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NATIONAL-LOUIS UNIVERSITY

IMPROVING SERVICES FOR STUDENTS WITH DISABILITIES AT COMMUNITY
COLLEGES

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE

DOCTOR OF EDUCATION

IN

COMMUNITY COLLEGE LEADERSHIP

BY

MICHAEL WILLIAM DUGGAN

Chicago, Illinois

March, 2010

Community College Leadership Doctoral Program

Dissertation Notification of Completion

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Disabilities at Community Colleges

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DEDICATION

This dissertation is dedicated to God for the wonderful life I have been provided and to my life partner, Wayne, who has been there throughout this whole process. His smile, patience, and love always give me strength and encouragement whenever I need it most. Of all the blessings I have in my life, you are at the top of the list. I love you with all my heart.

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A famous African proverb says, “It takes a village to raise a child.” The same could be said about writing a dissertation. There have been countless colleagues and friends who have made this possible and to whom I am eternally grateful.

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All of you have done so very much for me. You have brought me happiness, laughter, and love. May the passion that is reflected in these pages match the devotion I have to all of you for the wonderful times you have each brought to me. I am so grateful, and love each of you with all my heart. Thank you for being a part of my life.

ABSTRACT

The purpose of this qualitative case study was to discover ways in which community college faculty and administrators can better facilitate learning for students with disabilities. Semi-structured interviews, preinterview questionnaires, and a review of relevant documents were used to gain an understanding of how community college faculty perceive the challenges of teaching students with disabilities. Additional research goals included an exploration of strategies community college faculty have found effective in assisting students with disabilities to be successful, actions community college administrators have taken that effectively address issues related to success for students with disabilities, and approaches community college administrators use to enhance their support of faculty who teach students with disabilities.

The primary findings were constraints on funding and staffing negatively effecting support for students with disabilities. In addition, participants felt faculty and administrators lack sufficient knowledge concerning specific disabilities and need to learn new ways to work with students with disabilities in and out of the classroom. Other findings included faculty participants' frustration with a variety of issues students bring to the classroom such as high levels of immaturity and overly intrusive parents intervening with faculty. Faculty participants also expressed dissatisfaction with a variety of erroneous beliefs; for example, some students expect services identical to those they received in high school. Moreover, faculty were dissatisfied with inadequate skills exhibited by colleagues when working with students with disabilities, such as providing excessive assistance to students and thereby setting unrealistic standards for future

faculty. Administrators also reported students often experience inconsistent intervention strategies in working with different faculty members.

Exploration of effective intervention methods used by faculty and administrators revealed the application of specific behavioral strategies, relationship focused communication, and individual creativity in teaching and communication strategies. Many of these strategies do not involve a large cost to the institution, but faculty and administrator training is needed to make better use of current campus resources.

Conclusions drawn from the research suggest that administrators need to clarify the responsibilities both faculty and administrators have in working with students with disabilities. Moreover, faculty and administrators need to take greater responsibility in serving these students, and not rely solely on the college's Disability Services office to provide all of the support. In order to accomplish this transition, more disability specific training for faculty and administrators is necessary. Finally, a pedagogical paradigm shift should be examined at the institution to better address the needs of students with disabilities, particularly in view of the current funding environment. Also, the needs of students should be included in short term operational and long term strategic planning at the college.

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CHAPTER I

INTRODUCTION

Students with disabilities in higher education are a growing population throughout the United States. The most recent statistics from the U.S. Department of Education's National Center for Education Statistics (2006) show that 12.4 % of students in community colleges during academic year 2003 to 2004 had a disability; this evidences an increasing trend from the 8% reported for 1992 (Treloar, 1999). The U.S Department of Education (2006) determined there are over 1,400,000 students with disabilities in American higher education today. This increase shows there are even more students who never disclose their disability, or in the case of learning and cognitive disabilities, may not even realize they have one. Clearly this is a large group of students, yet data tracking and research on students with disabilities in higher education, and more specifically students with disabilities in community colleges, are both limited and outdated.

This lack of data and research on students with disabilities is a serious issue that needs to be addressed. There are many remarkable persons with disabilities who have made major contributions to the United States. and the world. Some of the country's most famous people have had some type of disability. Steven Hawking, a physicist with Amyotrophic Lateral Sclerosis (ALS), was one of the first individuals to apply complex mathematics to explain astronomical phenomena such as black holes and the Big Bang Theory (Hawkings, 1988). John Nash, an economist and mathematician with schizophrenia, developed a variety of mathematical theorems that resulted in his being awarded the Nobel Prize in economics (Nasar, 1994). Most interestingly, Franklin D. Roosevelt, a former president of the United States, had polio and lived much of his life in a wheelchair but he kept his disability hidden for fear of public disapproval

(Sidey, 1995). Each of these individuals with disabilities graduated from college earning at least a Bachelors degree, and some went on to earn their doctorates. However, if the education process had been a complete failure the world might have been robbed of their talents and contributions to society.

In this study, the definition of “disability” is drawn from the Americans with Disabilities Act (ADA) of 1999:

With respect to the individual, a person with a disability is one who has a physical or mental impairment that substantially limits one or more of the major life activities of such individual; a record of such impairment; or being regarded as having such an impairment. (Section 902.1.b)

The key words in this definition are *limitation of a major life activity*, such as vision, hearing, physical mobility, cognition, learning, emotional control, and intellectual capacity. Thus, disabilities that are readily visible such as blindness, deafness, and physical disabilities are a part of this definition; however, disabilities which cannot be seen such as learning disabilities, autism, and mental illness are also a part of this definition as these too can impact major life activities.

Community colleges have an “open door” policy, allowing any community member who wishes to access education to do so (Cohen & Brawer, 2003). As such, students with a broad range of disabilities often enroll in community colleges. Originally, some of the most common categories of disabilities encountered were learning disabilities, physical impairments, and sensory disabilities (e.g., blindness and deafness). However, more recently other populations are also emerging with more complex needs, including autism, mental illnesses (e.g., depression, anxiety disorders and schizophrenia), and developmental disabilities (e.g., Downs Syndrome and mild to moderate mental retardation).

These emerging populations present new challenges for community colleges, yet innovations by educators to address the needs of these students can improve education not only

for students with disabilities, but potentially for all students in the classroom. This study sought to discover insights and information regarding ways in which community college faculty and administrators can better facilitate learning for students with disabilities. The study's findings and conclusions could potentially contribute to the body of knowledge and provide insights and recommendations for community college administrators and faculty in serving students with disabilities in higher education. This population includes 14,000 students with disabilities in Illinois (Illinois Community College Board, 2005), and thousands more in community colleges across the country.

Purpose and Driving Questions

The purpose of this study was to discover ways in which community college faculty and administrators can better facilitate learning for students with disabilities. It aimed to provide community college leaders with a better understanding of these students' unique needs and to identify strategies for ensuring higher levels of success for this large population of students. To address this purpose, four specific driving questions were used to guide the study:

1. What do community college faculty perceive as the challenges of teaching students with disabilities?
2. What strategies have community college faculty found to be effective in assisting students with disabilities to be successful?
3. What actions have community college administrators taken that effectively address the issues related to success for students with disabilities?
4. How can community college administrators enhance their support of faculty who teach students with disabilities?

Significance of the Study

As previously mentioned, community colleges are experiencing significant enrollment growth of students with disabilities in their institutions. The George Washington University HEATH Online Clearinghouse on Postsecondary Education for Individuals with Disabilities is a program that tracks disability information regarding students with disabilities in higher education. The HEATH projects further growth in the number of students with disabilities accessing higher education in the future with community colleges seeing the largest increases (Savukinas, 2002). An important distinction will include the students who formally disclose they have a disability, and those who may not even realize they are disabled.

In American community colleges, 63% of the students take some type of remedial course before they graduate, and of this population 25% fail to complete all of their classes (Rioux-Bailey, 2004). There is a distinct possibility that within this 25%, many have learning or other invisible disabilities and do not realize they have unique needs. The students may be unable to pay for the expensive costs to have their disability formally diagnosed. Another possibility is students who qualify for accommodations do not request them. Although data show many community college students have a disability, only 4% of these students ever formally go through the process to request academic accommodations (Treloar, 1999). Consequently, the population of students with disabilities in community colleges is one that can never be fully measured, but comprises a large number of students. Therefore, this phenomenon of students with disabilities needs to be addressed. There are not many research studies in the literature that are specific to students with disabilities at community colleges.

Moreover, this research study provides an important link to the philosophical foundations of the community college. Simply stated, the mission of community colleges is to address the needs of members in the community it serves.

Community colleges are indeed untraditional, but they are truly American because at their best, they represent the United States at its best. Never satisfied with resting on what has been done before, they try new approaches to old problems. They maintain open channels for individuals, enhancing the social mobility that has characterized America, and they accept the idea that society can be better, just as individuals can better their lot within it. (Cohen, 2003, p. 36)

It is important community colleges serve all members of the community, including those with disabilities. Serving all members can be challenging at times given community colleges' open door admission policies and the costs of accommodations for students. However, serving all community members is still a responsibility that must be met. Also, there are legal implications for community colleges that fail to meet the needs of students.

Given that the United States government mandates access to persons with disabilities in community colleges, students have the right to file formal complaints and seek legal action against community colleges through the Office of Civil Rights (OCR) housed within the U.S. Department of Education if colleges fail to provide adequate academic accommodations. This can potentially result in costly legal expenses and hours of personnel time to remedy compliance issues that are not addressed.

Conceptual Frameworks

Two conceptual models were applied in this study as the lenses through which the researcher interpreted the results. The first is Hahn's (1985) Social or Minority Group Model of disability, which emphasizes that disability is simply a trait of human difference rather than a diagnosis used to fully define the person. Thus, the reaction to a person's disability is a social one in that people respond after learning a person is disabled. Hahn says the disability

experience is similar to the social experiences of other minorities. Subsequently, researchers such as Gill (1999) extended the framework by adding that there are cultural values and beliefs often shared by people with disabilities including celebrating one's uniqueness, striving for equality, and looking for other's strengths instead of weaknesses.

The second conceptual framework, Universal Design, was developed by researchers Scott, McGuire, and Shaw (2001), and has only been in use over the past 10 years. The Universal Design model suggests that faculty and administrators make classroom instruction multimodal and fully accessible from the beginning of instruction through final assessment. By using the Universal Design approach, all students can access information regardless of diagnosis or disclosure.

Definition of Terms

Academic Accommodation, or Accommodation: An alternative method for presenting academic material or service that, in its original form, is not accessible to a student with a disability. The alternative approach is a means that results in accessibility. Examples include producing a Braille textbook for a person who is blind, providing a sign language interpreter for a person who is Deaf, or giving extra time to complete an examination for a student with a learning disability. Accommodation is considered to be the opposite of academic modification.

Academic Modification, or Modification: A method in which an academic material or service not accessible to a student with a disability is substantially changed into a means that is accessible. For example, a student with a visual impairment only completes odd numbered exercises in a textbook, a Deaf student does not watch a movie other students

watch, or a student with a learning disability has one wrong answer removed from a multiple choice examination.

Assistive or Adaptive Technology: Technology specifically designed to assist persons with disabilities. Examples include screen readers which verbalize text, a computer monitor for a person who is blind, visual cues on an electronic bulletin board for a person who is Deaf, or a voice activated mouse for a person with an orthopedic disability.

Carl D. Perkins Rehabilitation Act: A federal law which allocates funding to support individuals in vocational and technical programs at the secondary and postsecondary institutional levels. (National Collaborative on Workforce and Disability, 2010).

Developmental Coursework: College courses in the subjects of reading, writing, and math offered at the non-credit level to assist students in developing remedial skills for college success.

Developmental Disability: A diverse group of severe, chronic conditions that is due to mental or physical impairments affecting language, mobility, learning, self-help, and independent living (Centers for Disease Control and Prevention, 2009).

Diagnostic Testing: A term informally used by several of this study's participants when referring to testing for invisible disabilities such as learning disabilities or mental illness. This type of testing must be done by a licensed professional, most commonly a licensed psychiatrist or psychologist.

Disability: A person with disability has a physical or mental impairment that substantially limits one or more of the major life activities of that person. A person is also considered

disabled if they have had a record of such an impairment, or are regarded as being impaired (U.S. Equal Employment Opportunity Commission, 2008).

FERPA (The Family Educational Rights and Privacy Act): A federal law designed to protect student privacy for students who are 18 years of age or older, establishing them as legal adults entitled to confidentiality of their student records (U.S. Department of Education, 2009a).

Handicap: A supplementary, indefinite physical or social burden that prevents access for a person with a disability. This barrier requires intervention for the burden to be overcome and what is missing to be restored. The word originated from the word *hand-in-cap*, a term used originally in horseracing to designate a need for an equalization of odds for a bet (Stiker, 1999).

Hahn's Social or Minority Model of Disability: A model of viewing disability suggesting that disability is merely a trait of human difference and that the true experience of having a disability is more of a social reaction to this human difference (Hahn, 1985).

Individualized Education Program (IEP): A written, individualized document that details the goals and learning objectives for children with disabilities in secondary education (U.S. Department of Education, 2007a).

Individualized Transition Plan (ITP): A written, individualized document that details the transition services needed to help a child prepare for leaving secondary education (U.S. Department of Education, 2007a).

Invisible Disability: A disability that cannot clearly be seen (e.g., Deafness, learning disabilities, or mental illness).

Multimodal Instruction: Instruction that integrates various media including a wide variety of

words and pictures with the intent of improving instructional delivery for students (Gellivej, Van der Meij, & de Jong, 2002).

Nontraditional Student: There are at least three different commonly used definitions of the term ‘nontraditional’ in the literature (Kim, 2002). For the purposes of this research, a nontraditional community college student is 24 years of age or older and did not attend a post-secondary institution immediately after high school. This can also be a person who had post-secondary education earlier in their lifetime, but is now returning after an absence of at least four years.

Rehabilitation: The academic discipline of study for persons training to become Rehabilitation Counselors.

Rehabilitation Counselor: A trained professional of Masters Degree certification dedicated to facilitating the personal and social goals, as well as the economic independence of individuals with disabilities (Commission of Rehabilitation Counselor Certification, 2002).

SAT (Scholastic Aptitude Test): A nationally administered examination that assists colleges and universities to make decisions in admissions determinations (The College Board, 2010).

Section 504 of the Rehabilitation Act of 1973: A federal law prohibiting discrimination against persons with disabilities in any federally funded program, including education (Galambos, 2004).

Traditional Student: For the purposes of this research, a traditional student is 18 to 21 years of age and attending the community college immediately after high school.

TRIO: A series of federally funded grant programs designed to support students from

disadvantaged backgrounds, including students with disabilities, to work toward their completion of higher education (U.S. Department of Education, 2009b).

Universal Design Model: A methodology used to make physical locations and environments (e.g., classrooms) usable for all persons, and especially persons with disabilities (McGuire & Shaw, 2001).

Organization of the Document

This chapter introduced the purpose of the research study, to discover ways in which community college faculty and administrators can better facilitate learning for students with disabilities. A series of four driving questions were developed to examine community college faculty perceptions of challenges in teaching students with disabilities, explore effective strategies faculty have taken to assist students with disabilities in being successful, discover effective actions community college administrators have taken to meet the needs of these students, and identify ways in which administrators can enhance their support of faculty who teach students with disabilities.

Chapter II reviews the literature related to students with disabilities in American community colleges. It explores the history of education for people with disabilities in the United States and examines the unique challenges that different populations of persons with disabilities can experience. Chapter III describes the qualitative case study research design including data sources and analysis procedures. Chapter IV presents the research findings and Chapter V discusses conclusions and recommendations for assisting community colleges to better meet the needs of students with disabilities. Chapter V also reviews salient points made throughout the research and provides an overall summary of the study.

CHAPTER II

REVIEW OF RELATED LITERATURE

The purpose of this chapter is to explore relevant literature centered on the education of students with disabilities in American community colleges. First, a historical profile of key legal decisions and social movements that have influenced the culture of persons with disabilities today is presented. Second, through an examination of current statistics on community college students, a variety of issues are identified. Third, an analysis of specific disability groups in community colleges is presented to explain some of the unique challenges each group faces. The disabilities include blindness, Deafness, autism/Asperger's syndrome, learning disabilities, attention deficit disorder, mental illness, developmental disabilities including mental retardation and Down's syndrome, traumatic brain injuries, HIV/AIDS and other chronic illnesses. Fourth, the two conceptual frameworks used in analyzing this study's data and findings are discussed: Hahn's Social or Minority Group Model of disability and the Universal Design model. Fifth, this research study is positioned within the body of literature to further explain the study's significance to the field. In the final section, a chapter summary is provided.

History of Education for People with Disabilities

While laws can be traced back to the early 1800's regarding provisions guaranteeing American children free opportunities to education, the first significant laws regarding the education of persons with disabilities was not passed until the early 1970s. In an effort to understand the experiences of students with disabilities in modern American community colleges, it is important to briefly study the history behind these current events.

From the 1700s to the early 1900s, the religious model of disability was most prevalent. This model emphasized disability was a product of a punishment handed down by God, and

warranted the person to be pitied as a helpless burden to society (Shapiro, 1993). This religious perspective influenced educational decisions regarding students with disabilities. Often students with disabilities, if allowed into schools, were segregated into separate classrooms or separate institutions (Winzer, 1993). Only a few key individuals with disabilities can be found during this period that were successful in spite of institutionalized limitations. While persons such as Helen Keller, Louis Braille, and Alexander Graham Bell contributed to the educational pedagogy during this time, it is generally difficult to find other significant role models or advocates.

Beginning in the early 1900s society advanced toward a new philosophy regarding people with disabilities, often called the medical model. This model realized people with disabilities are disabled not as a result of their own behaviors or attitudes but rather due to a medical diagnosis requiring treatment and abatement of symptoms (Fries, 1997). In essence, disabilities were thought to have pathological origins and required some type of treatment or cure. Laws during the time reflected the medical model. For example, the city of Chicago passed an ordinance in 1912 saying: "It is hereby prohibited for any person who is diseased, maimed, mutilated, or deformed in any way so as to be an unsightly or disgusting object to expose himself to public view" (City of Chicago, 1912, Municipal Code 36-34). Given that there were laws prohibiting people with disabilities from being in the public eye, education for people with disabilities also was limited. It is interesting to note that the medical model even today is one that often impacts personal philosophy. The argument for and against cochlear implants is a good example of this (Hyde & Power, 2006).

Cochlear implants are medical devices that through invasive surgery are positioned in the skull bone behind the ear. A receiver is placed into the drilled out area and an electrode array is inserted in the cochlea. The small, complex device inserted in the cochlea allows some persons

who are profoundly Deaf to establish a sense of sound; however, the cochlear implant is not a successful option for all Deaf people (National Institute on Deafness and Other Communication Disorders, 2009). It is a medical advancement many hail as a great achievement, while others argue that it is cultural genocide. Deaf advocates argue that deafness is not a condition requiring a “cure” offered by technology, and parents should take great care in making the decision. A cochlear implant is not suitable for all who are Deaf and the decision should be left to the individual (National Association of the Deaf, 2000). Many medical professionals assert a child should not be denied the opportunity to be part of the hearing community and it is unfair to put children at such a social disadvantage by not being able to hear (Levy, 2002). The arguments shed light on cochlear implants as a complex issue and also illustrate how the medical model of disability can influence perspectives.

In the late 1960s, many new legislative policies were put into place. This was a time when the education of students with disabilities was first addressed at the federal level. The precedent for much of the special education related litigation and legislation was established by *Brown versus the Board of Education* (1954). Although *Brown vs. the Board of Education* primarily dealt with racial discrimination, this case laid the groundwork for establishing that all children in education had a right to the least restrictive environment (Zirkel, 2005). In 1968, the TRIO Student Support Services federal grant program was established, earmarking federal funds to help support first generation college students, students of low income, and students with disabilities to be more academically successful through tutoring and individualized support programs (U.S Department of Education, 2009c).

From late in the 1960s, through the passage of the Americans with Disabilities Act (ADA) in the 1990s, a variety of laws took effect ensuring more equality of opportunities for

persons with disabilities. For example, an important legal decision occurred in 1971 with *Mills v. The District of Columbia Board of Education*; it specifically said that schools cannot exclude students with severe disabilities. This was an important first legal outcome in that schools were not allowed to turn persons with disabilities away merely because their disability might be complex and require more specialized education (Hurlbut, 1981). Another important decision that occurred a year later after the 1971 Mills decision involved the *Pennsylvania Association for Retarded Children v. The Commonwealth of Pennsylvania*. The Court's finding expanded upon the Mills decision by stating that schools must provide education to all people with disabilities regardless of diagnosis.

In 1974, the Family Educational Rights and Privacy Act (FERPA) was established protecting the privacy of adult students who were 18 years or older in age (U.S. Department of Education, 2009a). In 1975, Congress signed the Education for All Handicapped Children Act (U.S. Department of Education, 2007b), formally requiring that all levels from kindergarten through high school education be accessible to children with disabilities. This law was later renamed the Individuals with Disabilities Education Act (IDEA). At this point, throughout the country all persons with disabilities were legally entitled to a free and appropriate education.

While these were important decisions, the mandates were only directed towards elementary and secondary education. Certainly this was progress; however, nothing was done to address the issue of persons with disabilities in higher education. Also, there were no laws in place protecting the rights of adults with disabilities within American society. For example, courtrooms did not have to provide sign language interpreters for the Deaf, employers could choose not to hire a person solely because of their disability, and voting polls did not have to be wheelchair accessible (Shapiro, 1993).

In the 1970s, some of the most significant laws regarding the rights of adults with disabilities were passed. The 1970 through 1975 Federal Rehabilitation Acts set out provisions for federal offices of Vocational Rehabilitation to assist people with disabilities in finding jobs, and called for Rehabilitation Counseling programs to be established at universities to allow a better understanding of people with disabilities. Most importantly, within the 1973 Rehabilitation Act, Section 504 was added to mandate that all institutions receiving federal funding, including educational and governmental bodies, may not be exclusionary toward people with disabilities (Galambos, 2004). Specifically, the 1973 Rehabilitation Act stated,

No otherwise qualified individual with a disability in the United States . . . shall solely by reason of her or his disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. (U.S. Department of Education, 2005a, 29 U.S.C. 794)

This law impacts American higher education even today by guaranteeing that persons with disabilities cannot be denied access to educational programs offered by colleges and universities solely on the basis of their disability. Community colleges as recipients of state and federal funds are thus accountable to this law.

While the law itself is relatively simple in its statement, the interpretation can be complex. Section 504 not only refers to visible disabilities, such as persons in wheelchairs having physical access to educational buildings, but also more complicated access issues, such as a person with autism wishing to become a teacher, a person with dyslexia wishing to become a nurse, or a person with manic depression wishing to become a human services worker. Section 504 does not guarantee persons with disabilities will be successful in their educational endeavors, but it requires institutions of higher education to go through a formal process to determine if access is possible.

Over the next 10 years higher education and other federal programs became more accessible, but new challenges arose from these efforts. Although the intentions of many were good during this time, paternalism was paramount. Often decisions regarding the fate of people with disabilities were not made by the people themselves, but by parents, educational professionals, and federal employees who thought they knew what was best for people with disabilities (Shapiro, 1993). As a result, many people with disabilities became frustrated and began movements. For example, in Salem, Oregon the “We Are People First Movement” began in 1974. The movement’s emphasis was that people with disabilities have similar human rights as all other people and that beyond their diagnosis of disability they were also human beings (Ward, 1999). Thus, the era of self-advocacy had begun.

The ripple effect of these laws spread throughout the world. According to the United Nations (n.d.), Bengt Nirje, a Swedish administrator of a center for children with mental retardation, often spoke with the children about various aspects of life. Through these conversations he made a then important realization that people with mental retardation do have opinions and are capable of contributing to the planning process for their futures. Previous to the self-advocacy era, psychologists worldwide generally held the belief that children with mental retardation had no sense of self and thus should have no influence on future planning (Shapiro, 1993). Nirje realized people with disabilities have a right, and even a responsibility to self-advocate. He wrote several papers calling for people with disabilities to become self-advocates and dedicated himself to this cause. Nirje ultimately became a liaison on disability issues to the United Nations and contributed to shaping world policies on people with disabilities today.

In 1988, the Office of Special Education and Rehabilitative Services (OSERS) passed an initiative encouraging service providers to shift to a model of “self-determination” in working

with persons with disabilities (Ward, 2005). In essence, self-determination calls for people with disabilities to have the opportunity to influence decisions and have direct control of their lives (Wehmeyer, 2004). This was another important point in disability history because legislative bodies realized, as had Nirje, that people with disabilities should have direct control over decisions that impact their lives. The principles of self-determination permeated not only government, but educational philosophy as well (Russa, 2007). The momentum created from the self-determination movement led to passage of one of the most important laws regarding the rights of persons with disabilities today, the Americans with Disabilities Act (ADA).

In 1990, the Americans with Disabilities Act, was signed into law by then President George Bush Sr. ADA 1990 was crafted as a result of several advocates, and congressional representatives proved instrumental in expanding the rights of people with disabilities. The law's primary author was the late Congressman Justin Dart, Jr., who himself was in a wheelchair (Meneghello, 2008). ADA includes five titles that address different aspects of disability discrimination. Title I addresses employment issues, stating that employers cannot discriminate against a person with a disability applying for a job. It also requires employers accommodate employees with disabilities by providing reasonable accommodations. Title II requires state and local activities of city governments must be accessible and public transportation must also be accessible to people with disabilities. Title III addresses public accommodations, requiring that new architecture designs are accessible and older architecture be retrofitted to be as accessible as possible. Title IV addresses telecommunications issues for the Deaf and speech impaired, requiring the creation of a federal relay service to facilitate communication for these populations. Finally, Title V included miscellaneous provisions that were not addressed by the other titles (U.S. Department of Justice, 2005).

The impact of the ADA was broad. Civil rights activists stated the last civil rights law to have a similar impact of this scale was the Anti-Discrimination Act of 1964 (Fries, 1997). The ADA has had a dramatic impact on the workforce and access to services by holding places accountable for accessibility (Killackey, 2007). Persons with disabilities were also able to take legal action against those who refused to comply. “The Hockenberry Rule” was a term coined after the passage of the ADA stating the capabilities of persons with disabilities are almost always underestimated. This rule came into effect after journalist John Hockenberry, who has won two Peabody awards and uses a wheelchair, was denied access to a theater in New York for fear that his chair would create a fire hazard by blocking the aisles. Hockenberry successfully filed a complaint against the theater for their actions and the theater was forced to make restitution (Shapiro, 1993).

Nadelle Grantham successfully filed a complaint against the Louisiana Board of Trustees for Colleges and Universities when they expelled her from Southeastern Louisiana University for being Deaf and requiring sign language interpreters, which incurred costs for the institution (National Association for the Deaf, 1996). Marilyn Bartlett, a person with a learning disability, successfully sued the New York Bar Examination Branch for denying her testing accommodations for her learning disability (Journal, 1998). The International Dyslexic Association successfully sued Educational Testing Services for their flagging of students with disabilities who completed the SAT with accommodations when they reported test scores to colleges (Fine, 2002).

Other laws centered on educational issues were also brought into effect at this time. In 1998, the Carl D. Perkins Vocational and Technical Act was established allowing educational institutions to more fully develop post secondary vocational and technical programs supporting

underserved student populations, including students with disabilities (National Collaborative on Workforce and Disability, 2010). In 2004, the Individuals with Disabilities Education Act (IDEA) was reauthorized and revised, making improvements upon the delivery of special education services (U.S Department of Education, 2007b). In 1986, Section 508 was added to the 1973 Rehabilitation Act requiring that in addition to physical access, technology must also be made accessible for use by people with disabilities in federally funded programs (U.S. Department of Human Services, 2008).

While many laws have been put into place throughout the years regarding the education and civil rights of people with disabilities, statistics related to the quality of life for people with disabilities still remain low according to the National Organization on Disability (NOD). In the last census quarterly report conducted by NOD (2004), it was found that only 35% of people with disabilities are employed full or part time, compared to 78 % who are non-disabled. People with disabilities are three times as likely to live in poverty with an annual household income below \$15,000, twice as likely to drop out of high school at a rate of 21% compared to 10%, for nondisabled, and only 34% stated they were overall satisfied with their lives, compared to 61% who are nondisabled. This significantly lower number in the area of life-satisfaction is a problem that will be examined more closely in the review of literature; however, before doing so, it is important to also understand the current experience of being a student with a disability in today's educational system.

The Community College Student with a Disability Today

As previously mentioned in Chapter I, during the 2003-2004 academic year, 12.4% of all students attending community colleges had some type of disability (National Center for Education Statistics, 2006); this translates into 1,400,000 students. At the four-year university

level, the statistic is lower with 9% of undergraduates reporting a disability (National Center for Education Statistics, 2006).

Moreover, the American Association of Community Colleges (1996) determined that about half of the students with disabilities ever formally requested accommodation services, and of all students with disabilities, 71% were enrolled in community colleges. While students without disabilities may have a primary goal of attaining an academic degree or developing job skills at the community college, students with disabilities, when surveyed, indicated that another primary goal for them is to seek out new social experiences (Humphry, 1999). Other reasons students with disabilities attend community colleges are to access enhanced technology; more students acquire expanded support service programs where higher expectations for what students with disabilities can accomplish is the norm (National Center on Education Statistics, 1999).

The potential for the community colleges to assist students with disabilities can be great. The Task Force on Post Secondary Education and Disabilities (2000) concluded that students who successfully graduate from community colleges can expect incomes and careers which pay wages comparable to those of graduates without a disability and that educational achievement can be the most effective means for people with disabilities to achieve financial independence and equality. However, students still often struggle. The U.S. Census Bureau (2007) found the overall percentage of students without disabilities graduating from colleges to be 43%. For students with nonsevere disabilities, this number drops down to 33%, and for students with severe disabilities, the number is nearly half, at 22%. To explain the lower graduation rates for students with disabilities, a variety of areas have been identified in the literature as possible global barriers.

The first barrier is in accessing accommodation services for students with disabilities. Academic accommodations are services most often provided by a specific office within the college to make college materials more accessible (Rodriguez, 2007). Accommodations can be services such as having extended time to complete examinations for students with cognitive processing difficulties, note taking services for students with physical impairments making it difficult to keep up with the pace of instructor's lectures, or books-on-tape for students who are learning disabled or blind and unable to read their books in a traditional manner. For a student to access services, they must, "self-identify" they have a disability and provide appropriate documentation (Cook, Gerber & Murphy, 2000). In the most recent survey of students with disabilities in higher education by the National Center on Education Statistics (2003), 22% of students with disabilities report not receiving the academic accommodations they need to be successful. As noted previously, the American Association of Community Colleges (1996) states only half of the students with disabilities ever formally seek services. This leaves a large population of students to whom accommodations are never delivered.

Another issue is the lack of awareness and knowledge concerning students with disabilities and their needs. A variety of studies have been conducted examining the knowledge of college faculty and administrators related to this topic, often indicating low level results. This lack of knowledge has been found across all echelons of higher education, including presidents (West, 2008), and faculty members (Dona & Edmister, 2001). A theme identified as a possible explanation for this low level of knowledge is a lack of training for faculty and staff on the topic of working with students with disabilities (Lancaster, Mellard, & Hoffman, 2001; Quick, Lehmann, & Deniston, 2003). This lack of knowledge can be reflected in the way that community colleges are sometimes operated. For example, a 2000 survey by the Virginia Board

for Persons with Disabilities found that only 59% of Virginia community colleges had formal written policies regarding the provision and delivery of accommodation services for students with disabilities, compared to 92% of four year universities in Virginia (Tutton, 2001).

Given the number of students with disabilities appears to be continually increasing, it is important future leaders and faculty be made aware of student needs and legal obligations regarding delivery of instruction. Additional training and a sharing of effective strategies for teaching students may be a possible solution to this problem. Beyond these global issues for students, there are additional issues that can uniquely arise on the basis of their disability diagnosis itself. The next section looks at specific disability groups and some of the challenges these groups experience.

Types of Student Disabilities

Students with Orthopedic Impairments

Students with physical limitations that impact their mobility or bodily control are considered to have orthopedic impairments. These can be students who use wheelchairs, or who have physical limitations due to quadriplegia or cerebral palsy. In 2003-2004, this population comprised 25.3 % of students with disabilities, according to the National Center on Education Statistics (2006). Through the passage of the ADA and its focus on physical access, much has been accomplished in terms of physical access on community college campuses. However, public transportation and accessible housing continue to be issues for students with physical disabilities. Lancaster et al. (2001) conducted a study interviewing students with disabilities from nine different community colleges in three different states. Issues were identified regarding public transportation being late or inaccessible, and the inability to find accessible housing was listed as primary difficulties.

Another source of frustration related to transportation issues and other complications comes from the difference in services provided by institutions of higher education compared to services for K-12 students. IDEA, the applicable law for secondary students requires that accommodations, modifications to curriculum, transportation to and from school, ancillary services as needed such as but not limited to physical and occupational therapy, medical services for diagnostic or evaluation services, and orientation and mobility services among others (Pierangelo & Giuliana, 2008). In higher education, colleges are not obligated to provide these types of services (U.S. Department of Education, 2005a). This situation can create difficulty for students with orthopedic disabilities and other disabilities who relied on these services and no longer receive them when they transition to higher education.

In a qualitative research study by Alexis (2008), he interviewed postsecondary students with physical disabilities, who were identified by Disability Services professionals at East Tennessee University. Some findings include that students with physical disabilities had a much lower level of participation within organizations than students without disabilities. Part of the reason for this might be that orthopedic impairments are often the most visible of the disability groups. Clapton and Fitzgerald (1997) hypothesize that physical disabilities may go against body image of the “norm” of a healthy body and thus these people are perceived as being an “other”.

A negative reaction towards clearly visible disabilities also affects students with Cerebral Palsy (CP). CP is an orthopedic disability that can affect motor control and speech patterns. In a study conducted by Nabors and Luhmkühl (2005), 180 college students read short vignettes about either a person with, or a person without CP. They were then asked to give their opinions about the two people. Results showed that students who read the vignette with CP had much

more negative perceptions of the people in all aspects of life than students who read about people without CP (Nabors & Luhmkuhl, 2005). This again goes back to the Clapton and Fitzgerald's (1997) concept of "otherness" and the way in which people react to otherness. Clearly, the visibility of an orthopedic disability creates some type of social reaction and educators need to be aware of this phenomenon.

Students with Mental Illness

Students with mental illness, depression, or both comprised 21.9% of all students with disabilities in a 2003-2004 survey conducted by the National Center on Education Statistics in 2006. This is a substantial increase from 17% in the 1999 survey. Mental illnesses can include a number of Diagnostic Statistical Manual Revised (DSM IV-R) diagnoses, such as schizophrenia, bipolar disorder, anxiety disorder, and depression. The American Association of Suicidology determined that more than 80% of colleges say they are seeing more students with serious psychological problems than five years ago (Miller, 2004). They also found students at community colleges "attempted suicide one or more times" at a 2% higher rate than students at universities (Miller, 2004, p. 2). Tragedies such as Virginia Tech where 32 students and staff were killed (Jarvis, 2008) have also placed an intense spotlight on students with mental illness, thus raising fear and paranoia about a population of students who are often misunderstood.

Cook (2007) discussed a variety of stressors that may contribute to the development, or exacerbation of mental health problems. Stressors include meeting expectations of parents, coping with family problems, handling long-distance relationships with significant others, lack of transportation, balancing school workload and class schedules with full-time work, peer pressure, relationship problems, difficulty managing time, racism, and financial problems. Boysen and Vogel (2008) summate that mental illness often carries a stigma, causing people to

experience “reduced self-esteem and health care utilization, a perception of public devaluation, and discrimination” (p. 447-448). These issues can intensify the impact of mental illness and make the student’s academic difficulties that much greater.

Faculty and student perceptions can increase stigma and student difficulties. In a study by Becker, Martin, Wajeeh, and Ward (2002), 315 faculty and 1,901 students were surveyed on their attitudes towards students with mental illness and some of the findings were disturbing. For example, 19% of college faculty and 15% of students felt students with mental illness could not be successful in their academic pursuits, and only 35% of faculty and 60% of students felt they would be able to discuss concerns with students who showed signs of a mental illness. Among faculty, 12% stated they were unfamiliar with available campus mental health services available and 13% stated they would feel unsafe if a student shared with them they had a mental illness (Becker et al., 2002). These feelings can increase the impact of stigma that students with mental illness might experience in college.

Of experienced mental illness is depression. An American College Health Association (2006) study conducted in 2004, found that in a sample of over 47,000 college students, 25% had been to therapy for depression, 38% were taking medication for depression, and 14% had been clinically diagnosed with depression. Also, over 40% of the respondents stated they felt so depressed that they had difficulty functioning in life activities at least one or more times during the last school year. This troubling statistic must be addressed to avoid sadness and tragedies on both an individual and college level. With so many students feeling they are in distress, it is important for faculty and administrators to better recognize symptoms when students are in need of assistance.

Students with Health Impairments

Students who have a chronic health diagnosis that impacts their well-being are categorized and tracked by the National Center on Educational Statistics (2006) as having a “Health Impairment”. Chiriboga (2007) provides a helpful definition: “The term health impairment refers to a wide range of more than two hundred medical conditions that interfere with normal physical functioning” (p.58). Diagnoses can include health conditions such as Crohn’s disease, HIV/AIDS, cancer, diabetes, and other illnesses that impact a student’s complete health. Students with chronic health diagnoses compromised 17.3% of all students with disabilities in academic year 2003 to 2004 (National Center on Education Statistics, 2006). Students who suffer from health impairments or chronic illnesses often find it challenging to succeed in traditional college academic programs because of relapses and unpredictable symptoms which exacerbate and abate over time (Royster & Olena, 2008). The students may also be on medications that cause an adverse reaction, or they may experience physical symptoms making attendance in classes difficult.

Students who suffer from serious chronic illnesses can also experience heightened feelings of depression, anxiety, and Post Traumatic Stress Disorder-like symptoms (Bakarat & Wodka, 2006). This can make focusing on studying and maintaining attention difficult. Less serious health conditions may not create such intense symptoms, but can still impact student mental health. Students with health impairments such as diabetes can be at risk for additionally exacerbated symptoms due to alcohol consumption (Balfe, 2007), which often is a rite of passage for college students.

Students with HIV/AIDS can be impacted in unique ways that negatively affect interpersonal growth and adult development (Bower & Collins, 2000). In Bower and Collins’

(2000) study, which involved interviewing five students with HIV and AIDS from a large southern university, they found the students felt a need to be distant from and secretive with almost everyone at their college about their health condition. Feelings of anxiety can be overwhelming, as shown in a quote by one of the study's female participants:

Sometimes I am too exhausted emotionally to go to class or to do my homework. I am tired, my mind is racing, and I am trying so hard to cope. I just don't think I can handle college right now . . . I feel like I am broken. I sit there with my friends over meals, and it enters my mind that they will have each other forever and I start to cry. Right in my pizza. And I can't tell them why, and they think I am odd. (Bower & Collins, 2000, p. 435)

As a result of all of these challenges, students with health conditions have unique situations in which their physical symptoms may not appear to be disabling, but internal emotional and interpersonal issues are negatively impacting their ability to attend college and learn.

Students with Autism

Students who have disorders on the autism spectrum, including Asperger's syndrome, often referred to by practitioners as a high-functioning form of autism, are one of the fastest growing groups in higher education, yet they are not separately tracked. The closest statistic available is the category of "Other" where autism is often placed; "Other" made up 15.1% of all students with disabilities in 2003-2004 (National Center on Education Statistics, 2006). In 2007, the Center for Disease Control Metropolitan Atlanta Developmental Disabilities Surveillance Program (ADDSP) found that among 8 year-old children in multiple areas of the United States, 1 in 150 had an Autism Spectrum Disorder (ASD). Colleges are seeing more and more students with autism enrolling because elementary and secondary school systems have become better equipped to prepare this population for higher education (Farrell, 2004). This trend is creating a new challenge for colleges.

There is a paucity of academic literature on the topic of college students and autism; however, more journal articles are emerging. A recent article written by Adreon and Stella-Durocher (2007), who are researchers at the University of Miami-Nova Southeastern University Center for Autism and Related Disabilities, explained what an autism spectrum disorder (ASD) is and then highlighted areas of difficulty related to the transition of these students from high school to college. They cite one of the main reasons students with autism fail in college is a lack of transition planning for moving into higher education. Some of the common, but often overlooked areas that are important for students to consider include deciding what type and size of college to attend, assessing and learning independent living skills, discussing when and how to disclose one's disability, identifying appropriate academic supports and accommodations, identifying necessary social supports, and identifying strategies to assist in adjusting to the college environment (Adreon, 2007). These are all important considerations that need to be addressed by the individual transition team where students and educators determine adult paths.

An article written by Dillon (2007) emphasizes many important points and highlights areas of difficulty students with autism experience. In summarizing what the college experience might be like for a student with autism, Dillon (2007) explains:

One person may talk in class all the time, preventing any other discussion, while another might never speak up at all. One person might miss most classes, not due to lack of interest but rather poor planning and organization of time and self. A third might arrive at class an hour early to make sure he will acquire his favorite chair. Another might get lost crossing the campus or be late waiting to park in his preferred parking spot rather than taking an available space. (p. 502).

Thus Dillon (2007) suggests that the most common areas where students experience the greatest difficulty are in organizational skills and time management. Instructors and service providers should be especially cognizant of these characteristics when working with this unique and growing population.

Students with “Other Disabilities”

Aside from students with autism, the other two primary types of disability included under the “other” category are traumatic brain injuries and developmental disabilities, that include mental retardation and Downs syndrome (National Center on Education Statistics, 1999).

Traumatic brain injuries (TBI) is an acquired injury to the brain caused by an external force. The impact can be mild to severe in impacting student’s abilities to control behavior, emotion, and cognition (Davis, 2007). It appears that adult college students with TBI generally regain most of their intellectual functioning after their injuries but continue to experience difficulties with controlling their emotions and report severe distress in their general personal and emotional functioning (Marschark, Richtsmeier, Richardson, Crovity, & Henry, 2000).

Students with mental retardation are another population in the community colleges. By definition, students with mental retardation (MR) experience slower processing rates and subaverage intellectual levels of intelligence (Pierangelo & Giuliana, 2008). Because of this, it would be unexpected for a student with mental retardation to be accepted at a four-year university. However, community colleges, with their mission of open access, have responded to addressing the needs of students with mental retardation. For example, Baltimore Community College has developed a “Single Step Childcare Program,” which allows students with developmental disabilities to take classes and participate in closely supervised internship programs enabling them to get state-certification as childcare providers (Schmidt, 2008). The Venture Program at Bellevue Community College, in Bellevue, Washington, allows students with developmental disabilities to earn an Associates of Essential Studies, concentrating on life skills and vocational training for independent living (Schmidt, 2008).

Yet, these examples are exceptional, as many community colleges do not provide such unique programs. For community colleges not having specialized programs, students with mental retardation may be ones who spend a short time on the campus. In a clarification of Section 504, the Office of Civil Rights explained students with disabilities must demonstrate they are “qualified” for higher education. According to the government, a qualified student with a disability is one who meets the academic and technical standards requisite for admission or participation in the institution's educational and programmatic offerings (U.S. Department of Education, 1995). If a student cannot intellectually meet the academic requirements as a result of their disability, even with accommodation, that student is dismissed. However, dismissal can be a very difficult process.

Duffy (2001), an adjunct faculty member at Virginia community colleges, describes a student who enrolled in a college developmental writing course and worked diligently to succeed in her class. But, because of the student’s intellectual disability and lack of any supportive programs targeted towards her disability, she failed to succeed after much hard work. The student experienced sadness, anger, and confusion. If more programs in community colleges were in place to serve students with disabilities, there might be fewer of these types of disappointments.

Students with Learning Disabilities

Students with learning disabilities (LD) comprised 7.4% of all students with disabilities in 2003-2004 (National Center on Education Statistics, 2006). Although community college students who self-identify and receive accommodation services generally report more favorable educational experiences and higher levels of satisfaction compared to students in four year universities (Finn, 1999), there still are identifiable problems.

Supportive social relations appear to be a more important consideration for students with LDs than cognitive issues. Murray and Wren (2003) conducted a study involving 84 students with LDs to examine whether cognitive and academic challenges are their primary issues. The study looked at measures of cognitive functioning, as well as self-report measures on study habits and attitudes about themselves. The level of the learning disability and cognitive functioning did appear to be significant variables for determining the student's success (Murray & Wren, 2003). In a qualitative study, Heiman and Kariv (2004) sought to identify some of the factors that cause students with LDs to experience difficulty. This study compared coping mechanisms of students with and without disabilities, and the researchers found students with LDs perceive themselves as receiving less support than students without LDs (Heiman & Kariv, 2004). In another qualitative study, Miller (2002) interviewed 10 students with learning disabilities who were perceived as being academically successful. He found these students with LDs reported high levels of self-determination, special friendships, and resiliency as reasons for their academic success. Also, the participants each mentioned having had at least one encouraging teacher. In a study by McCleary-Jones (2008) that involved conducting a focus group comprising students with LDs, one of the primary reasons identified for a student with a LD to withdraw from a class was lack of support.

The feeling of poor support might be linked to faculty, administrator, and student perceptions of students with learning disabilities. In the McCleary-Jones (2008) research concerning community college students with LDs, thematic areas of difficulty for students included professors not understanding the student's LD; instructors not knowing how to accommodate student needs; instructors refusing to allow students accommodations, such as extra time for examinations; administrators dismissing student complaints; and fellow students

pressuring LD students for not taking examinations with the other students when they are allowed to take their tests in another location so they can receive extended time to finish their tests. One student described a difficult situation in which she had explained to her instructor that due to her LD she read at the 4th grade level, but with accommodations she could comprehend at the college level. She said her professor's response was "Well what are you doing in college? College students should read at a 13 level" (McCleary-Jones, 2008, p.16).

A final potential issue for the community college student with a learning disability is they may not even realize they have a diagnosis, or cannot afford to pay for an assessment to determine their diagnosis. A primary difference between IDEA and Section 504, as well as other higher education disability laws, is colleges and universities are not responsible for providing testing to determine if a student has a disability (U.S. Department of Education, 2005a). Diagnostic testing for learning disabilities can be time consuming and expensive (Brinckerhoff, 2007).

While it is impossible to calculate the percentage of undiagnosed students, it is reasonable to assume that some students have not been diagnosed due to cost or other factors. Students who have not been diagnosed can experience frustration, and ultimately academic failure. Canto and Proctor (2005) conducted a study involving 228 students who all fell into one of three categories: (a) those recently evaluated and diagnosed who received accommodation services, (b) students recently evaluated and diagnoses who did not receive accommodation services, and (c) students who were recently evaluated but did not receive their diagnosis. For the two groups that were diagnosed and either received accommodation services or not, the post-graduate point averages (GPA) for both populations improved (Canto et al., 2005). These researchers suggest that even if the students do not receive support services, just self-awareness

and validation of their frustrations alone may have a positive impact. The third group of students who were evaluated but not diagnosed had lower GPAs and they were more likely to drop out of school than students in the other two groups.

Students with Attention Deficit Disorder

Students with attention deficit disorder (ADD) or attention deficit disorder with hyperactivity (ADHD) made up 10.9% of all students with disabilities in 2003-2004 (National Center on Education Statistics, 2006). ADD/ADHD is a neurological disorder that impacts a student's ability to control impulses, maintain attention, and focus on completing tasks (Marker, 2007). As a result, students with ADD can have more academic problems than students without ADD/ADHD (Heilgenstien, Guenther, Levy, Savio, & Fulwiler, 1999). They also may have difficulties with organizational and time management skills. This is not a lack of competence or abilities, but difficulties with impulse control and organization that leads to failing out of college (Wadsworth, 2007).

Primary ways these issues may be manifested for a student with ADD/ADHD at the college level are in social skills (Wadsworth, 2007). Students with ADD/ADHD can experience difficulty in forming relationships and developing effective communication skills with faculty and administrators. As a result of these difficulties, academic projects requiring students to work in collaborative groups can be especially problematic (Simplicio, 2007). It is no surprise that students with ADD/ADHD often have a co-morbid diagnosis of depression and anxiety (Wadsworth, 2007). This co-morbidity may result from the social struggles students with ADD/ADHD face.

Another potential challenge can be substance abuse. Because of difficulties with impulse control, students with ADD/ADHD can be more prone to abusing alcohol and drugs (Quinn,

2001). While this type of self-medication can be detrimental, studies have shown that appropriately prescribed medications from a doctor can positively impact college performance for some students with ADD/ADHD as the medications help them to maintain focus (Freyaldenhoven, Thelin, Plyler, Nabelek, & Burchfield, 2005). However, similar to students with learning disabilities, not all students with ADD/ADHD either are aware of their diagnosis, or can afford to pay for diagnosis and medications

Students who are Deaf

Students who are Deaf, or hard of hearing made up 4.9% of all students having disabilities in 2003-2004 (National Center on Education Statistics, 2006). Most students who are hard of hearing use either hearing aids or American Sign Language (ASL) if hearing aids are ineffective, as a means of communication (Reynolds & Fletcher-Janzen, 2004). Deaf students who use ASL are often the ones who face more difficulty given the complexity of communication and the differences in their primary language. Because they have a different language and an inability to broadly communicate with hearing students, except through an interpreter or a fellow student who knows sign language, college students who are Deaf report higher levels of depression than hearing students (Leigh, 1989). At the same time, deafness can create uniqueness in that many people who are Deaf view themselves as being a cultural group due to their unique language and history (Reynolds, 2004). Often Deaf adults will capitalize the letter “D” in their use of the word “Deaf” to emphasize this feeling (Padden & Humphries, 1990). Thus, students who attend schools with large Deaf populations may be less inclined to feel isolated. However, beyond issues of communication, often difficulties of English comprehension and interpreter availability can complicate their college experience.

One of the biggest challenges is created by differences between American Sign Language (ASL) and written English. ASL is an oral language where body movements and gestures often represent concepts rather than words. Because of this, syntax and word orders can be very different from written English. ASL uses many more nouns and verbs, fewer if any articles like “the” or “an,” and word order is similar to romance languages (Channon & Sayers, 2007). Consequently, diagnosing secondary disabilities such as learning disabilities can be very difficult with students who are Deaf and hard of hearing given the emphasis on written English in the diagnostic instruments (Berent, 2000). Channon and Sayers (2007) further explain the language differences, “At age 17 the average deaf student has the same number of compound and complex sentences as the average 10-year-old hearing student, and the average sentence length is equal to the average for an 8-year old hearing student” (p. 91). These differences in languages can make getting through an English composition course especially difficult. This may be a primary explanation for an estimate that two thirds to three quarters of postsecondary students who are Deaf or hard of hearing drop out of college (Taylor & Myers, 2000).

Another unique difference and challenge for these students is working with sign language interpreters and other accommodations. First, sign language interpreting is considered a standard and appropriate accommodation for students who sign (U.S. Department of Education, 2005b). Although many colleges, especially colleges in rural areas may struggle with finding interpreters (Winters, 2005), this does not exempt them from providing the student an accommodation. For example, a student at College of the Redwoods sued the institution for providing interpreters for only 91% of her classes (Freedman, 2007). An employee absence has the potential to cause a student to fall far behind if colleges are not prepared to address this. Beyond accommodation issues with interpreters, Deaf students can also struggle with note taking in class, as they are

required to move their vision from the interpreter, to the instructor, to their notepads. A student explains this frustration:

The only trouble is, when I take my eyes off the interpreter to jot down my notes, I am always afraid that I will miss something the professor said. So I try to write with my eyes on the interpreter, but then my head gets overloaded with information and I end up missing one thing or another. (Smith, 2004, p. 78)

For this unique group of students, it is important to understand cultural differences, and also address the realities of the academic complexities that the accommodations for their disabilities might impose.

Students who are Blind

Students with visual impairments or who are legally blind comprised 3.8% of all students with disabilities in 2003-2004 (National Center on Education Statistics, 2006). These students primarily learn through other modalities including auditory, tactile, and kinesthetic modalities (Reynolds & Fletcher-Janzen, 2004). They may use accommodations such as textbooks on tape, assistive technologies, and testing to assist them in accessing materials. For some students, they may also be able to read written materials in Braille, or Nemeth code. Nemeth code is a version of tactile language similar to Braille designed for mathematical equations and symbols (McCallister & Kennedy, 2001). While one might think that students who are blind or visually impaired may have more psychological issues of adjustment given the often visual nature of communication, studies have shown college students with visual impairments have similar levels of adjustment as their peers without disabilities (Beaty, 1994). Most challenges for students with blindness result from issues involving access. One of the primary learning challenges experienced by students who are blind or visually impaired has to do with alternative material production of written text to either audio recordings or Braille. Many materials in higher education are visual. Historically, two areas in which blind students or students with visual

impairments have experienced particular difficulty are learning foreign languages (Morrow, 1999) and math (McAllister & Kennedy, 2001). Foreign languages can be problematic in that alternative materials in other languages may be difficult to obtain in either audio recording, or in Braille (Morrow, 1999). In 1968, 44% of people who were blind could read Braille, while in 1989 this had declined to 9% (Schroeder, 1989). Given that foreign languages require students to both read *and* write in a different language, for a student who does not know Braille, learning to write another language relying on only audio recordings can be very difficult (Morrow, 1999).

Math also poses difficulties for the same reasons as those discussed in learning a foreign language (McCallister & Kennedy, 2001). Accommodations services offices must be prepared to help with addressing these challenges; however, in the last survey of accommodation services offices by the American Association of Community Colleges (1996), only 31% of American community colleges responded that they serve students with disabilities fully.

Another primary challenge for students who are blind involves the use of technology. While assistive technology, such as screen readers, allows students to operate their computer and even surf the Internet without the use of a monitor (Pieters, 2007), Web sites still must be written in a way that makes the materials screen reader accessible (Van Arnhem, 2001). In one study where 100 blind students were asked to surf a variety of websites that were both academic and personal, the average amount of time lost was 30.4%, with many websites crashing and ultimately being completely inaccessible due to poor formatting (Lazar, 2007). Even some city governments, which are directly accountable under Section 508, continue to be in non-compliance. In a survey of city websites for 70 of the United State's largest cities, only 20% were found to be screen reader accessible (Web Site Rankings, 2003).

In summary, for blind and visually impaired students, creativity and patience are essential, given the limitations of access that can be imposed by their disability. It is also important for faculty to have an understanding of issues surrounding blindness if they are to be effective in teaching these students. In research by Enburg (1999), she surveyed college students with visual impairments and found that one of the most difficult struggles for students was with faculty. This study also found that the level of faculty empathy and effectiveness in working with students with disabilities was directly linked to the level of education, experience, and preexisting attitudes they had toward students with disabilities (Enburg, 1999). Attitude and education again prove to be key elements for enhancing student success.

Interpretive Models

Much research on persons with disabilities emphasizes the model of self-determination as a lens for examining students (e.g. Wehmeyer, 2004; Russa, 2007; Field, Sarver, & Shaw, 2003). As explained previously, the Office of Special Education and Rehabilitative Services (OSERS) introduced this model in 1998. The self-determination model states that students who actively self-advocate and make efforts to fully understand their disabilities will be more successful in reaching their goals than those students who do not (Thoma & Gretzel, 2005). While this may be the case, the focus of this research study is on how community college faculty and administrators interact with these students, thus it involves a social exchange. Regardless of how much self-confidence and awareness a student might have, it is reasonable to argue that the perceptions and beliefs of the faculty or administrator also shape the conversation. Therefore, the self-determination model was not considered a suitable lens for this study.

Hahn's (1985) Social or Minority Group Model of disability has a sociological emphasis suggesting that disability is merely a trait of human difference and the true experience of having

a disability is more of a social reaction to this human difference. Thus, the experience of having a disability is much like that of any minority or social group in the United States. Hahn originally developed his model in 1985 as a reaction to the most frequently mentioned model for working with disabilities at the time, the Medical Model of disability (Gill, 1999). In review, the Medical Model essentially views disability as a sickness that requires treatment so its symptoms might either be cured or abated (Fries, 1997). There are many problems with this type of model. For example, the Medical Model suggests that disability is a human flaw that requires a professional to address its treatment. Another problem with the model is that it implies that a person with a disability should wish to seek out a cure. Many people with disabilities if given the choice would not wish to have such a ‘cure’ as they view disability as a part of themselves (Edwards, 2005).

Hahn’s model offers insight into the disability experience from a different perspective that focuses on a social component. His model applies to both readily visible and less visible, or “invisible” disabilities. Invisible disabilities are those that might not be observed immediately, but after disclosed, also create a social reaction. These reactions Hahn suggests often are a product of one’s own internal fears. When a person learns another has a disability, especially if it is severe, the person fears for their own well being. The concern is that they too might one day be in a similar circumstance, and thus one reacts with feelings of apprehension, avoidance, or paternalistic behaviors (Hahn, 1985).

Hahn’s model helps explain the learning process from a relational perspective. Given that ultimately learning does, to a great extent, center around a relationship between student and teacher (DeVito, 1986; Phi Delta Kappan, 2006). This model is also helpful in understanding the human dynamics surrounding disability in the community college context.

Gill (1999), Assistant Professor of Human Development and Director of the Chicago Center for Disability Research at the University of Illinois at Chicago, said not only is disability a socially constructed trait of human difference but includes universal beliefs that most people with disabilities share. He explains having a disability includes having universal cultural values, including tolerance for other's differences, patience for problems that lack resolution, and highly developed skills for managing multiple problems simultaneously. He also says the goals of people with disabilities are similar to the goals most people have in life--to celebrate one's uniqueness rather than limitations, to strive for equality within society, and to look at the things that make one different as strengths rather than weaknesses.

Gills' (1999) additions to this model are helpful as they mirror what teaching in many ways truly is—a relationship between an instructor and a student. As the teacher reacts to a student with a disability upon discovery of the disability, a change takes place. Whatever this change becomes, it is a social product that results from the interaction between two people. Based on Hahn's conceptual model, improving the social exchanges should contribute to increased student learning.

A secondary and complimentary framework used for this study is Universal Design. The Universal Design model provides specific suggestions and actions that can be taken to make learning more accessible for students with, or without disabilities. Some of the most commonly accepted principles of Universal Design are ones written by Scott, McGuire, and Shaw (2001):

Principle 1: Equitable use--

Instruction is designed to be useful to and accessible by people with diverse abilities. Provide the same means of use for all students; identical whenever possible, equivalent when not.

Principle 2: Flexibility in use--

Instruction is designed to accommodate a wide range of individual abilities. Provide choice in methods of use.

Principle 3: Simple and intuitive--

Instruction is designed in a straightforward and predictable manner, regardless of the student's experience, knowledge, language skills, or current concentration level. Eliminate unnecessary complexity.

Principle 4: Perceptible information--

Instruction is designed so that necessary information is communicated effectively to the student, regardless of ambient conditions or the student's sensory abilities.

Principle 5: Tolerance for error--

Instruction anticipates variation in individual student learning pace and prerequisite skills.

Principle 6: Low physical effort--

Instruction is designed to minimize nonessential physical effort in order to allow maximum attention to learning. Note: This principle does not apply when physical effort is integral to essential requirements of a course.

Principle 7: Size and space for approach and use--

Instruction is designed with consideration for appropriate size and space for approach, reach, manipulations, and use regardless of a student's body size, posture, mobility, and communication needs.

Principle 8: A community of learners--

The instructional environment promotes interaction and communication among students and between students and faculty.

Principle 9: Instructional climate--

Instruction is designed to be welcoming and inclusive. High expectations are espoused for all students. (Scott et al., 2001, p.2)

This Universal Design model is helpful in seeing how college faculty and administrators view the construction of the college environment, both inside and outside of the classroom. The principles reflect actionable and attitudinal concepts, such as Principle 4 and 6, and others that are more attitudinal, like Principles 8 and 9 (McGuire & Scott, 2006). These principles aided the researcher in seeking out strategies used by administrators and faculty in this study.

A helpful resource educators can access for recommendations on Universal Design is offered by the Center for Applied Special Technology (CAST). This resource provides

recommendations for educators on creative methods to make the classrooms more universally designed (accessible), and for administrators in implementing Universal Design within their institutions. CAST also offers online training, conferences, and onsite institutes dealing with how to make a school's campus more accessible. An important point to emphasize is while some concepts of Universal Design can have a high cost, such as making architectural modifications or upgrading classroom technology, often changes can be implemented with little or minimal cost by using existing resources at a campus (CAST, 2010).

In summary, Hahn's Social and Minority Group Model of disability and Universal Design frameworks form accommodating conceptual frameworks in which to examine learning from both relationship and practical application perspectives.

Summary

The intent of this research study was to discover ways in which community college faculty and administrators can facilitate learning for students with disabilities. Thus, it is important to understand both the history of education for students with disabilities, as well as current issues that impact these students. In addition, special attention is needed to address the unique challenges each disability group can encounter. As has been shown through this review of literature, more research is needed to improve educational delivery for a surprisingly large yet relatively unstudied and misunderstood population—the community college student with disability—a population still not fully measured, but thousands strong and growing.

CHAPTER III

METHODOLOGY

This chapter explains the qualitative design and procedures used to conduct the research study. It begins with a review of the purpose and driving questions, followed by the rationale for selecting a qualitative methodology and the case study method. The data collection and analysis procedures are then discussed along with other important facets of the research, including credibility, ethics, and limitations.

Review of the Purpose and Driving Questions

In review, the purpose of this study is to discover ways in which community college faculty and administrators can facilitate learning for students with disabilities. This research enables community college leaders, including faculty and administrators, to gain a greater comprehension of the unique challenges that students with disabilities can face. To achieve the purpose of the study, four specific driving questions were addressed:

1. What do community college faculty perceive as the challenges of teaching students with disabilities?
2. What strategies have community college faculty found to be effective in assisting students with disabilities to be successful?
3. What actions have community college administrators taken that effectively address the issues related to success for students with disabilities?
4. How can community college administrators enhance their support of faculty who teach students with disabilities?

In addition to guiding this study, these driving questions were indicative of the most suitable methodology for the research design.

Research Design

Qualitative Methodology

Qualitative research is an effective tool for exploring social and educational problems (Barbour, 2008); it cuts across disciplines, fields, and subject matters. As described by Merriam (1998), “Qualitative research is an umbrella concept covering several forms of inquiry that helps us understand and explain the meaning of social phenomena with as little disruption of the natural setting as possible” (p. 5). From an educational perspective, qualitative research can be helpful in looking at current challenges within education, identifying sources of problems, and exploring potential solutions. Thus, qualitative research methodology serves as an ideal choice for this study, which seeks to discover ways in which community college faculty and administrators can facilitate learning for students with disabilities. The research sought to understand and define a human phenomenon experienced by faculty and administrators in working with students with disabilities at the community college level.

Creswell (2007) states that qualitative research has several essential characteristics, including using a natural setting, the researcher as a key instrument, multiple sources of data, inductive data analysis, a variety of participants’ meanings, emergent design, at least one conceptual lens, interpretive inquiry and a holistic account. Moreover, Denzin and Lincoln (1994) emphasize that qualitative research should be multimethod, involve an interpretive, naturalistic approach, and attempt to make sense of phenomena in terms of the meanings people bring to them.

In this study, various community college faculty and administrators were interviewed to gain their unique, as well as common perspectives concerning effective ways to facilitate learning for community college students with disabilities. In addition, multiple data collection

methods were used, including interviews, field notes and review of documents to enrich, and enable triangulation of the data. Thus, this research study reflects the characteristics of qualitative research described by Creswell (2007), Denzin and Lincoln (1994) and Merriam (1998). From among the several methods that can be used to conduct qualitative research, case study was considered to be the best approach for this study.

Case Study Method

The case study method is one that allows a specific case to be closely examined for information and themes. As defined by Barbour (2008), case study “relates to study design and to sampling, either of individuals or setting, in order to allow study of specific identified characteristics and their impact on the phenomenon being researched” (p. 93). Thus, case studies enable detailed research to be conducted at a specific place and time where a social problem can be closely examined. Given that this research study aims to understand students with disabilities at the community college level by looking at a ‘typical’ school for policies, practices, insights and suggestions, the case study method was selected.

Within the typology of case studies described by Willis (2007), Barbour (2008) and Merriam (1998), a descriptive case study is most suitable for this research. Descriptive case studies attempt to gather information and a detailed description of a case while not developing a theory as the case progresses (Willis, 2007). Merriam (1998) adds that the research should be “richly descriptive” of the phenomenon that is being studied (p. 8). This means that the research report should be full and complete in the description of the case. Therefore, descriptive case studies are helpful in providing a more complete explanation of something by requiring it to be fully studied, and the descriptive details provide the reader with a vicarious experience (Stake, 1995).

This study focused on a single place that is generally reflective of suburban community colleges. The descriptive case study design allowed for conducting interviews with a cross-section of administrators and faculty to gain an in-depth understanding of the phenomenon of interest from various perspectives. It also enabled the collection of detailed information necessary for providing the rich thick description that can enable readers to determine how the study's findings may be transferable to their own institution. Thus, the descriptive case study method provided the well-developed data necessary to address the research purpose and answer the driving questions.

According to Creswell (2007), core elements of a case study include a clearly identifiable case that is bounded by time and place and includes multiple sources of data. For this research, the intent of examining a single community college allows for the research to be bounded and conducted in depth by gathering perspectives and information from a variety of sources including faculty and administrator interviews, field notes and documents.

However, as with all research methods, case study has weaknesses that need to be recognized. A common criticism of case studies is that they have the potential for poor rigor and appear sloppy (Yin, 2002). In addition, case studies can be limited by the integrity and sensitivity of the researcher (Merriam, 1998). In an effort to address these concerns, a variety of steps were taken. First, approval to conduct the research was received from the National-Louis University's Institutional Review Board (IRB). Second, permission was received from the president of the case study college to conduct this research at the institution. Third, interviews were tape recorded, with the permission of participants, and participants were asked to verify the transcriptions. These measures helped ensure a well organized and ethical study while contributing to the validity and reliability of the research.

Participants

The quality of the case study is very much affected by the selection of the case and participants. Barbur (2008) explains that sampling gives researchers as much potential as possible for comparing or contrasting different views and opinions. Creswell (2007) also emphasizes that purposeful sampling is a specific sampling method that allows subgroups and comparisons to be made. The type of purposeful sampling used for this research was criterion-based, where the case study institution met specific criteria. Merriam (1998) explains there are two levels of sampling that should be used in conducting case studies. The first is choosing the case itself that will be studied and then the people within that case.

For this study, five criteria were used to select the case study institution: (a) an American community college with a large student population to represent a wide diversity of disabilities, (b) a variety of academic disciplines offered thus allowing for multiple opinions to be gathered, (c) an office of disability or accommodation services that provides support for a variety of disability groups, (d) a cooperative context that enabled good access to research data and participants within the institution, and (e) a location that was within reasonable proximity of the researcher to enable the fieldwork. Final considerations were the supportiveness of administrators, including the college president and several vice-presidents, for conducting the research, and the researcher's familiarity with the institution.

Purposeful sampling also was used to select study participants within the case study institution. The sample of participant administrators needed to include senior leadership, such as the Coordinator of Disability Services, as well as the Associate Deans and Deans over specific academic disciplines. In addition, faculty and administrators reflecting a variety of academic disciplines were selected. To gather as much teaching insight as possible, faculty members

having a professional reputation for being effective in teaching students with disabilities were specifically sought as participants. The goal was to include different administrators and faculty who had some connection to students with disabilities on levels ranging from small to great. It was important to have this broad perspective to develop the richness and rigor called for in effective qualitative research. In selecting the interview participants, the researcher chose individuals from the college's organizational chart who appeared to have a direct influence on students with disabilities at the community college, or people the college's Coordinator of Disability Services recommended as individuals who would be insightful on the topic. Thus, the types of purposeful sampling techniques used were criterion and snowball sampling.

Ultimately, in an attempt to gain as broad a view as possible, within the time available to conduct the research, six administrators and seven faculty were selected to be interviewed. Administrators included the Vice-President of Academic Affairs, Vice-President of Student Affairs, Dean of Students, Associate Dean of Developmental Education, Coordinator of Disability Services, and Associate Dean of Social Sciences. Faculty members from the disciplines of speech, chemistry, mathematics, developmental education, computer science, and education, as well as a faculty counselor who both teaches and provides personal, career, and academic counseling to students also were participants.

Instrumentation

The researcher is the primary instrument in conducting qualitative research; therefore, it is important to provide information concerning this individual. The researcher for this study has a strong interest in the topic of assisting students with disabilities in community college settings. The researcher has been involved in personal advocacy concerning disability issues since his undergraduate years. For example, in 1994, as a student, the researcher organized Butler

University's first disability advocacy day, promoting the importance of equal access for students at the university. In addition, the researcher's academic history shows a dedication to disability issues. His Bachelor's degree was in psychology, sociology, and anthropology and he obtained his Master's degree in rehabilitation counseling, with his graduate research focusing on students with learning disabilities in higher education.

On a professional level, the researcher has been involved in disability services at community colleges for over 11 years. He served as the Coordinator of a Disability Services office for seven years, and then moved on to become a counselor and faculty working with students with disabilities for five years. Programs he helped develop included the Butler Mentoring Project, a mentoring program for students with learning disabilities; Chemeketa DanceAbility, a professional dance group for persons with disabilities; and a college's Vocational Skills Program, a program dedicated to helping students with developmental disabilities in achieving skills for job and life preparation. This personal, academic, and professional experience, helped to prepare the researcher for carrying out this study.

Data Collection Methods

A variety of data collection methods were employed to conduct the research, including interviews, field notes, a questionnaire, and document analysis. Examining multiple data sources and various participants' perspectives enabled triangulation of the data, which strengthened the study's validity and reliability. An explanation of each method, including their strengths and weaknesses, is presented in this section.

Interviews

After selecting qualitative case study for the research design, the next step was to choose the primary data collection method for facilitating the research. Interviewing is often regarded as

a ‘gold-standard’ of qualitative research (Barbour, as cited in Barbour, 2008). Interviewing allows for an in-depth understanding of other people’s experiences and the meaning they make of their own experiences (Seidman, 1991). Moreover, interviews are sometimes the only way to obtain relevant data (Merriam, 1998) and allow the researcher to build a bridge between culture and method (Silverman, 2008). Interviews can enable the researcher to gather a variety of perspectives on a particular topic to gain further insight.

Fontana and Frey (1994), explain there are three different types of interviews that can be used: structured, semi-structured, and unstructured. Structured interviews comprise specific questions which are consistently asked in the same identical manner during each interview. Semi-structured interviews have a framework, but allow for additional questions to be asked beyond the structure of the interview. Unstructured interviews are similar to conversations and vary greatly from one interview to the next. Given that specific guiding questions had to be answered, yet additional exploratory information and probes were of interest to the researcher, semi-structured interviews were the best fit for this study.

For effective interviewing to take place, the researcher must carefully craft the questions and practice good interviewing techniques. Seidman (1991) recommends a variety of helpful techniques in terms of establishing a good interviewer and interviewee relationship. He explains ways to transform the interview from an “I-Thou” relationship to a “We” relationship (Seidman, p.72). For example, the interviewer must establish a good rapport, avoid entering into a therapeutic relationship, use open-ended questions for large responses, and acknowledge the lack of reciprocity between interviewer and interviewee. These techniques were carefully considered in conducting the interviews for this study.

Although interviews are used frequently in qualitative research, all data collection methods have weaknesses. Interviewing can be taxing on both the interviewer and interviewee, which can result in making errors. For example, researchers without extensive experience in interviewing can make errors through technical issues such as tape recorders breaking down and not having a back-up (Creswell, 2007). Also, interviewing may not be a good choice if a researcher has a limited amount of time to conduct research (Seidman, 1991). Moreover, Creswell (1994) notes that information is filtered through the perspectives of participants being interviewed, and the participant may say what they think the researcher wants to hear. In addition, not all participants are equally articulate. However, in this study, these concerns were countered by the researcher's efforts to encourage the participant's sharing of unique perspectives and the participants were confident professionals who would not likely be influenced by the researcher. Interviews provide detailed data and can be accomplished without predetermined hypotheses and goals (Willis, 2007).

Questionnaires

A preinterview questionnaire was distributed to participants asking for their years of experience in education, work experience in community colleges, opinions concerning the greatest difficulties faced by students with disabilities in learning at community college, and views of the greatest difficulties in teaching students with disabilities at the community college (Appendix A). This questionnaire helped to ensure that the participant had the qualifications desired before carrying out the interview and saved time during the interview process for more exploratory open-ended questions. It also helped the researcher in preparing for interviews by knowing more about the participant's level of experience.

Field Notes

Field notes were carefully recorded during and after interviews to enhance the research and enable triangulation of data for later interpretation. Silverman and Marvasi (2008) emphasize that field notes preserve the details of interaction, and place the researcher in a better position to analyze important issues. In this sense, field notes are said to be a type of ‘story-telling’ because the researcher describes from their own perspective what is happening (Denzin, 1994). Merriam (1998) makes several recommendations including leaving the setting immediately after the interview and recording as many field notes as possible, drawing a written diagram of the interview space, recording any observations made in the space where the interview took place, and writing down themes that emerge after the interview has concluded. All of these methods were employed by the researcher to ensure that effective field notes were recorded.

While field notes can be helpful in enriching research, they also have the potential to be problematic in that, as stated by Silverman and Marvasi (2008), you are “stuck with the form in which you have made them” (p.198). They go on to explain that the problem with field notes is indeed they are observations from the researcher’s perspective; this is a limitation because it is only from the researcher’s perspective and not a variety of perspectives. Another limitation of field notes is they cannot gather every single possible thing that occurs. There are undoubtedly things the researcher will miss or misinterpret. This is what Merriam (1998) calls the ‘schizophrenic’ aspect of collecting field notes. In an effort to avoid missing important information, the researcher took detailed notes during the interview and recorded thoughts afterwards including observations and impressions which were also coded during the data analysis. Reflections were documented in an effort to prevent bias through use of reflexivity.

Documents

Documents can consist of participant journals taken during a research study, personal letters or text in emails, public documents, photographs, videotapes, or charts (Creswell, 2007). For the purposes of this study, mainly governmental documents on disability-law and college-specific information found on the college's website were used. Strengths of this type of analysis are that documents can assist the researcher in identifying themes and may provide insight through the observation of how the documents are produced and how they function within an organization (Barbour, 2008). For example, the researcher can infer through the college's website the degree to which it values disability issues by examining the amount and type of related information provided online. However, this inference would only be one data point in the analysis concerning commitment.

Documents can also have research limitations. For example, most documents are not developed specifically for research purposes (Merriam, 1998), thus the information may be incomplete. Merriam (1998) adds that because of this, it can be difficult to determine the authenticity and accuracy of documents and often the information is put in a form that is not useful. In an effort to address these potential weaknesses, the researcher sought data triangulation through various reports; for example, reports were drawn from the Illinois Community College Board (ICCB) and the federal Office of Civil Rights (OCR).

Data Collection Procedures

Participants were contacted using an email that provided an explanation of the study and asked if they were willing to participate in the research. The email included the study's driving questions as well as a brief explanation of the researcher's background and the significance of the research. Those who volunteered to participate in interviews were then contacted with a

second email that included the questionnaire, (Appendix A), informed consent form (Appendix B), and interview questions (Appendix C for administrators and Appendix D for faculty). Each participant was interviewed once, at a time that was convenient to both the researcher and interviewee. These interviews took place over a three month period. Dates and times for interviews were verified using short emails. Most of the interviews were conducted before or after work hours in the interviewee's offices. Upon meeting the interviewees, the researcher introduced himself and established rapport by beginning with small talk conversation to make participants feel comfortable. Questionnaires were collected, and if not completed, the participants were allowed to complete it prior to starting the interview. The researcher then explained the purpose of the research that was being conducted and why this topic was important to the researcher on both a personal and professional level.

The researcher then confirmed once again (the first mention of this was in the 2nd email to interviewees), that this interview would be tape recorded, and upon receiving the participants permission to record, the interview commenced. Semi-structured, open ended interview questions were asked and responses probed with closely-related follow up questions when appropriate. Field notes were also written during the interview with the researcher taking descriptive notes, and reflective notes were added after the interview was concluded. A transcriptionist transcribed tape recordings of interviews and the transcripts were sent by email to the participants for review and any clarifications or corrections they wanted to make. After interviews were verified by the interviewees, thank you notes were sent to each expressing appreciation for their time and effort.

Ethical Considerations

A variety of measures were taken to ensure that ethical considerations had been addressed when planning and conducting the research. The researcher gained Institutional Research Board (IRB) approval through National-Louis University before commencing the research. Confidentiality of all participants and the case study institution has been maintained throughout the study by using job titles to identify persons interviewed and a pseudonym for the institution. The college's profile was cautiously described so as not to disclose its identity. Interviews were recorded using a digital recorder, downloaded onto a flash drive for storage and the flash drive will continue to be stored in a locked cabinet. Paper copies of the transcriptions will also be filed in the locked cabinet. Only the researcher and transcriptionist had access to this jump drive and the transcriptionist signed an agreement ensuring confidentiality (Appendix E).

In addition to these measures, Barbour (2008) states that it is important for interviewees to understand what consent does and does not mean; therefore, the researcher ensured that participants understood the specifics of the informed consent. For example, the person must understand that their information is confidential and will not be shared with others. It is also important for researchers to think ahead for possible ethical conflicts that might arise (Silverman, 2008). For example, one participant asked who else would be interviewed for this research. It was important to have an appropriate response, as sharing this information would breach confidentiality. Moreover, Creswell (2007) noted that the researcher should avoid encouraging "off the record" comments, especially if they can damage individuals (p. 142). Researchers also must be aware of the biases they bring to the research as these can taint the results (Merriam, 1998). Given the researcher's strong background in disability services, it was important to

control for bias, particularly if an interviewee expressed any negative attitudes towards students with disabilities.

Data Analysis Procedures

Merriam's Constant Comparative Method

Merriam's (1998) constant comparative method was used to analyze the data collected for this study. This method is appropriate for researchers who are not seeking to build theory, but rather explore different sources of information. In its application, the focus is on constantly comparing data from a variety of sources and identifying common, as well as unique themes. For this research, data from field notes, interview transcripts, questionnaires, and documents including relevant college reports and policies were compared. However, before conducting the analysis, it was important to focus on data management.

Data Management

As noted by Creswell (2007), careful steps must be taken to initially store the data so it can be readily reviewed. He suggests making electronic backup copies of files, using high quality equipment when audio-recording, protecting the anonymity of interviewees by removing their names from the data, and developing some form of data collection matrix as a means for locating and identifying information for research. For this study, interviews were audio recorded using a well-reputed digital recorder. The recordings were saved onto a jump drive as separate files and each file was labeled with an anonymous code to protect the identity of the interviewee. Each administrator was assigned a code using "A" and a number (e.g., A1, A2) based on the random order in which they were interviewed, and each faculty participant was assigned an "F" code (e.g., F1, F2). A master list matching code identifiers to names was kept in a locked filing cabinet with only the researcher having access. The files were emailed to a transcriptionist who

typed the taped interviews into a Microsoft Word document. In addition, backup digital copies of the interviews were placed on two other jump drives that were locked in the filing cabinet.

In segmenting the data, answers to interview questions were copied and pasted into separate Microsoft Word files where each interviewee's response was included for each question. Separate folders were then created to house both faculty and administrator files, as well as field notes and survey responses. Electronic files of typed transcripts were emailed to interviewees for verification and the opportunity to make revisions. In one instance, an interviewee asked that a comment made concerning a colleague be removed from the transcript and this request was immediately accommodated. After receiving final verification and agreement to use the typed transcripts from interviewees, the focused analysis could begin.

Development of Categories

The goal of data analysis is to communicate understanding (Merriam, 1998). It is important for data analysis in case studies to include an intensive, holistic description and analysis of a single, bounded unit. In essence, data analysis is the process of organizing and sorting data to help further insight (Glesne, 2006). The development of categories and subcategories is essential in enabling the researcher to label and sort the information. These categories should be identified within the data gathered through a largely intuitive and emergent process (Merriam, 1998). The researcher should develop a set of information groupings to fit under each category based on the themes of the research questions, as well as any other unique sets of data that may emerge. There should be common characteristics within the categories to make their organization easy to understand. Moreover, categories should be developed upon reviewing and comparing transcripts, field notes, and other relevant documents; however, Merriam (1998) recommends starting with only one set of data for the initial analysis.

According to Merriam (1998), the titles of categories should be named by the researcher and include amongst them the purpose of the research. They should also be exhaustive in analyzing the data using mutually exclusive categories, thus assuring there is no overlap of different themes. Finally categories should be sensitizing in that the name of the category can be viewed as being connected to the data, thus the process will be conceptually congruent when determining category names (Merriam). Yet, it is also important that categories be manageable, thus the number of categories should not become too large. Moreover, the categories should be plausible given the source from which the data is being collected. Once categories are developed, data should again be re-examined to ensure the categories are appropriate and robust.

In selecting information to sort under each category, units of data should be chosen:

A unit of data is any meaningful (or potentially meaningful) segment of data. . . . A unit of data can be as small as a word a participant uses to describe a feeling or phenomenon, or as large as several pages of field notes describing a particular incident. (Merriam, 1998, p.179)

Segments should be chosen where there is meaning that can be interpreted. The length of the data segment is not relevant; rather, it is important that meaning can be interpreted from the unit of data. The data should be both heuristic in providing information and meaningful to the study in stimulating further thought. The data should also be able to stand-alone without having any additional information to clarify it. After selecting segments, the next step is to develop a list of codes to reference the units of data that are collected, and the categories themselves. Miles and Huberman (1994) describe codes as “tags or labels” that are “attached to ‘chunks’ of varying size—words, phrases, sentences, or whole paragraphs. . . . They can take the form of a straightforward category label or a more complex one” (p. 56). An abbreviation or number can be used to symbolize each code.

Based on Merriam's (1998) recommendations, this study's research and interview questions were used as the initial category titles under which tentative subcategories were developed. Using these broad categories, each interview was analyzed by organizing statements that were linked to tentative subcategories, which emerged upon close examination of the transcripts. To accomplish this process, the researcher printed a hardcopy of each typed transcript, and highlighted statements using different colors to represent each of the broad categories. Separate word documents were generated for each category, and quotes from the transcripts were copied and pasted under the appropriate category. Short five to 10 word summary statements were developed next to each quote to facilitate data management and enabled the identification of possible tentative subcategories and new categories.

Next, Microsoft Excel spreadsheets were created to make each category, as well as the whole picture easier to visualize. Each spreadsheet addressed a different topical area as identified by the researcher. The spreadsheets provided a tool for tabulation of the number of times faculty and administrators made statements that fell under each category. Thus, each spreadsheet provided information concerning the frequency with which each category was found in all the interviews and the number of times the categories appeared in individual transcripts. This information was used in the data analysis process and not for the development of findings. As explained by Berg (2009), while this count identifies magnitude, which adds to the analysis, it does not represent a substantial finding alone. The spreadsheets enabled consolidation of subcategories into larger, more manageable groupings and the identification of unique subcategories that seemed particularly informative to the study. Thus, preliminary themes that answered the research and interview questions emerged.

Once the preliminary themes had been determined, participant quotations were verified through another review of the transcripts. In addition, when the titles of the different categories and subcategories were finalized, all were listed on a master spreadsheet organizing the titles and assigning a code to each title using the cell number listed on the spreadsheet to facilitate further data analysis. After the interview transcripts were coded and the data categorization process was completed, other sources were examined. Documents and field notes were analyzed to triangulate and enrich the categories and subcategories. Consolidation of the questionnaire responses was accomplished by typing the data into a Microsoft Excel spreadsheet; this procedure facilitated data management and analysis. Categories and subcategories were then reexamined to determine if additional categories were necessary or existing categories were reinforced. After completing this process, field notes were examined. First, the handwritten field notes were typed into a Microsoft Word document and then compared to existing categories and subcategories for triangulation and to identify any new potential categories or subcategories. When all interviews, surveys, and field notes had been analyzed and coded, they were reexamined one last time allowing for a final confirmation or revision of categories, subcategories and groupings. At that point, the researcher reevaluated the preliminary themes and identified additional themes that emerged regarding the research questions and other areas of relevance to the purpose of the study.

Validity, Reliability, and Transferability

Validity

Validity is a measure that assists in determining if research is genuine. Yin (2002) explains that validity takes on many forms, but its purpose is to assure that research is trustworthy, credible, confirmable, and uses dependable data. Internal validity centers on how

much the research findings match reality (Merriam, 1998), while external validity centers on whether a study's findings can be generalized to a larger population (Seidman, 1991). Although single case study research cannot be generalized according to the meaning found in quantitative methodology, Merriam describes user generalizability (transferability) as a suitable approach for qualitative research. To strengthen external validity, a community college was chosen that is generally reflective of community colleges in the United States with regard to core characteristics, although each community college has unique features. A technique that strengthens both forms of validity is the triangulation of data. Collecting data from multiple sources including interviews, documents, field notes, and questionnaires, enabled triangulation and increased confidence in the study. Data was compared between the various data sources to identify similarities and differences.

Another means for addressing issues of validity was peer review. Peer reviewing can be an effective way to have another person with an academic background critically review a researcher's work, and point out discrepancies (Lincoln & Guba, 1985). The researcher requested feedback from other professionals in the field, as well as a methodologist to guard against bias and enhance the study's validity.

Reliability

Reliability centers on the concept of research being replicable. It also speaks to the quality of the data gathered (Silverman & Marvasi, 2008). Yin (2002) explains that reliability is the extent to which another researcher could conduct the same study, using the same procedures and factors, and producing the same results. However, reliability assumes there is a single reality, which is not the paradigm of qualitative research; therefore, it is reasonable to expect the results will not be identical (Merriam, 1998). Reliability is strengthened in qualitative research

by describing the design and procedures in detail, as has been done in this study, thus enabling the reader to assess the credibility of the research and conduct a similar study.

In addition, by explaining the researcher's assumptions and keeping an audit trail, reliability can be further assured (Merriam, 1998). All of these methods were employed by the researcher to assure results were reliable and reviewable by another researcher.

Transferability

Transferability, as mentioned previously, is a reader's ability to generalize findings of the study to other contexts, such as their own community college. It is considered analogous to the word generalizability in qualitative research (Miller & Crabtree, 1994). By providing rich, thick description in the data analysis and findings, the readers can determine the applicability of the findings and recommendations to their own and other institutions. Transferability also holds the reader of the research responsible for determining if there is a fit between what they are reading and the current context of the situation they are examining (Duff, 2007).

Limitations

This study had three limitations related to the timeframe and funding available to conduct the research: (a) one geographic area (Illinois), (b) a single case (community college), and (c) the number of interviews that could be carried out and transcribed. To address these limitations, the researcher selected a cooperative case study community college that was reasonably reflective of many community colleges in the United States and the interviews were designed to develop rich thick description that would enable readers from other community colleges to assess the transferability of findings and recommendations.

Another limitation inherent, in all qualitative research is the potential for researcher and participant bias. The researcher addressed issues of potential bias early in the study by applying

introspective reflection throughout the process and asking many reflexive questions such as “why am I doing this research,” “how am I perceived by the people I interview,” “what do I want my audience to learn,” and other questions to this effect.

Summary

In summary, this study used a qualitative methodology and the case study method. Data collection was accomplished through interviews, a questionnaire, document review, and field notes. The case study community college and participants were selected using purposeful sampling. Data collection procedures included the use of digitally recorded interviews following standard protocols for conducting qualitative research. Data analysis procedures included Merriam’s (1998) constant comparative method of exploring different sources of information through comparison of results and careful, thorough analysis of the data. Appropriate measures of data management were applied through proper identification of categories and subcategories which corresponded with the data collected. Validity, reliability, and transferability were addressed through triangulation of data, peer review, maintenance of an audit trail, careful selection of the case, and rich, thick description. Finally, limitations of time, finances, and bias were addressed. The next Chapter will focus on an examination of research results.

CHAPTER IV

FINDINGS

This chapter presents findings derived from analysis of data gathered through interviews, questionnaires, documents, and field notes. These findings address the purpose of the study, which is to discover ways in which community college faculty and administrators can facilitate learning for students with disabilities. First, a description of the case study institution and information about the participants is provided. Subsequent sections specifically explain findings that answer each of the research questions, and a final section includes findings that were outside of the research questions, but relevant to the purpose of the study.

Case Study Institution

The case study community college is located in the Midwest. It hosts university transferable, occupational programs, and offers more than 100 different areas of study. Classes are conducted in traditional classroom formats, electronic formats, independent study; they offer flexibility to meet students' schedules throughout the day, evening and weekend, and take place at locations throughout the counties the college services. The college has about 40 administrators, 400 full time and 1500 part time faculty, and more than 1000 staff in other positions. It offers many noncredit programs to serve the needs of the community, such as English as a Second Language (ESL), General Educational Development (GED), and continuing education courses.

For the fall 2008 registration cycle, the Full Time Equivalent Student (FTES) enrollment was about 15,000. The average age was 30 years, with the median age being 23, and minority students comprised about 33% of the total student population. The top programs for enrollment

were nursing, early childhood education, fire science technology, accounting, and radiology.

Nearly half of the college's students state an intention of transferring to a four year institution.

Based on records maintained by the Coordinator of Disability Services, the office serves an estimated 1,000 full time students, which represents more than 6% of total FTEs. The college's Disability Services staff comprises one full time Coordinator, who has been in the position for 15 years, and three part time disability specialists, who work directly with students for about 20 to 35 hours per week. There is also one office manager, who coordinates the front desk as well as interpreting services for Deaf students. The Coordinator reports directly to the Dean of Students, who also supervises Counseling Services, Advising Services, and Career Services in addition to the Disability Services office.

While the program has no formal policies for serving students, there is a series of steps students must follow to access accommodation services. First, the student must formally disclose they have a disability and supplying documentation to a specialist. The student must provide disability documentation on their own, as the college does not offer diagnostic testing. The appropriate disability specialist or Coordinator then reviews the documentation and makes recommendations regarding accommodations the student should receive. The student is given a form verifying that they have a disability and received approval for whatever accommodations are necessary to provide equal access. For privacy, the form does not state the disability, as the students have the discretion of sharing more specific information with faculty. The student presents the form to their instructors, who are obligated to implement the accommodation. However, if the accommodation requires numerous hours to facilitate, such as audio recording of textbooks onto tape, the Disability Services office provides assistance. Faculty are encouraged

to contact the Disability Services office if they feel they are in need of assistance in working with a student.

If a student feels that either the instructor or the Disability Services office is not providing proper service, the student can choose to file a formal complaint with the Coordinator of Disability Services. At this point, the Coordinator conducts an investigation to remedy the complaint, as necessary. If the student feels the complaint is unresolved, they can then ask to see the Dean of Students, who would follow a similar process. If a resolution is not reached, the student can either continue to move the complaint upwards administratively to the Vice President, President, and Board of Trustees, or file a complaint with the Office of Civil Rights (OCR) through the U.S. Department of Education. This complaint would lead to a formal investigation by the OCR, which can become costly if it ultimately results in the college being found at fault for failing to provide access to students.

Participants

Participants in this study included six administrators and seven faculty members in various disciplines. Table 4.1 provides administrator and faculty participant details drawn from the questionnaires and interviews regarding job title and years of experience working at the community college level.

Table 4.1

Community College Experience of Administrator and Faculty Participants

Administrator and Faculty Participants	Teaching Experience at Community College	Administrative Experience at Community College
Administrator Participants		
Associate Dean of Developmental Education	4 years	15 years
Associate Dean of Social Sciences	10 years	2 years
Vice President of Academic Affairs	17 years	0 years
Coordinator of Disability Services	21 years	0 years
Vice President of Student Affairs	17 years	5 years
Dean of Students	15 years	0 years
Faculty Participants		
Math Faculty	18 years	.5 years
Counselor, Career Exploration	31 years	0 years
Computer Instruction	19 years	3 years
Developmental English	6 years	11 years
Speech	10 years	0 years
Chemistry	20 years	0 years
Education	10 years	0 years

Responses to Research Question 1

The first research question sought to discover faculty perceptions of the challenges faced when teaching students with disabilities. The data were organized into four broad categories: (a) lack of funding and staffing to address disability issues; (b) lack of knowledge about specific disabilities; (c) challenges resulting from students' personal and academic issues, and (d) limitations related to faculty members' beliefs and skills. Under each broad category, several subcategories emerged (Table 4.2).

Table 4.2

Summary of Research Question 1 Categories and Subcategories

Categories	Related Subcategories
Lack of funding and staffing	Lack of availability of DS staff
	Lack of on campus resources
Lack of knowledge	Need for specific disability training
	Need for information on DS policies
Students' issues	Lack of secondary level preparation
	Maturity and disability severity
Faculty beliefs and skills	Inadequate academic performance
	Improper classroom intervention skills
	Challenges with mental health issues

Lack of Funding and Staffing

Statements made by participants in both their questionnaires and interviews coalesced into the categories identified in Table 4.2. The first category, lack of staffing and funding, was particularly evident in the interviews and clustered around two areas: lack of availability of Disability Services (DS) staff and lack of on campus resources. Comments made by the chemistry instructor illustrate the problem, and some frustration concerning unavailability of DS staff.

I had one incident last semester with a student who had a documented disability. I was really surprised; I never thought this student would succeed from day one just based on his habits. He did have good attendance, and he thought that should count for something. But from the first week, he incorrectly interpreted what he had to do to show up on time, prepare for lab and turn things in correctly. There was some hostility from the student, so I talked to one of the part time DS staff. It would be nice if that person was full time, or if there was somebody on staff full time because when I have a problem, I want to take care of it within the week. She wasn't back to me for a couple days.

If the instructor had been able to contact a DS staff member more readily, the escalation between the student and instructor may not have occurred. However, when days pass before an instructor and DS staff member can communicate, both the student and faculty member are likely to become frustrated.

Administrators from academic services echoed this concern regarding delayed responses. One Academic Associate Dean shared their view of what is happening:

They're understaffed, overwhelmed, and running around like chickens with their heads cut off. This is probably because they only have two or three people on staff.

The majority of administrator participants thought the problems experienced with DS staff were a result of understaffing, not quality and competence.

Beyond the unavailability of DS staff, another frequently cited subcategory was a lack of on campus resources for students and faculty, transportation assistance, and individualized help.

One administrator expressed this by saying:

I don't think the educational goals of students with disabilities are being met. It's a frustration of the faculty that this is all we have to offer these students.

This lack of resources is a challenge not only for students, but also for instructors, especially part time faculty, who often teach during evenings and weekends when most support staff are unavailable.

Administrators admitted part time faculty are confused about what their role is and what resources are available to both them and students. The Social Science Associate Dean said:

[It can be hard getting part time faculty] to care. We are experiencing bad economic times at the moment. Some of these folks, they're teaching seven, eight, nine courses to make a living. If you do the math, someone teaching 10 courses a semester at our rate of pay, which is higher than at most community colleges, would make about \$25,000. Double it and its \$50,000, and if it's the second income in the family, they can make a living in the area. So, a lot of our part timers have a lot on their mind, and student issues sometimes throw them out of the cycle that they're counting on to survive.

Lack of Knowledge about Disabilities

The second category that emerged from faculty and administrator interviews was a lack of knowledge concerning disability issues and a need for additional training. One administrator summarized how a lack of understanding regarding one disability caused a faculty member frustration:

Students end up often in a literature class . . . and all of a sudden the instructor is faced with a student who has cerebral palsy and is doing all sorts of body motor things that they can't control, which freaks the instructor out. The student can't help it. And if a parent is involved, the instructor doesn't know how to deal with parents. There needs to be more training for instructors on how to work with special needs students.

In addition, the speech faculty member said one challenge for community college faculty is that they are not required to have formal classes in education and special education, as instructors at the secondary level must do for certification. This can lead to instructors being even more underprepared for working with students with disabilities. According to the speech faculty member:

To be a college professor requires a master's degree in your discipline, and that's it. Unfortunately, we are in a completely unique position. High school teachers, K through 12, are required to go to school . . . so it seems as if they've been hopefully trained.

Many participants agreed that instructors lack the disability specific information and training they need to deal with these issues. One faculty member said:

The biggest challenge for community colleges is being able to say what is and what is not a disability. Then you take all of them, those I call the tangible and intangible ones, and call them out. There are clearly physically disabled ones, and then there are the ones who have attention deficit disorder or they've got the invisible ones. And you don't know what to do.

In addition to lacking knowledge of specific disabilities, faculty and administrators also said there was a lack of understanding concerning disability policies; consequently, faculty mistakenly take inappropriate action or fail to take any action at all. Administrators expressed frustration with faculty who either do too much for students or not enough. Both administrators and faculty demonstrate a lack of knowledge related to disability policies and procedures. The Dean of Students explained:

The faculty know how to teach the content of their subject, but they typically struggle with the question of how much attention to give students with disabilities. Part of their frustration is their inability to understand what students with disabilities need, so often they go above and beyond for students with disabilities, which puts the general population of students at a disadvantage. They really don't understand what their role is as a faculty member once students are approved accommodation.

Another possible result of this lack of knowledge is faculty may be hesitant to ask questions about a student's needs in the classroom setting. Both administrators and faculty expressed a concern about discussing the student's disabilities too much because they feared offending the student or violating college policy.

The faculty's reservations can create challenges for both students and faculty in developing a teacher and student relationship. This finding is congruent with Hahn's Social or Minority Group Model, which suggests that the experience between a person with a disability and nondisabled person is a social product in reaction to the person's disability. One faculty member explained his discomfort in working with students with disabilities:

When attempting a strategy to alleviate a problem or help a student, in assessing what to do, I feel like I'm just some kid messing around with someone else's life. I'm not comfortable doing that.

Students' Issues

Some challenges faced by faculty are a direct result of students' past experiences and current expectations. The most common challenge mentioned by faculty was students' lack of preparation at the secondary level. In fact, several faculty and administrators who spoke to differences in educational models for high school students and college students specifically mentioned lack of preparation for college. In high schools, modifications may be used such as reducing homework assignments compared to students who are nondisabled, or only requiring that parts of an examination be taken rather than the full examination. In higher education, the accommodation model might involve placing assignments on tape or allowing students additional time to complete an examination, but there is little or no modification of curricula (Madaus, 2005). The education instructor referred to this challenge specifically:

So I don't think we service our kids well, especially I think they need to have accommodations but not modifications. I don't mind kids taking extra time, giving them

extra help; I think all of those things are a good thing. But I don't think you should water down the curriculum to the point where expectations are low, because that becomes what they expect that they need to achieve. They need to be pushed.

The developmental English instructor responded similarly, suggesting perhaps there is even excessive modification in secondary education:

I think sometimes students with disabilities might have been over accommodated K through 12 and they still expect the faculty to take away one wrong answer or adapt the curriculum or modify the curriculum, and that's not going to happen.

In addition to a lack of student preparedness, faculty reported frustrations with student maturity levels in their classes. Several faculty and administrators spoke of frustrations they experienced due to lower levels of student maturity for each subsequent year they have served as faculty members. Within their experience, students with disabilities appeared to be more immature than those without disabilities. Another frustration for faculty was the amount of time it often takes to accommodate students when the disabilities are more severe and require much attention. In one faculty member's words:

I'm not a special education teacher. I have 120 other people, you're [the student with a disability] one of them, and you're not getting it. I worked with you, I showed you what I want, and you're still . . . that was like [student name] in one of my classes. I worked with her and I'm instructing her saying, "This is what you're going to do tomorrow. Okay? Just like this". And the next day she just didn't do it. And I say, "Do you understand?" "Yeah, yeah, yeah, yeah" [the student says] . . . And then later [when it's time to speak, they perform incorrectly and I find myself asking], "what is this? This isn't anything we talked about"? And then I find myself just getting mad. Then . . . I guess I get mad at her because you don't get it, but then it's sort of like well mad at the situation itself. I don't know.

In this situation, the instructor admits that the frustrations he experienced led to an emotional reaction from him towards the student, which can be harmful if the student is unable to control the nature of their disability.

Faculty's Beliefs and Skills

The final category centered on faculty challenges that may have resulted from colleagues' practices. Many faculty and administrators said they were frustrated by previous instructors' inadequate interventions. One of the most common issues, thus a subcategory, was inept academic evaluation of students' performance, sometimes the result of an instructor feeling sorry for a student, or perhaps being overly frustrated. The developmental English faculty spoke of this frustration:

I think teachers need to call it honestly. I had a conversation with another teacher, who was having a problem failing a student. I said to her, 'the student's failure is not your failure', and that is just being honest. It's being fair to everybody else in the class.

One instructor admitted to unfairly evaluating based on fear of damaging the student's self-esteem, yet realizing this is an inadequate practice; therefore, the instructor felt conflicted.

It's like I'm saying to the student, 'now I'm going to give you a score that's not going to help you in any way but will boost your self-esteem'. It creates a domino effect. I have a different perception of the student now that I know about his disability, and I want to help out, so I will be lenient with the score. On one hand, I have a student who's smart and who's doing his work, and he gets a B because I have this standard of what I do, but then on the other hand, I'm looking at the student with the disability, and I think, well, I'm giving you a B, but realistically but your B is like a D. And then I hope neither the other students nor the student with the disability finds out about my grading discrepancy. It hurts the integrity of the overall degree. Then I think it's my fault for building up the student with disabilities self-esteem instead of grading their work. We're doing a disservice to them in the college.

Another subcategory where instructors can be doing students a disservice is when the instructor uses improper intervention strategies. For example, the instructor over accommodates by waiving a required paper or modifying an examination for students with disabilities. This creates an unrealistic expectation for students and can cause frustrations for administrators when students complain about the unequal treatment from one instructor to the next. The Dean of Students explains:

Instead of coming to some of the resources on campus sometimes, the faculty will bend over backwards for the student. This especially happens with part timers more than with full time faculty. Ultimately this becomes a problem because when they do too much and the college gets caught in an accommodations limbo.

At the other end of the continuum is avoidance. For some faculty, their discomfort with a student's disability can be so great that they attempt to have the student removed from the classroom. The Coordinator of Disability Services stated:

I think the first time an instructor has a student who has differences in the class; they tend to be a little apprehensive. Not that they're not willing, but I think they might want to have the student removed. It's a control thing. They might want to tell the student, 'you can't do that in this class'. But if it is a situation where the disability is related to, say, students making noises or sounds or something that can't be controlled, the student can't be singled out or be forced to leave. So we've had a few instances where we've had to educate the faculty.

This lack of understanding by instructors can ultimately lead to student complaints, and in extreme cases, student litigation.

A final subcategory that has intensified during the past few years is concern by faculty and administrators about students with extreme cases of mental illness. Tragedies such as the ones occurring at Virginia Tech and Northern Illinois University appear to have had a negative impact on faculty and administrators' perceptions of students who may experience mental illness. As a result, mental health issues can be especially difficult to understand and manage.

The Vice President of Academics spoke of differences they observed in faculty behavior:

It's taken on somewhat of a negative caste in many cases because of the instance at Virginia Tech and at Northern Illinois. Students with disabilities, particularly cognitive disabilities, are seen as strange and to be watched. There have been a few recent instances in which faculty have overreacted to student situations.

Another administrator said:

I find that faculty tend to be more heightened in their awareness, but also more nervous about what they're watching to the extent that many times they mislabel what it is they think they're seeing. Sometimes they think something is more extreme and causes more concern for them than need be.

One factor that can make faculty perceptions worse is an increase in the amount of overall campus violence that has occurred. Administrators believe there have been substantial increases in the amount of campus violence and student belligerence. One administrator said that on multiple occasions, they have had to use campus police to remove students from the college. While this may not be as a result of mental illness, the possibility can cause faculty and administrators to become increasingly apprehensive.

Concerns regarding mental health issues ironically can create more distance between students and faculty, which further complicates matters. Students can feel disconnected from the instructor and more isolated from society. The Vice President of Students expressed this view:

The faculty might be carefully watching because any situation could turn into the next Alex Cleabolt or whatever his name is. So, I think it has negatively impacted our ability to address students with disabilities' needs because it creates a watchful distance. Instead of trying to make a connection, the faculty are stepping back and watching. Sadly, I think what would probably have prevented most of those incidents is precisely the kind of human connection that is missed, because a student would have had a place to turn.

While concerns regarding mental illness may appear to be legitimate, it is important for faculty not to excessively distance themselves as this can lead to more obstacles when working with students.

Responses to Research Question 2

This research question explored strategies that community college faculty have found to be effective in assisting students with disabilities to be successful. For this study, students are viewed as being successful when faculty and administrators perceive that the students are able to achieve their educational and personal goals. Analysis of the data resulted in the emergence of three broad categories, and 14 related subcategories, as shown in Table 4.3. The three categories were general behavioral strategies to be applied in working with students, faculty building

relationships with students, and faculty using a variety of effective instructional techniques to enhance instruction for all students.

Table 4.3

Categorization of Strategies for Helping Students to be Successful

Broad Categories	Subcategories
Behavioral strategies	Being adaptable with course delivery and content
	Being readily available and open to receiving feedback
	Applying personal experiences related to disabilities
Building relationships with students	Starting relationships at the very first meeting
	Allowing students to feel comfortable in self-disclosure
	Treating students humanely
Effective teaching strategies	Breaking concepts down
	Creating instructional materials in alternate formats
	Use of student journaling
	Speaking with former students
	Using visualization exercises
	Using rubrics for grading
	Delivering content through alternate methods
Separating math problems for exams	

Behavioral Strategies

Faculty participants provided many examples of effective strategies for working with disability populations. The first category of strategies included specific behaviors that faculty applied in working with students. The word “behaviors” is used because these are practical strategies that did not require complex adaptation or preparation. Within this category there were three subcategories: being adaptable with course delivery and content, being readily available and open to feedback, and using personal life experiences related to disabilities in order to build relationships with students.

For the first area, adaptability, the most commonly mentioned strategy used by faculty was being flexible in their teaching. Learning style might be a result of the student’s disability, or as in the case of a student without a disability, their learning preference. The math instructor explains:

The last question I always ask is: ‘Is there anything that I can do for you to make you successful?’ And I get a lot of insight. Whether or not it’s auditory, whether they need visual, they need tactile, whatever the learning style is, I need to go step by step or I need to give a generalization, whatever it is. I try to incorporate all the different things the students tell me.

This approach is similar to Universal Design, which states that if instructors make their teaching multimodal from the beginning, the needs of all students are met without anyone having to ask for additional assistance.

Another area of faculty flexibility centered on adaptations in the way that students could complete their assignments. This did not mean making modifications that would result in students with disabilities completing less work than the rest of the class, but rather an instructor choosing different types of homework for all students to meet the course’s learning objectives.

For example, the education instructor explained how reading assignments can be changed to match the students' interests. The developmental English instructor told a story about her experience in teaching a class on reading comprehension skills, and the illustrative essay in the textbook was on Barbie dolls and body image. The class comprised all male students; therefore, she selected a different reading passage from the text in an effort to better engage the students' attention. The education instructor allowed students to complete their final course projects using a variety of methods, depending on their strengths. For example, they could choose to write a paper, give a presentation, create a visual display, or provide some other means to illustrate that they understood the course concepts.

Another subcategory that emerged was the availability of instructors outside the classroom. Many instructors emphasized the importance of having office hours at times that made them most accessible to students. This can be a time for students to ask questions about class assignments, upcoming tests, or even to build rapport. The math faculty member, for example, uses office hour times to meet with students and review their notes to see if they understand the concepts.

When I've had students in my office, I'll ask to see their notes. I give them some ideas of how to better organize their notes, and in general, they come back and say 'This is amazing! I can follow! I can figure out what I'm doing! I can even see what I was supposed to do here!' Previously, the note taking for them was haphazard. I ask them, 'If you can't get yourself organized, how are you going to get your mind organized?'

Asking students for feedback is another useful strategy for faculty. This occurs both individually during office hours and at the end of the semester, when students evaluate the instructor. Several faculty said they go beyond the college's standard tool in assessing their teaching at the end of the term and use their own individualized assessments. The counseling faculty member said this is a responsible practice, and it is important for instructors to take this

additional feedback seriously by being willing to incorporate reasonable student suggestions into future classes. From this participant's perspective, failure to use the feedback means it is wasted.

Some instructors described using their personal experiences related to individuals with disabilities to enhance their teaching. While this may not be a strategy all faculty can use, those who can have found it helps build understanding and student-faculty relationships. For example, one instructor, who has a son with developmental autism, a form of a developmental disability and autism, explained how learning from the son's situation helped to inform teaching practices in the classroom when working with students with developmental disabilities.

I have a son with developmental autism. The key is to catch the mistakes early, so they're not thinking too much on their errors. That is one of the problems with people with developmental disabilities. They dwell too much on things.

Another instructor had Attention Deficit Disorder (ADD) and openly shared this in class to make students with disabilities feel more comfortable. The instructor explained:

Another strategy is self-disclosure. I'll tell my students I also have problems. That I was slow; that I didn't try. I have ADD myself so this affected my academic performance. That helps build relationships.

Only one participant in this study openly mentioned having a disability. However from this instructor's perspective, openness regarding the disability appeared to make students with disabilities feel more comfortable. By instructors being open about their disabilities, students are able to share their own limitations with faculty; the students gain some degree of comfort in knowing they are not alone.

Building Relationships with Students

According to participants, another important component in helping students to be successful is maintaining a professional and comfortable relationship between the student and instructor. Faculty and administrators provided many reasons for the importance of this

relationship: it helps students feel more comfortable in asking questions, it can make students feel that instructors are more approachable if the student needs to speak with someone, and it raises students' interest levels in the subjects being taught. Moreover, several specific strategies were frequently mentioned as means for helping to build a bridge between the student and instructor, including focusing on relationships from the start, allowing students to feel comfortable in self-disclosure, and treating students as people with legal rights and feelings, both in and out of the classroom.

While several instructors spoke about the importance of establishing a positive relationship from the beginning, the math instructor described techniques for creating this environment.

The one thing that you have to start with is rapport. If the student doesn't feel trust, if they don't feel a rapport, you're not going to get anywhere. In the college setting, as an introductory first day activity, we'd go over the syllabus and what we will be studying in the class. I tell them upfront that I'm not going to call on them and not embarrass them in front of their peers. And tell them not to worry if they make a mistake, we're all here to work on this together. I break the ice right at the very beginning, so from day one, I have students talking to me. They're not afraid to say something.

The math instructor further elaborated:

I've had students say things to me after class that gave me more [insight] into who they are and what they need from me. I would also have them make out a note card just to ask them a couple questions. I ask how did they do in math, how do they feel about the subject, just so I can get a sense of who I have in that classroom. The last question I always ask them, 'Is there anything that I can do for you to make you successful?' And I assure them after today I will tear the cards up, I won't remember who wrote what, so your grade has nothing to do with anything. It gives me a lot of insight.

In this description of establishing a safe relationship in the first class, creating a feeling of cohesion by informing students that everyone is in this together, and using a note card that allows students to express their challenges, but with some degree of anonymity, the instructor presents several strategies that may be helpful to students with disabilities.

Another area discussed was faculty efforts to make students feel comfortable in self-disclosure. While each instructor used a different strategy, the end goal was similar. One method was for instructors to take the first step in disclosing something. As noted previously, one faculty member with ADD spoke about his own experiences, and then encouraged other students to share theirs: “If you have ADD, then talk about ADD.” Faculty also encouraged students to reveal their disabilities by assuring them that accommodation would be provided as discretely as possible. When instructors emphasize that they can accommodate without bringing attention to the student, this opens the door for students to feel more confident in taking the first step.

Another suggested strategy was for instructors to ask to meet with students confidentially while returning assignments, and then gradually reach the topic through conversation. The education faculty member explained this approach.

I'll say: ‘Can I talk to you for a few minutes? How do you learn best?’ And eventually they fess up, so that way I can talk to them on what resources we have here at the college that are available to help them.

Using a method that allowed students to feel comfortable talking about their disabilities appeared to be an important classroom strategy.

One aspect of building relationships with students is based on the basic concept of treating students humanely. Faculty and administrators explained that they must be genuine in their communication style, and not be perceived as either feeling sorry for, or in opposition to the student. The Developmental Education Associate Dean explained:

Treat them like they're human beings. They may not be able to control the drooling, but they are a human being. Give them the dignity. Having a sense of humor, not making fun of them, but instead not taking everything so seriously that you can just kind of say, oh look at that, that happened, oh well. I see this sometimes with the parents' involvement. It's the kid you need to be talking to, be they a young adult or an older adult. I think it's difficult because there is discomfort, and its people who have a sense of

humor who seem to get over that discomfort. They get self-conscious. Getting over those kinds of things is important. So, people who have a sense of humor, people who really realize they are human beings, and don't see them with a "big D" disability, that helps. That takes maturity and life experience, I think.

The counseling faculty member also discussed the importance of being respectful when working with students with disabilities:

You need to show them that you are interested in them. You think that they can achieve and that they can be successful within their limitations. You don't treat them as 'poor whatever'. You meet them where they are at. It means understanding or finding out about the type of disability they have, and if you don't understand, ask them some questions. Understanding their capabilities, their IEP plans. If you want more information, the student has to sign off, giving you permission, but you then go to Disability Services and ask for that information.

In summary, it appears that the student-instructor relationship is a critical one, especially for students with disabilities, if they are to be successful. Additionally, the strategies suggested by participants often need to be initiated by the instructor, who have positional authority in the classroom.

Effective Teaching Strategies

Individual instructors shared several specific strategies found to be helpful in working with students with disabilities. These strategies are described in detail and an example of application is included when a participant provided one.

The most commonly mentioned teaching strategy was breaking concepts down into smaller segments to make information more manageable, or as the math instructor said, "Start in the basement and work your way up to the roof." The faculty counselor elaborated:

Break down the tasks into small steps; be extremely direct with the student. Don't pussyfoot around an issue, be very concise and clear and specific, and mean business.

According to faculty responses, the smaller the segments of information, the easier they are for students to digest.

Another technique mentioned was creating instructional materials in alternate formats. While a college's DS office usually provides this service, some faculty felt this was a teaching responsibility that should be assumed by the instructor. As the math faculty member stated:

If you're the educator you have to figure out what ways you can work with the students who are visually impaired. If I was trying to teach a geometric concept and the student can't see, I would then take a folder and try to create the model so it would be like reading Braille. There are a number of things that can be done, but you have to have a little ingenuity, and for me, I think part of that comes back to having taught junior high previously.

When asked to meet with a group of students who were visually impaired, the computer science instructor enlarged the materials by using bigger fonts to make the content more accessible. Instructors providing materials in alternative formats themselves enabled students to be served more quickly, as the DS office has a small staff and a large workload.

Another strategy mentioned by the faculty member who has a son with developmental autism was the use of journaling as a means for parent to teacher communication. However, according to another study participant, educational laws such as Family Educational Rights and Privacy Act (FERPA) normally bar communication between parents and instructors. Yet, it is important for a bridge to be built from parent to student to instructor, especially in the case of students with more severe developmental disabilities where parents are the student's legal guardians. In this unique instance where a parent is the legal guardian, FERPA, with a student's permission, does allow communication to be open between faculty and parents (U.S. Department of Education, 2009a).

The journaling is wonderful. Words cannot express how important it was for me to understand how he was doing at school. With my son, I couldn't say "how was your day, dear?" when he came home because he is nonverbal, so journaling was the only way I could find out how he was doing. Another interesting thing is to have a student do the journal, and then do a journal between the instructor and the parent, so the instructor can see how the student is perceiving his own or her own education versus how the parent and the instructor are helping provide it.

Another strategy the computer science instructor mentioned was canvassing former students for ideas. One faculty member said that he discussed ideas with a former student when thinking of how to creatively accommodate a student with a similar disability. The former student emphasized the importance of maintaining student confidentiality and not sharing anything personal about the student that the instructor is seeking to assist.

The speech instructor explained how he used visualization exercises to assist students who had excessive levels of anxiety when asked to give a presentation in front of a class. The instructor meets the student individually in his office. The student is asked to close his eyes and explain in detail what he is seeing and experiencing as he gives the speech. If the student expresses fear or anxiety, the instructor addresses the anxieties as they go through the visualization. According to the speech instructor, after using this technique, students find themselves to be calmer when giving a speech, and they also feel more connected with the instructor.

The education instructor stated that grading rubrics could be an effective means for students to understand how their grade will be determined for assignments, and what the expectations are for those assignments.

When students turn in papers, I don't care if they have a disability or not, I use rubrics. I know what they didn't do well on. They can do it over; if they score below a score they can revise until they get a grade they like if they're willing to do the work. I think that helps kids know what they have to do. I provide numerous opportunities for revision.

Through use of the rubrics, students can become more empowered in preparing for an assignment, and also understand what is required for them to revise their work.

Instructors also explained that sometimes the method they use to instruct materials, even if well developed and thought out, might not reach all students. In this case, they must be willing

to meet with students individually and attempt to teach the concepts using a different method.

The math faculty member gave an example:

As an instructor, you decide what you're going to do, and then at some point you see what you're doing doesn't work for you or the student. The best course of action is to ask the student, "tell me what works for you and we'll do it another way, we can set up extra time, or have tutorials". Sometimes you just have to simultaneously deliver the material in two different ways.

The education professor stated:

I use multiple instructional strategies every day. It's always auditory, visual, kinesthetic, hands on. I use all kinds of approaches to teach stuff. I have the kids do portfolios. I give them choices, which is highly motivational.

These ideas are similar to Universal Design, except the strategies are being used more individually than in whole classroom instruction. If these strategies could all be incorporated into the classroom itself, the after class meetings might be less necessary.

A final strategy mentioned by both the Coordinator of Disability Services and the math faculty was to place large math problems individually on separate sheets of paper. According to the Coordinator of Disability Services, this process helps students who have difficulty with visually tracking information, and also prevents students from becoming distracted by upcoming math problems. A similar strategy might also be effective for tests in other disciplines, but no other faculty mentioned this technique.

It is noteworthy that many of the strategies recommended by faculty appeared to be not only applicable for students with disabilities, but for all students. This again ties in with Universal Design, which argues that when faculty make a course universally accessible for students with disabilities, all students can reap the benefits.

Responses to Research Question 3

Of the four research questions, Research Question 3 provided the least diversity of responses from administrators and faculty. The question specifically asked: What actions have community college administrators taken that effectively address the issues related to success for students with disabilities? Administrator responses were grouped into two primary categories: consulting with other administrators and recommending additional training.

In the presentation of findings, a faculty perspective is also included to provide a more holistic explanation of the data. Additionally, the Coordinator of Disability Services responses are provided separately as they cast a particularly strong light on the findings, and differed from the other administrators. The Coordinator has much more daily interaction with students with disabilities than other administrators interviewed for this research study.

Consulting with Other Administrators

The most frequent action reported by administrators when they encountered a student issue was speaking with administrator colleagues. Other administrators who were sought out for consultation included the Coordinator of Disability Services, the Dean of Students, and the Vice President of Student Affairs. Often student complaints were directly referred to those administrators for intervention. The Vice President of Academics explained:

Absolutely I collaborate with other professionals. In fact, this might sound bad, but when I know I am over my head, I refer students to the Vice President of Student Affairs.

However, administrators not only consult with and refer students to other administrators on a reactive basis; they also collaborate with administrator colleagues to be proactive in working with students. The Developmental Education Associate Dean, for example, explained how he always tries to consult with DS staff for advice whenever they plan to rewrite a course outline or are looking for assistance in finding ways to better serve a student.

The Dean of Students detailed how collaboration can be useful when working with a student who may be filing a complaint against an instructor.

Maybe the accommodation the student is requesting is inappropriate and we need to help find an accommodation that can work for the student, but also ensure that the student is successful. Because sometimes they just ask for everything under the sun, but our resources have limits. We want to provide the minimum, but not just the minimum; we want to make sure that accommodations are successful.

Administrators expressed a desire to do both what is legally appropriate and helpful for the student; however, they admitted that sometimes these two objectives did not complement each other as well as they may have hoped. Thus, a challenge for administrators is meeting the legal requirements of services and going beyond this minimum when possible.

Recommending Additional Training

Administrators also frequently encourage faculty to seek training from campus resources such as the Disability Services office and Faculty Development office to enhance their understanding of serving students with disabilities. Unfortunately, as the Vice President of Student Affairs explained, faculty are not always proactive in seeking assistance:

There has been some effort through the Faculty Development Center to address these concerns and put them in workshops. The response to those concerns bubbles up from faculty at the grassroots. That's our primary initiative but it's not as successful as we want. In speaking with the DS Coordinator, the response is not overwhelming. It tends to be somewhat underwhelming on occasion, until particular faculty are faced with the issue. Usually, it's too late at that point. They've got the student, the student has a problem, and the relationship between the faculty member and the student has deteriorated and needs to be repaired, which is always more work than just creating the right kind of relationships from the beginning.

By faculty only seeking training while they are in the middle of a student conflict, it is usually too late for them to prevent the conflict from escalating. Administrators expressed frustration with this phenomenon and wished that more faculty would seek training earlier.

One source of this frustration may be a difference of opinion concerning who is ultimately responsible for faculty training. One administrator said:

Faculty ultimately must take responsibility for educating themselves, accessing these resources, learning what they can at moments in time when I think when it's relevant for them to know what they're doing. They wait until they have these situations before they realize they need to know more, so then they attempt to access the services and resources to become better equipped with their skill sets in the classroom. I would love to see them become more proactive instead of reactive in their use of services and resources.

From this administrator's perspective, faculty should take responsibility for educating themselves on working with students, without compensation and during their personal time.

However, one faculty member expressed a different perspective:

I am happy to receive additional training, but the administration has to pay me for that, they have to pay for my time. I am nice to people but I'm tired of getting worked over. You need not necessarily reward me with thousands of dollars. If I get training on my own, I know more than that guy next door to me, but he's making more money and he's not getting training. Administrators need to promote that stuff and make it so we are rewarded for that, make it so there's some kind of advantage to doing it.

The divergence of views expressed by these participants is indicative of an issue that clearly caused frustration for the administrator and faculty member. The issue also creates an obstacle to having professional development that is directed at supporting the success of students with disabilities.

Current Actions Taken by the Disability Services Office

When the Coordinator of Disability Services was asked about actions community college administrators have taken that effectively address issues related to success for students with disabilities, the response was specific to actions taken by the DS office. Some of the actions mentioned were offering presentations on disability issues, keeping up with changes in technology, working beyond the letter of the law to meet the spirit of the law, allowing faculty a fair chance to share their side when a student files a disability related complaint, notifying

faculty ahead of time when students with significant disabilities are to be enrolled in one of their courses, and thinking of Americans with Disabilities Act (ADA) compliance whenever the college is engaged in new construction.

When other faculty and administrators were asked for their views on the DS office's effectiveness, the majority responded with positive comments regarding the way that the office delivers accommodations to students. The education faculty member stated:

I take tests to the resource center all the time. If I have a student who's really experiencing difficulty, I'll talk to them [the DS office] about it. I close the door and ask, "Do you know such and such? This is what I'm experiencing, have other teachers experienced it?" I'm not looking for gossip, just confirming my experiences and making sure I'm doing everything right.

The Vice President of Student Affairs also spoke positively of the DS office's value:

The staff has always been very helpful and pleasant. I have not always had this role as an administrator; I've been a faculty member working with students with disabilities, so during that time those relationships were needed and helpful. You get a lot of support, a lot of understanding sometimes based upon where they sit in the organization versus where I may be sitting in the organization. Sometimes I need to collaborate and partner with them because other people are providing different pieces of support to the student than I may be, and then bringing the group together allows you to be a little more holistic about how you're supporting the student.

Thus, it appears that both faculty and administrators are pleased with how the DS office supports them in working with students. However, in looking at their overall views of actions taken by the college to support students with disabilities, the response is somewhat different.

Faculty and Administrators' Views of Actions Taken

Faculty and administrator responses were mixed when asked about their feelings regarding how the college was serving students with disabilities. The counseling faculty member was positive about actions taken:

If I go to the Disability Services office and ask questions, I'll get answers. I think our Vice President of Student Affairs has a good handle on the legal aspect, so if I ever needed to use her as a resource, she would definitely help me.

However, the computer science instructor had a negative view:

I have the opposite [view] of what's going on with the environment of the college. I believe the future of the college is going to be a detriment to the students with disabilities.

In general, most faculty expressed a mixed perception, stating they felt the college was doing what was legally required to make the college accessible, but it could still do more. They were sympathetic with the college's situation, saying students with disabilities are one of many populations of students and thus the challenge cannot be an easy one. Administrators also thought the college could do more. One admitted:

I don't think their educational needs are being met. Another frustration the faculty has is that this is all we've got to offer them. It is not enough.

It appears there is some level of consensus among participants that the college is not currently doing everything it can to best serve students with disabilities. At the same time, the challenge is complex and many factors must be considered before making changes.

Responses to Research Question 4

Research Question 4 addresses actions administrators can take in the future to enhance their support of faculty who teach students with disabilities. Three categories emerged from the data, along with 19 related subcategories, as summarized in Table 4.4.

Table 4.4

Categorization of Actions Administrators Can Take to Support Faculty

Broad Categories	Subcategories
Increasing funding	Hiring more staff in Disability Services
	Make changes in budgeting priorities
	Provide more funding for special populations courses
Provide more staff development	Require staff development
	Develop a faculty mentoring program
Other creative actions	Pilot a new paradigm
	Be more proactive and less reactive
	Develop philosophies/guidelines for working with students
	Define student success more broadly
	Be more responsible with admissions standards
	Offer specialized degrees for students with disabilities
	Offer new student success classes for all students
	Develop a skills and resource center for students
	Designate counselors for students with disabilities only
	Use a team approach for student needs
	Continue to keep up with changes in technology
	Prepare students for transition better
Provide resources for undiagnosed adults	
Gather more research on the topic	

Increasing Funding

The first subcategory of recommendations under increasing funding was to increase the number of full time employees working in the Disability Services (DS) office. Several faculty and administrators remarked that the majority of personnel appeared to be part time and not readily accessible. One administrator said:

Funding is the big issue and one action would be to allocate additional resources to the center. Even the part time staff is working 20 to 30 hours a week, and I think that number is diminishing. And with the full time Coordinator having additional responsibilities outside of just meeting with the students, it does cause some concern. Most of the students' needs arise on a weekly basis, so having staff who can quickly adapt their schedules to meet these needs is essential.

Other faculty and administrators shared similar stories. The current staffing of one full time and three part time specialists does not appear from the study participants' perspectives to be enough staffing to support the hundreds of students the DS office sees each year.

A second recommendation was for disability issues to become a priority from the top down rather than bottom up, and finding more money to fund programs. Administrators indicated this is not an easy proposition, and one stated, "The challenge is not as simple as finding additional funds." He elaborated that fund reallocation can cause problems:

We're at a point where we have dwindling federal and state money to begin with. In order to even attempt to try hiring additional staff in a department, it would be at the loss of either another department or another staff member, meaning when somebody resigns or retires, so instead of filling we don't fill that position, instead reallocating the resources to another area. So you're always just robbing from Peter to pay Paul.

Finding a solution to the resources problem can be difficult and complex; implementation of a change in the Disability Services area can negatively affect another area of the college.

A third set of recommendations for funding came from the computer science faculty member, who strongly felt there was not enough funding for classes targeted towards students with disabilities, and tuition waivers should be offered to students since often they have a limited

income of only Social Security Disability (SSD). The faculty member added that because most colleges, including the case study institution, do not offer academic degrees or certificates for students with developmental disabilities, these students cannot apply for federal student aid. Thus, it appears that students in courses designed to meet the needs of students with developmental disabilities are not offered the same financial assistance as students without disabilities in traditional programs.

Provide More Staff Development

The second largest category of recommendations focused on the topic of staff development. Many administrators felt the best way to have faculty become more educated in working with students was to require them to seek staff development. The Vice President of Student Affairs suggested that the college require staff to attend some type of disability workshop once each year to keep their skills current. Another suggestion was to incorporate this training into required faculty meetings, which are held regularly. This approach would help address the disagreement mentioned earlier regarding compensation for faculty who attend training.

The second subcategory of suggestions regarding staff development was to initiate a mentoring program that would support less experienced faculty as they learn about teaching students with disabilities. The math faculty member elaborated:

Maybe even a mentoring program of some type where if somebody had extensive background working with diverse populations of students with special needs . . . and if a person wanted to learn about that to work alongside that person, let's say they were working with a student who had schizophrenia and you wanted to learn more . . . you'd kind of shadow them or attend workshops and professional development events with them.

This initiative would allow faculty to teach one another by sharing their unique skill sets and important lessons learned from working with students with disabilities.

Other Creative Actions

Although only one participant may have mentioned a particular recommendation, it has been included in the findings if the action appeared to show potential as a promising practice. For example, the Vice President of Students suggested finding a new paradigm that would result in a better transition for students when moving from high school to college.

I think it's time to do something different, to use a different approach. I think it's time to shift the paradigm, and not look at it in such a discrete fashion as serving students in high school with disabilities one way and to serving students with disabilities in college another way.

She further suggested that colleges stop blaming high schools for poor transition planning by taking the initiative to provide these services for the high schools. For example, a community college disability services representative might visit the high school to advise future students. In her words:

It's time to become more progressive. The two educational systems can create some kind of synchronization so there's no discrete difference at all, allowing a movement from high school secondary into post secondary so seamless it doesn't create an uncomfortable shift for students and parents.

Another paradigm shift expressed by some administrators and faculty is similar to Universal Design in making instruction automatically accessible for all, thus not requiring many additional services to be provided separately later for an individual student with a disability.

The Vice President of Academics thought a change in philosophy was needed in working with students with disabilities. He suggested that historically, colleges used a "right to fail" philosophy, where colleges always allowed students with disabilities in their doors, but did not always provide everything they needed to meet their goals. In addition, he suggested the shift should instead go to a "right to expect success" philosophy, where the student may not achieve

all of their goals, but they can reasonably expect to leave the institution with more skills that will help them with everyday life.

A related thought by another administrator was that the college may be focusing too much on boosting enrollment totals and not enough on the individual success potential of each student enrolling. The Vice President of Academics concurred and said that while community colleges may have higher enrollment totals through open door policies allowing students to take almost any class, this may not be in the student's best interest, even though it does raise the college's enrollment figures.

We allow students to enroll in courses they aren't ready for or will do poorly in. Students with disabilities run into difficulty about two to four weeks into the semester and then disappear, but they've already been counted. So, TADA! [the community college] succeeded in raising enrollment.

By colleges having more responsible admissions practices, as well as appropriate course prerequisites and more course offerings for students with disabilities, many of these problems could be averted. To increase course offerings, the Associate Dean of Developmental Education suggested that an entire degree program be offered only for students with developmental disabilities, with a view toward focusing on their job and life skills.

Another suggestion made by the math faculty member was to develop a new student success skills course required for all students. It would be an orientation class to introduce students to campus resources and demonstrate how to seek assistance. A related idea was to develop a skills center for students with disabilities or students with academic difficulties, which would provide job placement and individualized skills building in reading, writing and math, as well as targeting other areas of academic difficulty such as time management, test taking, and note taking skills.

Some suggestions centered on reexamining staffing in assisting students with disabilities. The computer science faculty member felt a counselor from the counseling center should be dedicated to only working with students with disabilities given the size of the population of students. A different suggestion was to use a team approach, similar to the way in which a child with a disability is served in high school as a part of their Individualized Education Program (IEP). A faculty member elaborated:

I'm not the trained educator but I have the experience of being the parent. I understand from what I've learned my 32 years with my autistic son plus my current experience. I think it would be really helpful to have a team of people. Not just one or two people, but maybe a team of five, who are available to faculty so they can help these students more.

With a team approach, the onus is not on one individual but a whole team of people who could all be dedicated to meeting the student's needs.

The last set of recommendations proposed long term services to help future students. For example, the Coordinator of Disability Services felt that technology was in many ways the key to assisting students with disabilities, and that it is important for student computer labs to have the most current equipment and personnel who can train people on how to use it.

Finally, the Dean of Students felt one of the largest gaps community colleges fail to address is in serving undiagnosed adults with learning disabilities who cannot afford to be assessed.

In the past couple years we've seen an increased enrollment of students with disabilities. More and more individuals are coming in who are undiagnosed. With a lot of adults who are returning to education, how do we address their needs?

This administrator thought that many students who struggle never even realize they need assistance, or even worse, do realize this, but cannot afford the testing required to receive help.

Other Findings

Beyond the research questions, two additional areas of discovery emerged: (a) challenges for community colleges themselves in meeting the needs of students with disabilities, and (b) training content desired by faculty and administrators for working with students with disabilities in the future.

Perceived Challenges for the Community Colleges

Participants were asked what they think is the single greatest challenge community colleges face in meeting the needs of students with disabilities. The responses clustered into three categories: addressing resource issues, meeting the needs of students, and addressing the issues students themselves possess.

There were a variety of areas briefly mentioned by faculty and administrators regarding resource issues, which were often reiterated throughout the participant interviews. Suggestions for better supporting the instruction of students with disabilities included smaller class sizes, additional teacher's aides in classrooms where there are many students with disabilities, and additional financial assistance for students to pay for classes and transportation. However, many administrators also remarked that this is an especially difficult time to secure such assistance as federal and state funding is declining. In addition, administrators said it could be difficult to justify additional funding for disability issues when there are already so many other challenges facing the college.

In meeting the needs of students, faculty and administrators most commonly mentioned the challenge of balancing the student's individual goals with the institution's overall responsibilities. Each student is uniquely affected by a disability; therefore, providing for their

education can be “a multifaceted problem,” as one administrator explained. The Vice President of Academics elaborated on how this challenge is becoming even more difficult.

Although vocational programs in the past could provide a ‘hands on’ or ‘apprenticeship’ education that ameliorated deficiency in those fundamental skills, this is less and less true of Career and Technical Education. Having said this, however, post secondary education is becoming a universal expectation. It is difficult to obtain and maintain employment above the federal poverty levels without some form of post secondary education. Consequently, higher education, and the community college in particular, are being challenged to educate students, including those with cognitive or learning disabilities, who would not have been considered ‘college material’ as little as two decades ago. It is a challenge that most of us would like to meet, but I don’t think we have developed the flexibility to do so well, at least not yet.

The participants’ comments indicated that the challenge of meeting these students’ needs could become further complicated if the financial situation in the U.S. fails to improve and funding for higher education remains at the current level or continues to decline.

The third category that emerged from participants’ responses dealt with issues related to the students themselves including lack of maturational preparedness for college, deep psychological issues that might lead to a major crisis or tragedy, and the need to take an excessive number of credit hours for health insurance eligibility. Faculty and administrators felt it was important for community colleges to become more adept at identifying and addressing these types of issues if the colleges are going to truly meet the needs of their community.

Content for Future Training

The last area of findings emerged when faculty and administrators were asked what topics they would most want to see included if they attended training regarding students with disabilities at the community college level. Responses were grouped into three broad categories and several subcategories as shown in Table 4.5.

Table 4.5

Administrator and Faculty Suggestions for Training Content

Broad Category	Participant Suggestions
Information on specific disabilities	<ul style="list-style-type: none"> Detailed explanations of specific disability groups Practical teaching strategies for different groups Examples of effective instructional practices
Information on legal requirements	<ul style="list-style-type: none"> Differences between accommodations vs. modifications Approaches to facilitating accommodations Details on laws for students with disabilities
Information on college procedures	<ul style="list-style-type: none"> Create a policy manual for Disability Services office Better identify resources for students in different groups Better illustrate policies and what students can expect

Most participants reported not understanding some aspects of learning disabilities. For example, many faculty and administrator participants said they did not fully understand the difference between developmental disabilities and learning disabilities. Also, several faculty wanted to learn practical strategies that could be used in addressing student behaviors or inappropriate questions by parents and students. The developmental English instructor suggested having real life examples of instructors who effectively solved problems as a means for learning. The math instructor recommended allowing faculty to observe classes where there were students of multiple disability groups to see what techniques were working or were ineffective.

For legal requirements, many faculty and administrators admitted they do not fully understand what they can and cannot do when working with students who have disabilities. The education professor felt the first step would be to understand the differences between accommodation and modification. The Dean of Students thought it would be beneficial for faculty and administrators to understand how accommodations are facilitated in the DS office. However, the most common suggestion by both faculty and administrators was to provide a detailed explanation of all the relevant laws that affect community colleges and what they need to do in meeting those legal requirements.

Under the third broad category of providing information concerning internal college policies, the Coordinator of Disability Services said the college does not have formal written procedures; this statement was triangulated and verified when reviewing both the college's Board and Student Affairs policies. The policies do not mention procedures or complaint processes in working with students with disabilities. Faculty and administrators felt that specific policies would be helpful in providing access to essential information.

The computer science instructor felt there should be more information readily available on different community resources for disability groups. This might include support groups and additional means for financial assistance. The speech instructor suggested having a detailed manual for faculty and administrators providing an explanation of basic policies and procedures. The manual might be combined with creating a more detailed list of procedures for DS staff to follow as an internal document.

Summary

This chapter presented the findings of the study, which were based on an analysis of data from interview transcripts, questionnaires, documents, and field notes. These findings were

organized around answering each of the study's four driving questions. Faculty felt that they need more disability specific training and resources to assist students with disabilities.

Administrators expressed frustration with challenges imposed by inadequate student evaluation and unrealistic student expectations. Moreover, many of the teaching strategies suggested by instructors to effectively address the needs of students with disabilities might be helpful to all students. Chapter V further discusses the findings in relation to implications, conclusions, and recommendations.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

This chapter includes a summary of the research design and findings. It also provides conclusions that can be drawn from the results, implications for future practice, recommendations for future research, and a final overall summary of the study.

Summary of the Research Design

The purpose of this study was to discover ways in which community college faculty and administrators can facilitate learning for students with disabilities. The research was conducted using four guiding questions:

1. What do community college faculty perceive as the challenges of teaching students with disabilities?
2. What strategies have community college faculty found to be effective in assisting students with disabilities to be successful?
3. What actions have community college administrators taken that effectively address the issues related to success for students with disabilities?
4. How can community college administrators enhance their support of faculty who teach students with disabilities?

To answer these questions, a qualitative case study method and four data collection techniques were used: semi-structured interviews; questionnaires; a review of relevant state and federal government, as well as case study institution documents; and field notes. Purposeful sampling was used to select the case. Criteria for the sample included an American community college with a large student population to represent a wide diversity of disabilities; a variety of academic disciplines allowing for multiple participant perspectives to be gathered; an office of

disability or accommodation services that serves a variety of disability groups; and a cooperative context that enabled good access to research data and participants within the institution..

Purposeful sampling also was used to select participants. Snowball sampling also was used based on referrals from the Coordinator of Disability Services. Several measures were taken to ensure the well being of participants and the ethical integrity of the study. Institutional Research Board (IRB) approval was received before beginning the research, and participants were informed concerning the nature of the study. Participants also had the ability to withdraw at any time before the research was completed. In addition, participants were asked to review typed transcripts of interviews and could make revisions to clarify their perspectives. Interview recordings and transcripts were kept in a locked cabinet, and codes were used in place of participant's names to protect confidentiality; only the researcher had access to the participants' names. Results reported in Chapter IV are briefly summarized to lay a clear foundation for the discussion of conclusions drawn from the study.

Summary of the Findings

In this study, the four guiding questions have been used to structure the presentation of research findings. This summary is presented using a similar approach.

When faculty and administrators were asked to identify the greatest challenges faculty face in the classroom while working with students with disabilities, four major themes emerged: (a) lack of funding and staffing to address disability issues, (b) lack of knowledge concerning specific disabilities and ways to deal with them in the classroom, (c) students themselves bringing a variety of issues to the classroom, and (d) erroneous beliefs and inadequate skills related to working with students with disabilities.

Participants felt there was not enough full time staff to support faculty in working with these students and there was insufficient funding to better support students with disabilities in working toward their academic goals. Faculty also thought there was a lack of knowledge about specific disabilities that are manifested in the classroom; therefore, disability specific training was necessary. Also, faculty felt they needed further education on the different policies that address the role of college personnel in serving students with disabilities. Another issue voiced by faculty was the lack of secondary level preparation for students transitioning into higher education; participants view this as an increasing trend. Students were also exhibiting lower levels of maturity and more severe degrees of disability than previously experienced by faculty. Consequently, some faculty admitted that they at times inflated grades for students with disabilities, and struggled with classroom management skills when students with disabilities, especially those with mental health issues, caused them concern.

When faculty and administrators were asked about actions they had taken that appeared to be helpful in working with students with disabilities, answers clustered into three broad themes: (a) behavioral strategies, (b) relationship building with students, and (c) a variety of disability specific creative teaching techniques. Participants emphasized the importance of being adaptable with course delivery and content, being readily available and open to receiving feedback, and applying personal experiences related to students with disabilities. Treating students humanely from the very beginning of the instructor-student relationship and allowing students to feel comfortable in self-disclosure were also important elements faculty considered as they developed relationships with students. Effective strategies included concepts such as breaking information down, disability specific teaching techniques, presenting instructional materials in alternative formats, and using rubrics for grading. Many of these recommendations

were parallel to recommendations of Universal Design, which encourages faculty to make their materials accessible to all students in a variety of mediums ahead of time, so that no student needs to self-disclose a disability (McGuire & Scott, 2006).

Regarding current actions taken by administrators to support the needs of students with disabilities, the majority of administrators stated they relied on the Disability Services office as a primary consultant in addressing issues. Administrators also consulted with other administrators for assistance when needed. Faculty had mixed feelings about actions administrators were taking with some saying that administrators were doing all they could while others expressed that administrators could do much more. Generally all faculty and administrators rated staff in the Disability Services offices positively in the support they provided to assist students.

When participants were asked about actions administrators could take in the future to better meet student needs, three themes emerged: (a) increasing funding to support students with disabilities; (b) offering more staff development for faculty; and (c) creating new strategies such as adding more specialized classes, developing a skills center, and providing more resources for undiagnosed adults with invisible disabilities. There was some disagreement between the views of faculty and administrators regarding responsibility for faculty development. Some administrators felt faculty should seek development on their own, while faculty felt that administrators should pay them for participation in additional training.

Other findings emerged from exploratory questions regarding the greatest challenges community colleges face in relation to students with disabilities and elements that should be included in faculty and administrator training. Participants thought the greatest challenges for community colleges center around addressing funding issues, meeting the needs of a highly diverse body of students, and addressing the personal issues students possess when they come to

the college. Regarding faculty and administrator training, participants felt that there should be more information on specific disabilities, legal requirements in serving students, and college wide procedures for student services.

Conclusions

Four primary conclusions can be drawn from the findings of this research study. First, conflicting views regarding responsibilities for students with disabilities within the community college organization need to be addressed. Second, steps must be taken by faculty and administrators in going beyond almost exclusive reliance on the Disability Services office to meet the needs of students with disabilities. Third, the findings indicate a need for administrators and faculty to make changes in the way that they teach and offer services for students with disabilities. Fourth, the strong feeling expressed by faculty and administrators that something new must be done to bring about change in serving students with disabilities needs to be pursued and mobilized.

Clarifying Responsibilities

One problem that emerged through the interviews was differing opinions concerning individual responsibilities. Administrators need to take a leadership role in developing this clarification for faculty and staff. The research data indicated that conflicting views exist on a variety of questions regarding the responsibilities of administrators, faculty, and staff in serving students with disabilities. For example, who is responsible for seeking out training for faculty development on the topic of serving these students, who is responsible for high school transition to the community college, and what is the role of a teacher in assigning grades to the students? Faculty often felt unclear about what their obligations were and administrators reported frustration with some faculty doing too much for students, and others not doing enough. One

action administrators and faculty can take is to seek clarification of their respective responsibilities in working with students with disabilities.

While conflict between college faculty and administration is nothing new (Tyron, 2005; Wasley, 2006), responsibility for addressing the needs of students with disabilities does appear to be an area of disagreement calling for resolution. Administrators want faculty to seek more professional development (Swain, 1994), but who is responsible for paying or facilitating this? There is no clear indication in the literature as to who should be financially responsible for faculty training. Because there is disagreement between faculty and administration regarding this responsibility, upper level administrators and faculty leaders should engage in dialogue and seek to establish mutually agreed upon strategies for faculty development. Moreover the dialogue should include leadership representation within the part time faculty, as this is an important group that also needs training.

However, the administrator's task of resolving issues related to faculty development may be complicated by collective bargaining agreements. Given the scope of these long term agreements, administrators may be challenged in finding ways to accomplish faculty training, but during contract negotiations, training could be included. For example, at the case institution, full time faculty are obligated by contract to complete three semester hours of coursework related to assessment of student learning, instructional methodologies, learning strategies, or advising during each four year contract cycle. One avenue to meeting this requirement might be to have college personnel offer training concerning students with disabilities in a format that would satisfy this three credit hour requirement. This approach would provide a good incentive for faculty participation. Another creative strategy might be to give non-tenured faculty credit in

their tenure applications for attending uncompensated faculty development training specific to teaching students with disabilities.

Currently there is no requirement for part time faculty to seek any form of professional development. Given this situation, making disability training a preferred qualification when hiring to fill vacant full time positions might be an effective strategy for enticing part time faculty to attend training. Another strategy that might be employed is integrating professional development workshops into required in-service days for both full and part time faculty one day per semester.

A second conflict emerged from the data that involved responsibility in the area of preparing students for transfer from high school to college. The answer concerning who is ultimately responsible is unclear. It seems reasonable however to suggest that this should be a shared responsibility between the high school and college. While the Individuals with Disabilities Education Act (IDEA) added a requirement in 2004 that a Summary of functional Performance (SOP) document be created by the high school to help students transition to either colleges or employment (Izzo & Kochhar-Bryant, 2006), minimal guidance has been provided in most states on how to facilitate implementation of this requirement (Kochhar-Bryant & Izzo, 2006).

The findings of this study show a weakness in student preparation to successfully transition from high school to college, which is consistent with discussions in the literature. In a study surveying 74 Coordinators of Disability Services at colleges in New York, participants expressed dissatisfaction with transition services and identified the greatest weakness as being in the area of students' preparation to self-advocate (Janiga & Costenbader, 2002). As noted by the participants in that study, colleges are not doing all they can to assist students. Colleges also

have a role to play in helping to teach self-advocacy to students with disabilities (McCarthy, 2007). A possible solution may be for Disability Services leaders and high school Special Education representatives to collaborate more closely on student transition. This collaboration should also be sought on a statewide level in addressing the most recent changes to IDEA and SOP reports. If both institutions can clarify their roles and responsibilities, and sustained collaboration can be built into the high school-college relationships, students may arrive at the college with more realistic expectations and a stronger ability to self-advocate.

A final area of conflict that emerged from the findings dealt with the role and responsibility of a faculty member in assigning a grade to the student's work. Some faculty members reported struggling with the expectation that they will grade fairly because they also do not want to harm a student's self-esteem and self-image by giving low grades. They admitted to inflating grades for students with disabilities, or knowing other faculty who have uncomfortably lapsed into this practice. While there is research suggesting instructors may engage in grade inflation (Bacon & Novoty, 2002; ASHE, 2005), there is nothing in the literature suggesting this is done due to a student's disability. Thus, the findings in this study may be symptomatic of a larger problem with grade inflation.

Upon further inquiry to clarify the finding, administrators admitted grade inflation in general is a concern at the institution. Therefore, based upon the data in this study, it can be concluded that grade inflation is an issue, and the tendency toward grade inflation for students with disabilities may be even greater than with other students. Consequently, instructors need to use clearer standards that are made transparent and presented to all students. Moreover the instructors need to be consistent in implementing the established academic standards, as failure to do so can lead to litigation against the college. Several examples can be found in the literature

where students are taking legal action against colleges that grade inappropriately (Masinter, 2006; “OCR: Students,” 2006; “Student Alleges Discrimination,” 2008).

Assuming Greater Responsibility for Serving Students

This study shows that administrators and faculty need to assume greater responsibility for serving students with disabilities while relying less heavily on the campus Disability Services office. For example, the research found that most administrators rely almost solely on the Disability Services office for assistance in resolving issues that arise concerning students with disabilities. There is limited information in the literature on disability services at community colleges and no research that explores the phenomenon of how administrators use disability services offices as a resource. This study helps to fill a gap in the knowledge base regarding community college offices that serve students with disabilities; it explores how one disability services office provides support to faculty and administrators.

As discussed in the findings, faculty need to better understand the challenges faced by students with disabilities and not rely on the Disability Services office in every situation. There are several reasons for this, including the limited staffing and operating hours of the Disability Services office. Also, as indicated in the literature, faculty who seek to better understand students with disabilities tend to have students who are more successful (Lamport, 1993). In addition, faculty who seek to build relationships with students demonstrate increased student retention (Pompper, 2006). Faculty in this research study felt they were lacking knowledge of formal policies and procedures concerning students with disabilities. They believed that if they had a clearer understanding of related policies and procedures, they would be better able to help the students. This perspective is also supported by other research. In a study by Murray, Lombardi, Wren, and Keys (2009), faculty who attended some type of disability training afterwards

demonstrated higher levels of openness towards facilitating student accommodations and sensitivity to students with disabilities' unique needs.

Yet, training does not overcome all the potential barriers for faculty in building better working relationships with students. For example, as a result of incidences of campus violence over the past 10 years (Shute, 2007; Go, 2008), and particularly the recent incidents at Virginia Tech and Northern Illinois University, faculty may be overly fearful of students with mental health issues. Research also shows that, as a result of this fear, colleges at times respond to students with mental illness in punitive ways ("Model Policy," 2007). In this study, administrators and faculty shared their concerns regarding students with mental health issues.

An approach for improving faculty relationships with students is to engage student affairs staff who more directly work with all student populations. For example, a program at Grand Valley State University is seeking to build greater collaboration between faculty and student affairs administrators. As a part of their program, leaders at Grand Valley organized intergroup dialogues between faculty and student affairs staff discussing student and faculty expectations, and exploring ways in which they can support each other (Pace, Blumreich, & Merkle, 2006). The results were faculty having more strategies to improve student learning, a raised cultural awareness, and clearer expectations for faculty and student affairs staff concerning their mutual responsibilities. Although not directly mentioned in this study, if a program like the one at Grand Valley were adopted at the case institution, it could easily include Disability Services personnel and a greater focus on serving students with disabilities.

Making Modifications in Service and Instructional Delivery

Participants expressed a desire to learn "practical, hands-on tools" to serve students with disabilities better. Many intervention strategies that support students with disabilities do not

necessarily have a great cost. Universal Design and related ideas would be a feasible approach to offering improved instruction. Universal Design can assist a wide array of students in promoting greater access (Ofiesh, Rojas, & Ward, 2006). Simple training for faculty on Universal Design has shown an immediate improvement in the level of accessibility to their curricula (Spooner, Baker, Harris, Delzell, & Browder 2007). In one study involving 72 graduate and undergraduate students enrolled in four education courses, after participants had received training on Universal Design, 92% reported feeling more comfortable in working with students with disabilities (Izzo, Murray, & Novak, 2008). Thus, if similar training was offered at the case study institution on Universal Design, positive outcomes would likely be achieved.

Principles of Universal Design can also be applied to office settings. Universal Design offers several low cost recommendations that administrators can use to make offices and information throughout the institution more accessible. Examples include offering all publications online and in electronic format so they can be easily enlarged, arranging furniture so as not to pose barriers for wheelchairs, ensuring adequate lighting and low noise levels to prevent distractibility and difficulty hearing, making sure websites are screen reader accessible, and providing adequate signage that has high contrast and large print thus enabling students to more easily navigate the floor plan of the office setting (Burgstahler, 2009). The University of Washington Disabilities, Opportunity, Internetworking, and Technology (DO IT) Program (2009) offers additional free handouts to make student services, financial aid offices, libraries, academic offices, and other campus settings more universally accessible for all students.

Administrators also should consider increasing class offerings specifically for students with developmental disabilities. An example of this approach is provided by Bellevue College (formerly Bellevue Community College) in Washington, which offers an Associate of

Occupational and Life Skills for students with developmental disabilities. The curriculum includes job skill development, critical thinking skills, interpersonal skills, and practical vocational skills to assist in finding a job after graduation (Bellevue Community College, 2009). Programs such as these assist students who previously had few course offerings to choose from, and enable students to be eligible for federal financial assistance.

Based on the findings of this study, additional actions faculty and administrators can take involve building student relationships, applying creativity, identifying ways to facilitate training on various disability groups and college policies, and changing personal philosophies regarding students with disabilities. By using the expertise of personnel in the Disability Services office, these are modifications that have minimal cost but can be of great benefit to making all students feel more comfortable. These modifications also allow students to have a better experience in accessing the various services and educational opportunities offered throughout the college.

Change Occurring at Higher Levels

A final conclusion and overarching theme drawn from most participant interviews was that some type of change needs to take place on the board of trustee, state, and federal levels identifying students with disabilities as a priority if there is to be any improvement. Trustees play a critical role in overseeing and maintaining an institutional structure that supports the college's foundation (Nielsen, Newton & Mitvalsky, 2003). There are many changes that should be made on federal, state, and local levels to further support students with disabilities in meeting their educational goals.

At the federal and state levels, more financial assistance should be available for students with disabilities given their unique transportation and personal care expenses, which other student groups may not face. Also, while some grant programs exist that allow colleges to apply

for funds to enhance services for students with disabilities, additional funds should be allocated for students who attend community colleges that do not receive grant funds, but still have an identifiable need which cannot be met by any other state or educational agency. On the board of trustee level, board members need to continue their support of disability services offices and seek to hire senior administrators, including community college presidents and vice presidents, who are aware of the issues currently facing students with disabilities.

On the community college operational level, additional staffing for Disability Services offices is needed. The majority of participants said that increased staffing was a necessary priority for the future. Other needs as identified by participants included developing more programs and services targeted towards students with disabilities such as mentoring, disability specific tutoring, diagnostic testing for invisible disabilities such as learning disabilities, and transportation assistance. The availability of these services would alleviate the large financial burden that diagnostic testing and tutoring can place on students (Brinckerhoff, 2007).

Implications and Recommendations for Practice

The following recommendations specifically apply to the case study community college; however, through transferability these recommendations may be helpful to other community college administrators and faculty in addressing the needs of students with disabilities. The first recommendation is to increase opportunities for faculty and administrator professional development in the area of understanding student disabilities. A possible model is provided by the Virginia Community College system, which has made professional development a statewide initiative with positive results in decreasing faculty isolation and allowing faculty and administrators to further develop their skills. Their program, called the Virginia Community College Professional Development Initiative (VCCPDI), focuses on offering peer group

conferences regularly throughout the year by experts in different areas; faculty are encouraged to attend and learn from one another. The ultimate objective of this program is to enhance student learning (Sydow, 2000). A model such as this at the case study institution would encourage faculty to not only learn more on the topic of working with students with disabilities, but on other related academic areas as well.

If the case community college were to attempt such a model, a variety of elements could be incorporated such as information on specific disabilities and college wide procedures to help faculty and students with accessing services. In addition, legal topics and recommended best practices for integrating Universal Design concepts could also be included. The information from these training sessions could be archived on an easily accessible website for past attendees to simply review what they had learned. The website also could be used as an information resource that might be helpful in working with a student with a certain type of disability. Moreover, faculty who were unable to attend the training could still benefit from the information by being able to read it online.

A second recommendation is for administrators to persist in seeking ways to increase funding and resources to address the needs of students with disabilities and related programs. Federal grants are available that target assistance to students with disabilities and offer funds to some community colleges for improvement of services. For example, the Carl D. Perkins Vocational and Technical Education Act grant provides funds for community colleges to sponsor students who wish to enroll in vocational or technical education. One common use of Perkins funding is to support “special populations” which can include any student population that would be more likely to succeed in a technical occupational program with additional assistance.

The TRIO Student Support Services grant programs also are available to community colleges. These programs provide a variety of services for academic development, as well as helping students to develop basic college skills and a plan for completion of their postsecondary education (U.S. Department of Education, 2009b). Colleges that receive these funds may apply them towards first generation students entering college, students of low income, and students with disabilities. The grant programs stipulate that one third of the students who receive funds have some type of disability. With TRIO grant funds, colleges can provide additional support services to students including specialized tutoring, mentoring, scholarships, and counseling. These are all services that would be ideal in helping students with disabilities to be more successful.

The third recommendation is to raise awareness and understanding of invisible disabilities, such as mental illness, within the college. Awareness will help combat the related negative stigmas of mental illness and the intolerance college staff members sometimes exhibit in dealing with students with these types of disabilities (Granello & Granello, 2000). For example, a study at the University of Washington that gathered data from focus groups of student services personnel found that one of the largest areas of discomfort centered on students with invisible disabilities (Burgstahler & Moore, 2009). One approach to addressing this issue is modeled by the U.S. Department of Mental Health and Substance Abuse, which offered workshops to colleges across the country in an effort to lessen the stigma of mental illness (“Mental Health”, 2008). These types of workshops can help combat negative social perspectives surrounding mental illness.

The negative reaction of faculty and administrators to persons with mental illness is similar to the Hahn social or minority group model of disability (Gill, 1999), suggesting that the

experience between people with disabilities and people who are not disabled is a social product in reaction to the person's disability. If a faculty member or administrator has negative views of mental illness when the student discloses their disability, this revelation might hamper the interaction. Through education and training, college personnel would likely have less negative perceptions of mental illness, thus students would have more positive interactions with faculty and administrators.

A fourth recommendation is for faculty to seek and apply principles of instruction found to be helpful for students with disabilities. A clearinghouse of effective strategies could be created at the college thereby enabling all faculty to access the information. This could be offered both in a physical location, housed at the case studies center for faculty development and also on a webpage. Another resource would be to establish a group of volunteer faculty and administrators who are familiar with effective strategies in working with students with disabilities to be available for consultation. Each member could cover a specialty area in which they are most comfortable. Offices that wish to make their location more accessible, or faculty members who wish to improve their instruction could contact members of this advisory group. In addition, members of this group could offer training sessions on Universal Design for faculty and administrators to attend and share ideas with one another.

A fifth recommendation, is a good retention and completion practice for college leaders to more closely track students with disabilities in order to monitor progress and challenges. As mentioned in Chapter I, there are many gaps in the tracking of students with disabilities in higher education, and even less data is available on community college students with disabilities. There is a great need for more careful measuring and tracking of students with disabilities and their experiences.

Community colleges should examine more closely the reasons students with disabilities leave before completing their educational objective and factors that contribute to their lack of success. A recent study of two different community colleges serving a large number of students with disabilities found that neither institution tracked students who were dropping out of their college (McCleary-Jones, 2008). The case institution in this study also did not report any formal tracking of students with disabilities who left the college.

A sixth recommendation is for the community college to improve the entering and exiting transitions for students with disabilities. College staff could be assigned to interview students when they arrive and when they leave to better understand the students' needs. The entering transition could be started through active partnerships between high schools and the college Disability Services office. In addition, the college should develop ways to communicate with students from the very beginning as they start their collegiate experience. When students develop relationships with the Disability Service providers early in their academic careers, this gives them additional opportunities to develop their self-advocacy and communication skills by having more time to meet with staff. Research shows that when students leave high school with self-advocacy skills they are more likely to gain access to the support services they need to be successful in an academic environment (Gil, 2007). One possible method for reaching students is for the Disability Services office to provide new student orientation training.

The seventh and final recommendation is to formally document policies for serving students with disabilities in a way that clarifies decision-making and appropriate actions for faculty and administrators. These policies should be placed both on the college's website for students to access and the campuses' intranet for faculty and administrators to use. The information should be updated regularly and include compliance procedures as well as legal

requirements for both students and the college. As mentioned by the case study institution's Disability Services Coordinator, the college currently does not have formally written procedures on these topics; consequently, no related procedures are available online...

While this section offers a variety of recommendations for practice, it is important to acknowledge that the current economic situation limits the college's ability to add staff, services, and faculty training. The concept of long term strategic planning is important to maintaining a vision and continuing to guide the future of the institution. A piece of the strategic plan should recognize the increasing number of students with disabilities and incorporate goals, objectives, and actions that will lead to allocated funding, more resources and better services and support for these students. Models such as Universal Design, which at times may not require many additional resources, can be incorporated into the institution's annual operational planning and implementation. While today's economic climate is a challenging one, there will be a tomorrow. Administrators, along with faculty and staff, need to be planning for a future that includes consideration of students with disabilities.

Recommendations for Future Research

There are several areas that warrant further investigation. First, research should be conducted on students with all forms of disabilities at the community college level to better understand the needs and challenges of this growing student population. This research might include students with developmental disabilities in noncredit courses, students who are higher functioning in traditional programs, and students who are in the middle of these two groups in both credit and noncredit classes. Second, more research should be conducted to better understand disability services offices and their functions at the community college level. This research could be a comparative study that also examines university and high school programs

for commonalities and differences. This might help educators in both high schools and higher education better understand how each functions, allowing them work in partnership more effectively.

A third recommendation is to conduct a study to examine disability specific teaching methods considered to be most effective by disability specific educators, such as Deaf educators, learning disability specialists, and autism experts. This research might use quantitative or mixed methods to add light unto these disability specific teaching methods from a different perspective. Lastly, it would be helpful to survey high school educators to examine their opinions on the difficulties students with disabilities experience when transitioning to community colleges. Their views concerning students' needs and what community colleges can do to better ensure a successful transition for students may be quite different from the perspectives of community college administrators and faculty.

Summary

The purpose of this research was to discover ways in which community college faculty and administrators can facilitate learning for students with disabilities. Overall, the participants felt that more should be done and greater consistency among faculty is needed in the ways they accommodate students in classrooms. There was also a strong feeling that more research and funding needs to be directed toward the topic of students with disabilities in community colleges as this student population continues to increase.

In conclusion, community colleges play a critical role in addressing the needs of people with disabilities in the community. Since their beginning over 100 years ago, community colleges have had an "open door policy" and the mission of serving their local communities. This is done through offering classes in a wide variety of academic and technical areas,

specialized student and career services, affordable tuition, financial aid, and tutoring services to support student success. Students with disabilities represent 12.4% of the overall student population enrolled at community colleges (National Center for Education Statistics, 2006) and this population is growing. Faculty need training to effectively teach these students and administrators need training to manage the resources and make decisions essential to serving them. Community college scholars and practitioners should seek new paradigms to better serve the students with disabilities, particularly factoring in the resources available to the institution. Research and assessment must be ongoing to ensure that community colleges are meeting their commitments to special populations within the community. Moreover, the communities served, as well as policy makers, need to support the community college's efforts to educate and train students with disabilities, thus maximizing the students' potential for contributing to the socioeconomic well being of the community, state, and country.

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APPENDIXES

APPENDIX A

Pre Interview Questionnaire

Date: _____

Participant Name: _____

Please complete this demographic background questionnaire for the study.

1. Gender: ___Male ___Female
2. How many total years and in what roles have you participated at a community college/university?

As faculty member in a community college:

Total Number of Years _____

As faculty member in a university:

Total Number of Years _____

An administrator in a community college:

Total Number of Years _____

As administrator in a university:

Total Number of Years _____

3. Current Employer:

Name: _____

Job Title: _____

City/State: _____

of years employed _____

4. List the subjects you have taught in a community college or university and the length of time you taught that subject. If at the university level rather than community college, please place an asterisk "*" next to the course title:

Courses

Years Taught

1. _____

2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____
7.	_____	_____
8.	_____	_____
9.	_____	_____
10.	_____	_____

5. What departments have you supervised at a community college / university. Please list all departments throughout your career, as well as corresponding length of time. If at the university level rather than community college, please place an asterisk next to the department:

	Departments Supervised	Number of Years
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____
7.	_____	_____
8.	_____	_____
9.	_____	_____
10.	_____	_____

6. Please list all degrees you have obtained, as well as where and when:

	Degree	Date
Doctoral	_____	_____
Master	_____	_____
Bachelor	_____	_____

Associate _____

Trade School _____

Other _____

7. What percent of your time is spent interacting with students with disabilities in some degree?

8. What would you guess is the aggregate percentage of students with disabilities in American Community Colleges today?

9. *For administrators*, in what capacities do you most often interact with students with disabilities? Why do you most often meet with them?

10. *For faculty*, in what capacities do you most often interact with students with disabilities? What are the most common reasons you interact?

APPENDIX B

Informed Consent Form

Thank you for agreeing to participate in this study that will take place from October, 2008 to January, 2010. This form outlines the purposes of the study and provides a description of your involvement and rights as a participant.

I consent to participate in a research project conducted by Michael W. Duggan, a doctoral student at National-Louis University located in Chicago, Illinois.

I understand the study is entitled *Facilitation of Learning for Students with Disabilities in American Community Colleges*. The purpose of the study is--to discover ways in which community college faculty and administrators can better facilitate learning for students with disabilities. Specifically the study will address four large questions:

5. What do community college faculty perceive as the challenges of teaching students with disabilities?
6. What strategies have community college faculty found to be effective in assisting students with disabilities to be successful?
7. What actions have community college administrators taken that effectively address the issues related to success for students with disabilities?
8. How can community college administrators enhance their support of faculty who teach students with disabilities?

I understand that my participation will consist of digital audio-taped interviews lasting 1 to 1½ hours in length with a possible second, follow-up interview lasting 1 to 1½ hours in length. I understand that I will receive a copy of my transcribed interview at which time I may clarify information.

I understand that my participation is voluntary and can be discontinued at any time until the completion of the dissertation.

I understand that only the researcher, Michael Duggan, will have access to a secured file cabinet in which will be kept all transcripts, digital taped recordings, and field notes from the interview(s) in which I participated.

I understand that the results of this study may be published or otherwise reported to scientific bodies, but my identity will in no way be revealed. Also, the name of my employers (school) will not be published.

I understand there are no anticipated risks or benefits to me, no greater than that encountered in daily life. Further, the information gained from this study could be used to assist community colleges in serving the needs of students with disabilities.

I understand that in the event I have questions or require additional information I may contact the researcher: Michael W. Duggan.

If you have any concerns or questions before or during participation that you feel have not been addressed by the researcher, you may contact my Primary Advisor and Dissertation Chair: Dr. Diane Oliver, National-Louis University (Chicago Campus), 122 S. Michigan Avenue, Chicago, IL 60603. Phone (312) 261-3534 or E-mail: diane.oliver@nl.edu

Participant's Signature: _____ Date: _____

Researcher's Signature: _____ Date: _____

APPENDIX C

Administrator Interview Questions

1. What resources are currently in place for helping faculty teach students with disabilities?
2. Have the faculty you supervise ever expressed frustrations or concerns in working with students with disabilities? How do you help them address these issues, or how might you help the faculty address such issues?
3. What is the college currently doing to address issues faced by students with disabilities in the classroom?
4. Are there additional actions you think the college could, or should take to better address the needs of students with disabilities?
5. What do you think are the greatest challenges for faculty in teaching students with disabilities?
6. Do you know of strategies and techniques that faculty have used with good results while teaching students with disabilities? Please explain.
7. What do you think are the biggest challenges for students with disabilities in learning at the community college?
8. What percent of time, or hours per week, do you estimate faculty have direct contact teaching students with disabilities in the classroom? During office hours, what percent of time, or hours per week do you estimate faculty have direct contact in helping students with disabilities?
9. Do you generally find parental intervention helpful or problematic in working with students with disabilities? Please explain.
10. Do you ever collaborate with other administrators in addressing issues surrounding students with disabilities? How do you do this and what do you discuss?
11. Have you worked with offices in the college that can provide services to students with disabilities? Please explain.
12. Is there anything else you could share with me that might provide insights or shed more light on this topic? Is there anything else I should have asked to gain a more

comprehensive understanding of teaching and administrative considerations related to facilitation of learning for students with disabilities at the community college?

APPENDIX D

Faculty Interview Questions

1. Tell me about your general experiences in working with students with disabilities in the classroom.
2. Have you ever taught a student (s) who you believed had the potential to be successful in passing your course, but was not? What do you think was the source(s) of the problem(s)? Please provide specific examples (maintaining confidentiality if possible).
3. Have you ever taught a student who you believed no matter what was done, could not be successful in passing your course? Please provide a specific example (maintaining confidentiality if possible).
4. Have you ever received any training or professional development that enables you to teach students with disabilities more effectively? Please describe the training.
5. What types of professional development would you recommend to help teachers who have students with disabilities in their classrooms?
6. Have you worked with offices in the college that can provide services to students with disabilities? Please explain.
7. What percent of time, or hours per week, do you have direct contact teaching students with disabilities in the classroom? During office hours, what percent of time, or hours per week do you estimate that you have direct contact in helping students with disabilities?
8. Do you generally find parental intervention helpful or problematic in working with students with disabilities? Please explain.
9. What are some of the actions currently taken by administrators to help you effectively address issues concerning students with disabilities in the classroom?
10. What other actions or measures could administrators take to help support you in working with students with disabilities? Please explain.
11. What are some strategies that have been successful in teaching students with disabilities? Please provide specific examples.

12. What are some strategies you have tried but have not worked in teaching students with disabilities? Please share your thoughts on why these strategies did not work well.
13. What do you think are the greatest challenges for you in teaching students with disabilities?
14. What do you think are the biggest challenges for students with disabilities in learning at the community college?
15. Is there anything else you could share with me that might shed light onto the topic of teaching students with disabilities in the community college? Are there any other questions I should have asked you but did not?

APPENDIX E

Transcriptionist Confidentiality Consent Agreement

This confidentiality form articulates the agreement made between Michael W. Duggan, the researcher, and the transcriptionist.

I understand and acknowledge that by transcribing the audiotapes provided to me by Michael W. Duggan, that I will be exposed to confidential information about the research study and the research participants. In providing transcription services, at no time will I reveal or discuss any of the information of which I have been exposed.

In addition, at no time will I maintain copies of the electronic or paper documents generated. Further, upon completing each transcription, I agree to provide the electronic and paper documents to the researcher:

Michael W. Duggan

I understand that breach of this agreement as described above could result in personal and professional harm to the research participants for which I will be held legally responsible.

Transcriptionist's Signature: _____ Date: _____

Researcher's Signature: _____ Date: _____