, K. C., & Silver, P. (2000). Faculty members' provision of instructional accommodations to students with LD. *Journal of Developmental Education* 33(1), 26-32.
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal* 9(2), 27-40.
- Burgstahler, S., & Moore, E. (2009). Making student services welcoming and accessible through accommodations and universal design. *Journal of Postsecondary Education and Disability*, 21(3), 151-174.
- Collins, M. E., & Mowbray, C. T. (2008). Students with psychiatric disabilities on campus: Examining predictors of enrollment with disability support services. *Journal of Postsecondary Education and Disability*, 21(2), 91-104.
- Corbin, J. & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3<sup>rd</sup> ed.). Thousand Oaks, CA: Sage Publications.
- Corcoran, P. B., Walker, K. E., & Wals, A. E. J. (2004). Case-studies, make-your-own-case studies, and case stories: A critique of case-study methodology in sustainability in higher education. *Environmental Education Research*, 10(1), 7-21.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4<sup>th</sup> ed.). Thousand Oaks, CA: Sage Publication.
- Crouch, M., & McKenzie, H. (2006). The logic of small samples in interview-based qualitative research. *Social Science Information*, 45(4), 483-499. doi: 10.1177/0539018406069584
- Davies, T. G., Safarik, L., & Banning, J. H. (2003). The deficit portrayal of underrepresented populations on community college campuses: A cross case analysis. *Community College Journal of Research and Practice*, 27(9-10), 843-858.
- Denhart, H. (2008). Deconstructing barriers: Perceptions of student labeled with learning disabilities in higher education. *Journal of Learning Disabilities*. 41(6). 483-497. doi: 10.1177/0022219408321151
- Denzin, N.K., & Lincoln, Y. (2003). *The landscape of qualitative research: Theories and issues* (2<sup>nd</sup> ed.). London: Sage Publications.
- Derry, J. (2013). *Vygotsky: Philosophy and education*. Somerset, Great Britain: Wiley-Blackwell.

- Dreher, M. (1994). Qualitative research methods from the reviewer's perspective, in J. Morse (Ed.) *Critical Issues in Qualitative Research Methods*. p. 281-97. Thousand Oaks, CA: Sage Publications.
- Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes*. Orlando, FL: Harcourt, Brace, & Janovich.
- Eckes, S. E., & Ochoa, T. A. (2005). Students with disabilities: Transitioning from high school to higher education. *American Secondary Education*, 33(3), 6-20.
- Field, K. (2008). Cost, convenience drive veterans' college choices: For-profit and community colleges are most popular among students using GI bill's benefits. *The Chronicle of Higher Education*. Retrieved from <http://www.csun.edu/pubrels/clips/clips08-09/July08/07-21-08M.pdf>
- Fonosch, G. G., & Schwab, L.O. (1981). Attitudes of selected university faculty members toward disabled students. *Journal of College Student Personnel*, 22(3), 229-235.
- Gibbons, M. M., Cihak, D. F., Mynatt, B., & Wilhoit, B. E. (2015). Faculty and student attitudes toward postsecondary education for students with intellectual disability and autism. *Journal of Postsecondary Education and Disability*, 28(2), 149-162.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine.
- Green, S. K., & Gredler, M., E. (2002). A review and analysis of constructivism for school-based practice. *School Psychology Review*, 31(1), 53-70.
- Guba, E. G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Resources Information Center Annual Review*, 29(2), 75-91.
- Gordon, M., Lewandowski, L., Murphy, K., & Dempsey, K. (2002). ADA-based accommodations in higher education: A survey of clinicians about documentation requirements and diagnostic standards. *Journal of Learning Disabilities*, 35(4), 357-364.
- Haller, B. A. (2006). Promoting disability-friendly campuses to prospective students: An analysis of university recruitment materials. *Disability Studies Quarterly*, 26(2), 1-17.
- Hammersley, M. (2013). *What is qualitative research?* London: Bloomsbury Academic. Retrieved from <http://dx.doi.org/10.5040/9781849666084.ch-002>

- Hartley, J. (2004). Case study research. In C. Cassell & G. Symon (Eds.), *Essential guide to qualitative methods in organizational research*. London: Sage Publications.
- Hsieh, H.F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277-1288.
- Horn, L. & Bobbitt, L. (1999). Students with disabilities in postsecondary education. *U. S. Department of Education. National Center for Education Statistics*, 187, 1-89.
- Houck, C. K., Asselin, S. B., Troutman, G. C., & Arrington, J. M. (1992). Students with learning disabilities in the university environment: A study of faculty and student perceptions. *Journal of Learning Disabilities*, 25(10), 678-684.
- Huang, H. M. (2002). Toward constructivism for adult learners in online learning environments. *British Journal of Educational Technology*, 11(1), 27-37.
- Kantar, L. (2013). Incorporation of constructivist assumptions into problem-based instruction: A literature review. *Nurse Education in Practice*, 14, 233-243.
- Keengwe, J., Onchwari, G., & Agamba, J. (2013). Promoting effective e-learning practices through the constructivist pedagogy. *Education and Information Technologies*, 19, 887-898. doi: 10.1007/s10639-013-9260-1
- Kezar, A. J., & Eckel, P. D. (2002). The effect of institutional culture on change strategies in higher education: Universal principles or culturally responsive concepts? *The Journal of Higher Education*, 73(4), 435-460.
- Kurth, N., & Mellard, D. (2006). Student perceptions of the accommodation process in postsecondary education. *Journal of Postsecondary Education and Disability*, 19(1), 71-84.
- Lam, W. Y., Gunukula, S. K., McGuigan, D., Isaiah, N., Symons, A. B., & Akl, E. A. (2010). Validated instruments used to measure attitudes of healthcare students and professionals toward patients with physical disability: A systematic review. *Journal of Neuroengineering and Rehabilitation*, 7(55), 1-7. doi: 10.1186/1743-0003-7-55
- Langtree, I. (2010). Defining disability diversity in society. *Disabled World*, Retrieved from <http://www.disabled-world.com/disability/diversity.php>
- Laucker, H., Paterson, M., & Krupa, T. (2012). Using constructivist case study methodology to understand community development processes: Proposed methodological questions to guide the research process. *The Qualitative Report* 17(25), 1-22.

- Lehmann, J. P., Davies, T. G., & Laurin, K. M. (2000). Listening to student voices about postsecondary education. *Teaching Exceptional Children*, 32(5), 60-65.
- Leyser, Y., Vogel, S., Wyland, S., & Brulle, A. (1998). Faculty attitudes and practices regarding students with disabilities: Two decades after implementation of Section 504. *Journal of Postsecondary Education and Disability*, 13, 5-19.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Newbury Park, CA: Sage Publications.
- Leon, A. C., Davis, L. L., & Kraemer, H. C. (2010). The role and interpretation of pilot studies in clinical research. *Journal of Psychiatric Research*, 45(5), 626-629.
- Lombardi, A. R., & Murray, C. (2011). Measuring university faculty attitudes toward disability: Willingness to accommodate and adopt Universal Design principles. *Journal of Vocational Rehabilitation*, 34(1), 43-56.
- Mace, R. (2008). Universal Design. *The Center for Universal Design: Environments and products for all people*. Retrieved from [https://www.ncsu.edu/ncsu/design/cud/about\\_ud/about\\_ud.htm](https://www.ncsu.edu/ncsu/design/cud/about_ud/about_ud.htm)
- Marshak, L., Van Wieren, T., Ferrell, D. R., Swiss, L., & Dugan, C. (2010). Exploring barriers to college student use of disability services and accommodations. *Journal of Postsecondary Education and Disability*, 22(3), 151-165.
- Maxwell, J. W. (2010). Using numbers in qualitative research. *Qualitative Inquiry*, 16(6), p. 475- 482. doi: 10.1177/1077800410364740
- Maxwell, J. (2013). *Qualitative research design: An interactive approach* (3<sup>rd</sup> ed.). Thousand Oaks, CA: Sage Publications.
- May, A. L., & Stone, C. A. (2010). Stereotypes of individuals with learning disabilities: Views of college students with and without learning disabilities. *Journal of Learning Disabilities*, 43(6), 483 – 499. doi: 10.1177/0022219409355483
- McCallister, L., Wilson, K., & Baker, J. (2014). An examination of graduate students' perceptions toward students with disabilities. *The Journal of Faculty Development*, 28(2), 19-26.
- McCarley, T. A., Peters, M. L., & Decman, J. M. (2014). Transformational leadership related to school climate: A multi-level analysis. *Educational Management Administration & Leadership* 44(2), 322-342.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education* (2<sup>nd</sup> ed.). San Francisco, CA: Jossey-Bass Publishers.

- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded source book* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage Publications.
- Minner, S., & Prater, G. (1984). College teachers' expectations of LD students. *Academic Therapy*, 20, 225-229.
- Moreno, L., Gonzalez, C., Castilla, I., Gonzalez, E., & Sigut, J. (2007). Applying a constructivist and collaborative methodological approach in engineering education. *ScienceDirect*, 49, 891-915.
- Morse, J. M. (2000). Determining sample size. *Qualitative Health Research*, 10(1), 3-5.
- Murray, C., Lombardi, A., & Wren, C. T. (2011). The effects of disability-focused training on the attitudes and perceptions of university staff. *Remedial and special Education*, 32, 290-300. doi: 10.1177/0741932510362188
- Murray, C., Lombardi, A., Wren, C. T., & Keys, C. (2009). Associations between prior disability focused training and disability-related attitudes and perceptions among university faculty. *Learning Disability Quarterly*, 32(2), 87-100.
- National Center for Education Statistics (2011). *Students with disabilities at degree-granting postsecondary institutions: First look*. U. S. Department of Education, NCES 2011-018, Washington, DC: U. S. Government Printing Office.
- Office of Civil Rights (2015). *Protecting Students with Disabilities*. U. S. Department of Education, Office of Civil Rights. Retrieved from <http://www2.ed.gov/about/offices/list/ocr/504faq.html>
- Ogloff, J.R. & Otto, R.K. (1991) Are research participants truly informed? Readability of informed consent forms used in research. *Ethics & Behavior*, 1(4), 239-52.
- Panting, C., & Kelly, K. (2007). Barriers to success? Disability identity in higher education. *PRIME*, 2(2), 61-67.
- Patel, M & Rose, J. (2013). Students' attitudes towards individuals with an intellectual disability. *Journal of Intellectual Disabilities* 18(1), 90-103.
- Patton, M. Q. (2002). *Qualitative evaluation and research methods* (3<sup>rd</sup> ed.). Newbury Park, CA: Sage Publications.
- Paulhus, D. L. (1991). Measurement and control of response biases. In J. P. Robinson (Ed.) *Measures of personality and social psychology attitudes*. San Diego, CA: Academic Press.
- Peshkin, A. (1988). In search of subjectivity – one's own. *Educational Research* 17(7), 17-21.

- QSR International. (2006). *What is Nvivo?* QSR International. Retrieved from <http://www.qsrinternational.com/what-is-nvivo>
- Quick, D., Lehmann, J., & Deniston, T. (2003). Opening doors for students with disabilities on community college campuses: What have we learned? What do we still need to know? *Community College Journal of Research and Practice*, 27, 815-827.
- Quinlan, M. M., Bates, B. R., & Angell, M. E. (2012). What can I do to help?: Postsecondary students with learning disabilities' perceptions of instructors' classroom accommodations. *Journal of Research in Special Educational Needs*, 12(4), 224-233. doi: 10.1111/j.1471-3802.2011.01225.x
- Rao, S. (2004). Faculty attitudes and students with disabilities in higher education: A literature review. *College Student Journal* 38(2), 191 – 199.
- Rao, S., & Gartin, B. C. (2003). Attitudes of university faculty toward accommodations to students with disabilities. *Journal for Vocational Special Needs Education*, 25(2), 47-54.
- Raue, K., & Lewis, L. (2011). *Students with disabilities at degree-granting postsecondary institutions (NCES 2011–018)*. U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Rehabilitation Act of 1973, Section 504, Pub. L. No. 93-112, 87 Stat. 394 (1973).
- Rossmann, G. B., & Rallis, S. F. (1998). *Learning in the field: An introduction to qualitative research*. Thousand Oaks, CA: Sage Publications.
- Rubin, H. J., & Rubin, I. S. (2012). *Qualitative interviewing: The art of hearing data*. (3<sup>rd</sup> ed.). Thousand Oaks, CA: Sage Publications.
- Sandelowski, M. (2004). Qualitative research. In M. Lewis-Beck, A. Bryman, & T. Liao (Eds.) *The Sage encyclopedia of social science research methods* (pp. 893). Thousand Oaks, CA: Sage Publications.
- Saldana, J. (2013). *The coding manual for qualitative researchers*. (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage Publications.
- Shakespeare, T. (2006). *Disability rights and wrongs*. London: Hurst Publications.
- Sharpe, M. N., Johnson, D. R., Izzo, M., & Murray, A. (2005). An analysis of instructional accommodations and assistive technologies used by postsecondary graduates with disabilities. *Journal of Vocational Rehabilitation*, 22, 3-11.



- Siebers, T. (2001). Disability in theory: From social constructionism to the new realism of the body. *American Literary History*, 13(4), 737-754.
- Siebers, T. (2011). *Disability theory*. Ann Arbor, MI: The University of Michigan Press.
- Silverman, D. (2010). *Doing qualitative research* (3<sup>rd</sup> ed.). London: Sage Publications.
- Sowers, J., & Smith, M. (2004). Nursing faculty members' perceptions, knowledge, and concerns about students with disabilities. *Journal of Nursing Education*, 43(5), 213-218.
- Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage Publications.
- Stodden, R. A., & Dowrick, P.A. (2000). Postsecondary education and employment of adults with disabilities. *American Rehabilitation*, 25(4), 19-24.
- Story, M. F., Mueller, J. L., & Mace, R. L. (1998). *The universal design file: Designing for people of all ages and abilities*. Raleigh, NC: North Carolina State University Press.
- Sweener, K., Kundert, D., May, D., & Quinn, K. (2002). Comfort with accommodations at the community college level. *Journal of Developmental Education* 25(3), 12-42.
- Taylor, S. J. & Bogdan, R. (1998). *Introduction to qualitative research methods* (3<sup>rd</sup> ed.). New York, NY: John Wiley & Sons.
- Timmerman, L. C. & Mulvihill, T. M. (2015). Accommodations in the college setting: The perspectives of students living with disabilities. *The Qualitative Report* 20(5), 1609-1626.
- Treloar, L. L. (1999). Editor's choice: Lessons on disability and the rights of students. *Community College Review*, 27(1), 30-40.
- Triandis, H. C., Adamopoulos, J., & Brinberg, D. (1984). Perspectives and issues in the study of attitudes. In R.L. Jones (Ed.), *Attitudes and attitude change in special education: Theory and practice*. Reston, VA: The Council of Exceptional Children.
- Turner, D. W. (2010). Qualitative interview design: A practical guide for novice investigators. *The Qualitative Report*, 15(3), 754-760.



- U.S. Department of Health and Human Services. (2003). *Trends in the well-being of America's children and youth*. Washington, DC: U.S. Government Printing Office.
- Vasek, D. (2005). Assessing the knowledge base of faculty at a private, four-year institution. *College Student Journal*, 39(2), 307-315.
- Vogel, S. A., Leyser, Y., Wyland, S., & Brulle, A. (1999). Students with learning disabilities in higher education: Faculty attitudes and practices. *Learning Disabilities Research & Practice*, 14(3), 173 – 187.
- Wendell, S. (1996). *The rejected body: Feminist philosophical reflections on disability*. New York, NY: Routledge.
- Wilson, K., Getzel, E., & Brown, T. (2000). Enhancing the post-secondary campus climate for students with disabilities. *Journal of Vocational Rehabilitation*, 14(1), 37-50.
- Yin, R. K. (1994). *Case study research: Design and methods*. (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage Publications.
- Yin, R. K. (2003). *Case study research: Design and methods*. (3<sup>rd</sup> ed.). Thousand Oaks, CA: Sage Publications.
- Young, R. A., & Collin, A. (2003). Introduction: Constructivism and social constructionism in the career field. *Journal of vocational Behavior*, 64, 373 – 388.
- Yuker, H. E., & Block, J. R. (1986). *Research with the attitudes towards disabled persons scale (ATDP) 1960-1985*. Hempstead, NY: Hofstra University Bookstore.
- Yuker, H. E., Block, J. R., & Young, J. H. (1970). *The measurement of attitudes toward disabled persons*. Albertson, NY: U.S. Department of Health, Education & Welfare.
- Zhang, D., Landmak, L., Reber, A., Hsu, H. Y., Kwok, O., & Benz, M. (2010). University faculty knowledge, beliefs, and practices in providing reasonable accommodations to students with disabilities. *Remedial and Special Education*, 31(4), 276-286. doi: 10.1177/0741932509338348

## Appendix A

### Attitudes Toward Disabled Persons Scale (ATDP) Form B

Class Climate	Students with Disabilities Survey	
		

Mark as shown: ☐ ☒ ☐ ☐ ☐ Please use a ball-point pen or a thin felt tip. This form will be processed automatically.

Correction: ☐ ☒ ☐ ☒ ☐ Please follow the examples shown on the left hand side to help optimize the reading results.

1. Thank you for participating in this survey. Your responses will be kept strictly confidential. You will be asked at the end of the survey if you would be willing to participate in a 30 minute interview regarding your experiences. If you are able to participate in the interview, please provide your contact information. If you are not interested in participating in the interview portion of this research, please leave your contact information blank.

1. Read each statement and mark the appropriate response that best reflects your attitude. The scale for this survey ranges from -3 (strongly disagree) to +3 (strongly agree).

	-3	-2	-1	+1	+2	+3
1.1 Disabled persons are usually friendly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.2 People who are disabled should not have to pay income taxes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.3 Disabled people are no more emotional than other people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4 Disabled persons can have a normal social life.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.5 Most physically disabled persons have a chip on their shoulder.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.6 Disabled workers can be as successful as other workers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.7 Very few disabled persons are ashamed of their disabilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.8 Most people feel uncomfortable when they associate with disabled people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.9 Disabled people show less enthusiasm than non-disabled people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.10 Disabled people do not become upset any more easily than non-disabled people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.11 Disabled people are often less aggressive than normal people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.12 Most disabled persons get married and have children.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.13 Most disabled persons do not worry any more than anyone else.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.14 Employers should not be allowed to fire disabled employees.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.15 Disabled people are not as happy as non-disabled ones.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.16 Severely disabled people are harder to get along with than are those with minor disabilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.17 Most disabled people expect special treatment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.18 Disabled persons should not expect to lead normal lives.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.19 Most disabled people tend to get discouraged easily.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.20 The worst thing that could happen to a person would be for him to be very severely injured.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.21 Disabled children should not have to compete with non-disabled children.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.22 Most disabled people do not feel sorry for themselves.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.23 Most disabled people prefer to work with other disabled people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.24 Most severely disabled persons are not as ambitious as other people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.25 Disabled persons are not as self-confident as physically normal persons.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.26 Most disabled persons don't want more affection and praise than other people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.27 It would be best if a disabled person would marry another disabled person.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.28 Most disabled people do not need special attention.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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1. Read each statement and mark the appropriate response that best reflects your attitude. The scale for this survey ranges from -3 (strongly disagree) to +3 (strongly agree). [Continue]

- |   |   |
|---|---|
| 1.29 Disabled persons want sympathy more than other people.                             | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| 1.30 Most physically disabled persons have different personalities than normal persons. | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |

2. Please read each question carefully and respond in the text box below.

- 2.1 In the space provided, please discuss your overall experiences with students with disabilities. Would you classify them as generally positive or negative?

- 2.2 In the space provided, please discuss your overall experiences with classroom accommodations. Would you classify them as generally positive or negative?

### 3. Demographic Questions

- 3.1 Gender Male ☐ ☐ Female

- 3.2 Age

20-30    31-40    41-50    50+  
☐    ☐    ☐    ☐

- 3.3 Years of Teaching

0-5    6-10    11-20    20+  
☐    ☐    ☐    ☐

- 3.4 Academic Division

Arts and Sciences    Applied Sciences    Health Sciences  
☐    ☐    ☐

### 4. Interview

- 4.1 Included in this study is the opportunity for faculty to participate in a semi-structured interview designed to further explore faculty attitudes toward students with disabilities and classroom accommodations. Your participation is completely voluntary but very much appreciated. If you would be willing to participate in the 30 minute interview please leave your name and contact information in the text box below. This information will be collected separately and will not be associated with your other responses.

## **Appendix B**

### **Interview Protocol**



#### **Introduction to study**

Thank you for participating in this study, which will explore community college faculty attitudes of students with disabilities and explore how their experiences and attitudes influence the use of accommodations in the classroom. I am interested in your experiences and feelings regarding students with disabilities and the use of ADA accommodations at the College. I am also interested in what you believe you and other faculty need to work with students with disabilities.

Participation in this study is completely voluntary and you can stop at any point during the interview. Participation in this study also requires informed consent and I ask that should you choose to participate, you read carefully and sign the consent form in the appropriate areas.

When the interview is over, should you want to contact me for any reason, I can be reached after working hours at [252-354-7771](tel:252-354-7771).

Do I have your permission to audio tape this interview so I may accurately transcribe it later? This way I can focus on you during the interview. I ask that you meet with me again after I have transcribed the interview to discuss the content of the transcript and make any clarifications as needed.

Do you have any questions before we begin?

## Interview Questions

Today is \_\_\_\_\_ and I am speaking with \_\_\_\_\_. The time is \_\_\_\_\_.

1. How did you get into teaching?
2. What brought you to the college? How long you have been teaching here?
3. What classes are you teaching this semester? How are they going?
4. Can you tell me about your experiences with people with disabilities?
5. Can you describe a positive experience you have had with students with disabilities? How did you react? What did you do?
6. Can you describe a negative experience you have had with students with disabilities? How did you react? What did you do?
7. What is required of faculty when working with students with disabilities? Skills, time, resources.
8. How have your experiences revealed or not revealed differences between students with disabilities and students without disabilities? (differences in academic ability, social acuity, work ethic, determination, etc.)
9. What would help faculty to better work with students with disabilities? Information, training, equipment?