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by

DISSERTATION

Submitted in Partial Fulfillment of the Requirements for the Degree of

The University of New Mexico Albuquerque, New Mexico

Exploration of the Qualities and Interactions of Post-Secondary Faculty Identified as Exemplary by Students with Support Services

By

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Abstract

Recent statistics indicate that approximately 11% of undergraduate college students seek out disability support services (National Center for Education Statistics, 20015). The review of research indicated a lack of research regarding faculty in postsecondary education and their knowledge of disabilities and services, experiences of individuals with disabilities, and in particular, experiences and interactions toward students with support services attending postsecondary educational institutions. The purpose of this case study was to explore the classroom experiences of seven faculty nominated by students with support services as exemplary at a four-year public university. The semi-structured interviews focused on the abilities of students with support services as they transition from secondary to postsecondary education from a faculty viewpoint.

Comments made by students with support services regarding exemplary faculty indicated willingness by faculty to provide accommodations and the importance of faculty interpersonal skills in relationship building. Results from the faculty semi-structured interviews found: (a) little difference in comparison of students without support services to

students with support services (b) faculty have more stories of success than stories of failure, (c) stories of failure resulted in future success or increased understanding of the student, and (d) faculty preferred students with support services to self-initiate accommodation requests. The advice faculty offered to new faculty was that minimal adaptations to teaching styles are necessary to accommodate students with support services.

The current study found two topics often touted in disability research as reoccurring themes. They were social justice education and Universal Instructional Design (UID). Students with support services and participants expressed similar viewpoints on the social construction of disability. Their viewpoint constructed impairment as a biological fact and the environment as the handicapping condition resulting in a disability (Jones, 1996). Additionally, the current study provided examples of participant use of UID. Examples of UID included multiple opportunities for engagement through short lectures, student participation, videos, group activities, and pictures. Future direction for Disability Services (DS) points to development of social justice training in collaboration with other minority groups including ethnicity, gender, and sexual orientation that address the needs of all students through UID is necessary.

Table of Contents

Abstract iii
Chapter 1
Introduction1
Disability Services in Postsecondary Education
AHEAD Program Standards and Performance Indicators
Definitions and Positionality
Purpose and Significance
Research Questions
Chapter 2
Review of the Literature
Postsecondary Education and Students with Support Services
Research on Students with Support Services in Postsecondary Education24
Comparison of Literature Review to AHEAD Programs Standards and
Performance Indicators
Chapter 353
Methodology and Methods
Methods56
Chapter 4
Findings66
Chapter 5
Discussion
Common Ground: Social Justice and Universal Instructional Design

Limitations	116
Future Directions.	117
References	120
Appendices	137
Appendix A Letter of Invitation.	137
Appendix B Consent Form.	138
Appendix C Interview Questions	141
Appendix D Demographic Survey	142
Appendix E Transcription Symbols	144

Chapter 1 Introduction

Students with support services coming of age in 2014 grew up under federal legislation that provides greater opportunities for successful transition into adulthood than any previous generation (Leiter, 2012). This began in the 1980s with efforts to improve transition to adulthood outcomes for students with support services who demonstrated poor postschool outcomes, lower quality full-time employment, and diminished opportunities for independent living, along with limited success in postsecondary education and community engagement (Kohler & Field, 2003). Most recent statistics indicate that approximately 11% of undergraduate students seek out support services (National Center for Education Statistics, 2015). Factors pointing to the increase are the 2008 reauthorization of the Americans with Disabilities Act (ADA), the Higher Education Opportunity Act (HEOA, 2008) (20 U.S.C.§ 1003), post-9/11 Veterans Educational Assistance Act (Government Accountability Office, 2009; Korbel, Lucia Wenzel, & Anderson, 2011), and special education services for students with support services (students with disabilities who self-identify to disability services and request accommodations) since 1975 through the enactment of the Education of All Handicapped Children Act (EHA) (Madaus, 2011), now IDEA.

Postschool outcomes of youth with disabilities reflect the effectiveness of transition planning in assisting with postsecondary enrollment (Carter, Trainor, Sun, & Owens, 2009). Data gathered from the National Longitudinal Transition Study-2 (NLTS-2) show a modest improvement for students with support services in postsecondary outcomes over the last 20 years, but transition planning has not been the equalizer of

success in comparison to students without disabilities. The Office of Special Education and Rehabilitation Services (OSERS) (2008) reported that from 2007–2008 217,905 students with support services between the ages of 14 and 21 graduated from high school with a regular diploma. This was a 16% increase in students with support services graduating from high school since 1996–1997. Further, OSERS reported data indicated from 2007–2008 that only 90,766 students with support services between the ages of 14 and 21 dropped out of high school, a 21% decrease since 1996–1997. Yet, retention and graduation rates for students with support services continue to lag behind other students. The reality of growing populations of students with disability and lower graduation rates than students without disabilities at both the secondary and postsecondary education level has educators analyzing research, longitudinal studies, retention and graduation statistics, and effectiveness of programming to determine what factors contribute to student success.

This dissertation explored the experiences of faculty at a four-year public university on the abilities of students with support services as they transition from secondary to postsecondary education from the viewpoint of faculty who interacted with them on a weekly basis in the classroom. This chapter examines the history of students with support services in postsecondary education, including the history of disability services, current trends in postsecondary education, continuum of services from prior to enrollment in postsecondary education to employment, and concludes with the purpose and significance of this study.

Disability Services in Postsecondary Education

History of Postsecondary Education Disability Services

The history of students with support services in postsecondary education occurred in two stages. The first part prior to World War II included two major events: (a) founding of Gallaudet University (Burch, 2001) and (b) founding of Disabled American Veterans (DAV) (Fleischer & Zames, 2001; Madaus, Miller & Vance, 2009). Gallaudet University was founded in 1864, the first and only liberal arts university for the Deaf in the world (Burch). It holds the distinction as providing the first academic accommodation for college students with support services through the translation of an astronomy lecture into sign language in 1865 (Ryan, 1993).

The DAV was the second specific movement for individuals with disabilities in postsecondary education (Fleischer & Zames, 2001; Madaus, et al., 2009). The Ohio Mechanics Institute (OMI) for Disabled Soldiers and another disabled veterans' student organization from the University of Cincinnati formed the first DAV organization in the country (Fleischer & Zames; Madaus, et al., 2009). They became a national organization on September 25, 1920 (Fleischer & Zames).

The post-World War II era began a time of great change for individuals with disabilities in postsecondary education. The focus started on the next group of disabled veterans returning from World War II and continued through the 1950s with voices becoming louder and stronger during the Civil Rights era of the 1960s (Fleischer & Zames, 2001). One of the early pioneers to fight was Edward Roberts, a person with a disability who sued to gain admission to the University of California the same month James Meredith, an African American sued for admission to University of Mississippi (Fleischer & Zames). This led to the enactment of Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. § 794) and the Education of All Handicapped Children Act (EHA)

(20 U.S.C. §1400 *et. seq.*) in 1975. These two pieces of legislation broadened the focus beyond physical disabilities to those with sensory, emotional, and cognitive disabilities. The implementation and evolution of disability services (DS) departments at postsecondary institutions began during this period (Madaus, 2011) with the "Disabled Students on American Campuses: Services and State of the Art" conference at Wright State University in 1977 (Marx & Hall, 1977; Marx & Hall 1978). Madaus commented that the conference led to the formation of a national association for DS professionals now called the Association on Higher Education and Disability (AHEAD) (AHEAD, 2010). Colleges and universities saw a dramatic increase in students with support services beginning in the 1990s (Hurst & Smerdon, 2000). The focus at the postsecondary level was on eligibility for services, reasonable accommodations, disability compliance, and presence of self-determination by students with support services to succeed.

Two reoccurring themes of the twentieth century have continued into the twenty-first century with the passage of the Americans with Disabilities Act Amendments Act (ADAAA, 2008) and the Post 9/11 Veterans Educational Assistance Act in 2008 (Madaus, 2011). The ADAAA broadened the definition of disability and refocused the intent of the law on equal access (Madaus, et al.). The Post 9/11 Veterans Educational Assistance Act expanded educational benefits for the approximately 2 million military veterans who have served since September 11, 2001 (Madaus et al., 2009). In addition, the American Council on Education (2008) is working with veterans with disabilities through the Serving Those Who Served program. This program includes a presidential summit, web site portal, incentive programs for colleges, and production of surveys and reports on current conditions for veterans in colleges.

Student with Support Services Enrollment Trends

Review of research indicates three enrollment trends in disability services at the postsecondary level: (a) increasing number of students with support services enrolled in postsecondary education (NCD, 2015), (b) impact of legislation (Madaus, et al., 2009; Madaus, 2011), and (c) complexity of needs by students with support services (Government Accountability Office, 2009; Korbel, et al., 2011). Data provided through the National Longitudinal Transition Study-2 (NLTS2) indicated positive and negative outcomes for students with support services (Newman, Wagner, Knokey, Nagle, Shaver, & Wei, 2001). While the percentage of students with support services increased to 11% in 2009 and maintained in 2011, completion rates for students with support services are less than the general population of postsecondary students. The graduation rate at a fouryear school is 34% graduating within eight years compared to 51% of students without support services graduating within the same period. In addition, only 45% of students with support services live independently compared to 59% of the general population of postsecondary students. The United States Government Accountability Office (GAO) reported in 2009 that the three largest groups of students with support services were: (a) mental, emotional, or psychiatric conditions, (b) Attention Deficit Disorder, and (c) orthopedic or mobility disabilities. Students with learning disabilities were nine percent of the students with support services, an increase of four percent from 2000 to 2008.

There is a direct link between the foundation of disability services and the key components of Section 504 of the Rehabilitation Act (29 U.S.C. § 794). Section 504 requires all postsecondary institutions to eliminate disability status from admission criteria and perform career counseling without consideration of the person's disability as

a selection factor (Brinkerhoff, McGuire, & Shaw, 2002). Students with support services may attend college on a part-time basis and receive all benefits given to full-time students (Brinkerhoff, et al., 2002). There is allowance for course substitutions within general curriculum requirements when academic accommodations are unable to provide equal access to the curriculum (Brinkerhoff, et al., 2002). Finally, the development of academic adjustments grew from the need for a centralized system to provide auxiliary aids, such as sign language interpreters, assistive listening devices, and assistive technology to ensure equal access (Brinkerhoff, et al., 2002).

AHEAD Program Standards and Performance Indicators

Disability service departments have been in operation over 30 years, but it was not until 1999 that the national organization for postsecondary disability providers, AHEAD, established program standards and performance indicators that provide essential expectations of minimal supports that must be available to provide equal access (Dukes, 2006; Shaw & Dukes, 2006). The current 2004 standards are an update from those done in 1999 and 2001 (Shaw & Dukes). There are eight specific areas within the program standards and performance indicators. The eight areas are: (a) consultation/collaboration, (b) information dissemination, (c) faculty/staff awareness, (d) academic adjustments, (e) counseling/self-determination, (f) policies/procedures, (g) administration and evaluation, and (h) professional development (AHEAD, 2004).

Consultation/Collaboration

The role of DS providers in consultation and collaboration is to facilitate equal access through advocacy and representation on campus committees (Dukes, 2006; Shaw & Dukes, 2006). Madaus (2000) reported three factors influencing collaboration at the

postsecondary level between DS and faculty through the establishment of technical standards in many academic majors. First, the implementation of technical standards assists in determining "if and when" reasonable accommodations are appropriate.

Second, the linking of disability service providers and faculty in determining reasonable accommodations aids in the educational experience for students with support services.

Finally, the establishment of technical standards lends itself towards the use of Universal Instructional Design (Silver, Bourke, and Strehorn, 1998; Madaus, 2000).

Information Dissemination

Dissemination of information is critical at the postsecondary level as Section 504 requires students with support services to self-identify and seek out services (29 U.S.C. § 794). It is important that DS departments provide policy and procedural information, campus access information, and documentation guidelines through a wide array of electronic and printed media (Dukes, 2006; Shaw & Dukes, 2006). It is also essential that DS departments ensure the availability of assistive technology on campus in order for students with support services to access the information (Dukes; Shaw & Dukes).

The typical first step in the request for special services is the determination of eligibility for services. The process begins with the submission of disability documentation by the student and varies from postsecondary institution to postsecondary institution (Madaus, Banerjee, & Merchant, 2012). The Office of Civil Rights (OCR) defined documentation as:

Prepared by an appropriate professional, such as a medical doctor, psychologist, or other qualified diagnostician. The required documentation may include one or

more of the following: a diagnosis of your current disability; as well as supporting information, such as the date of the diagnosis, how that diagnosis was reached, and the credentials of the diagnosing professional; information on how your disability affects a major life activity; and information on how the disability affects your academic performance (Department of Education, 2011, p. 4).

OCR defined the amount of disability-related information as the "minimum information necessary to establish a disability and/or support an accommodation request" in the decision of *Letter to: Central New Mexico Community College* in 2007 (Heyward, 2011). The guideline for appropriate documentation is an adequate amount to establish the existence of the disability and support the need for an accommodation (Heyward).

Dissemination of information must include students transitioning from high school or community college to a four-year postsecondary institution. Formalization of the transition process from secondary to postschool activities became a mandated requirement for education of students with support services beyond secondary school with the IDEA of 1990, which defined transition as a coordinated set of activities from school to postschool (20 U.S.C. § 1402 (34), 1990). From 1990 to the current day, the Individualized Educational Programs (IEP) of all students receiving special education services during high school must include a transition plan (Ashbaker, 2011; deFur & Korinek, 2008). The most recent reauthorization (Individuals with Disabilities Education Improvement Act, 2004, IDEIA) encouraged a transition plan at 14 and required that transition planning begin no later than 16 years of age (20 U.S.C. § 1400(d)(1)(A)).

Faculty/Staff Awareness

Disability service providers have the responsibility of informing the campus community of general services, academic accommodations, legal responsibilities, programmatic modifications, and availability of disability awareness training (Dukes, 2006; Shaw & Dukes, 2006). Shaw and Dukes indicated that the evolution of support services places a broader responsibility for all campus personnel, especially faculty, on the implementation and continuation of accommodations. In order to provide high quality support services, awareness by faculty of reasonable appropriate accommodations and assurance that accommodations do not result in a fundamental alteration of the essential functions of a course (Dukes; Shaw & Dukes) requires DS departments to assess faculty knowledge and awareness of legal mandates.

Academic Adjustments

Accommodations are the variations in the curriculum that allow for equal access without fundamentally altering the essential skills and objectives of a course (Brinckerhoff, Shaw, & McGuire, 1993). Examples of reasonable accommodations are: extended test time, use of a reader/scribe during tests, use of note taker during lectures, alternative text format, and use of a calculator during math tests (Brinckerhoff, et al.). Cory (2011) indicated reasonable varies from individual to individual and class to class. An example is use of a calculator for a student with learning disabilities during an exam in an advanced level Chemistry course is reasonable, but not for a student with intellectual disability in a low level math course requiring the demonstration of mathematical calculations (Cory).

Counseling and Self-determination

Disability services delivery models should provide avenues for fostering independence in students with support services (Dukes, 2006; Shaw & Dukes, 2006). Wehmeyer (2003b) noted "People who are self-determined act autonomously, selfregulate their behavior, and are psychologically empowered and self-realizing" (p. 31). Self-determination is critical for individuals with disabilities in the postsecondary educational environment because of the additional responsibility of managing academic accommodations along with academic coursework (Getzel & Thoma, 2008). Wehmeyer (2003a) concluded that a person exhibiting self-determination acts as a causal agent in one's life and makes decisions and choices that contribute to quality of life without undue influence or interference by others. The definition of self-determination includes four essential characteristics: (a) autonomy, (b) self-regulation, (c) psychological empowerment, and (d) self-realization (Wehmeyer, 2003a). Wehmeyer (2003b) explained that one with autonomy acts independently according to personal preferences, interests, and abilities. Additionally, he stated that self-regulated behaviors include use of self-management strategies, goal setting, attainment behaviors, problem-solving and decision-making behaviors, and observational learning (Wehmeyer, 2003b). It is critical that DS departments develop programming that enhances students with support services' self-determination as they progress through postsecondary education.

Policies/Procedures

Postsecondary institutions must have written policies and guidelines for determining and accessing reasonable accommodations, provision of services, student rights and responsibilities, as well as settling formal complaints, and ensuring confidentiality of disability information (Dukes, 2006; Shaw & Dukes, 2006). The

establishment of institutional and departmental policies and procedures determines the responsibilities of faculty, staff, students, and DS departments' roles in the implementation and continuation of academic adjustments (Shaw & Dukes). In addition, policies and procedures assist in the resolution of disagreements and the assurance of legal compliance by postsecondary schools.

Administration and Evaluation

Disability departments must do more than provide accommodations. It is their responsibility to align the department with institutional missions, collect data, implement regular departmental assessments, purchase adaptive equipment to ensure equal access, and provide fiscal management (Dukes, 2006; Shaw & Dukes, 2006). This AHEAD performance indicator justifies the need for at least one full-time professional responsible for academic adjustments (Shaw & Dukes). Shaw and Dukes stated that data collection encompasses the reporting of physical access issues, effectiveness of services, justification for funding, and the development of a program budget.

Professional Development

Staff must have opportunities for professional development, gain knowledge of institutional programs and policies, and adhere to the relevant Code of Ethics (Dukes, 2006; Shaw & Dukes, 2006). It is through professional development that DS providers grow and develop (Shaw & Dukes). Shaw and Dukes stated that the areas of development are dependent on the DS workers' prior knowledge, education, and work experience. Dukes stated that the Professional Standards and Performance Indicators provide a method of assessing training needs and hiring criteria by DS providers.

In conclusion, the type and quality of support services have evolved over time. Implementation of the AHEAD Program Standards and Performance Indicators within DS departments lessens the possibility of non-compliance by postsecondary institutions (Shaw & Dukes, 2006). The Program Standards and Performance Indicators show that support services do not occur in a vacuum. Factors outside of the departments play a critical of a role in the success of students with support services because the majority of academic adjustments occur in the classroom setting (Shaw & Dukes). It is critical that DS providers increase the amount of faculty/staff training opportunities and dissemination of information across campuses so proper referrals of students needing support services occur in order to lessen the graduation and retention rate gaps of students with support services compared to students without support services

Definitions and Positionality

Definitions

For the purposes of this research, the following definitions will be used.

Faculty. A professional individual who is a lecturer, professor, or instructor and teaches students at the postsecondary education level.

Student with support services. A self-identified student with a disability who receives academic adjustments during postsecondary education.

Disability services. A department within a postsecondary education institution that verifies the disability documentation presented by students, implements institutional standards for required disability documentation, determines the appropriateness of accommodations, and implements accommodations.

Postsecondary education. The period of education after completion of secondary education or the General Equivalency Degree (GED) when students earn a certificate, associate degree, or bachelor degree in specialized areas of study.

Researcher's Positionality

My career path in disability services began in the seventh grade when I decided to become a special education teacher. The year was 1973, the first federal legislation was enacted for individuals with disabilities, and the career as a special education teacher became possible. I remember great empathy prior to 1973 for classmates continually held back because of an inability to perform adequately academically. Suddenly education provided an opportunity for them to be successful and I believed teaching students with support services would be more rewarding. In addition, a distant cousin with Down syndrome lived at a residential school beginning at a young age and never lived at home again because the local community could not provide adequate education and services. I remember being very sad for her because she did not grow up with her siblings and parents.

My thirty-three-year career in education began as a special education elementary teacher in a rural community in Illinois where I spent three years. The next position as a high school special education teacher and counselor lasted approximately ten years in a community of 20,000 and home to a public four-year university. The last twenty years were spent as director of the disability services program at two different public four-year universities. As director, I interact with faculty on a regular basis regarding students with support services and accommodations. Discussion often centers on the reasonableness of accommodations and best implementation procedures. My experience is a strength and a

limitation in this research. My strength is in the determination of reasonable accommodations. I serve as the final person in the decision making process for accommodations for students and serve as a departmental witness in discrimination cases filed through the Office of Equal Opportunity (OEO) at the University level and OCR at the federal level. My limitation is that knowing many faculty at the University may influence what is said during the interview. My belief is that students with support services can be as successful as students without support services in earning college degrees, and that faculty serve an important role in the accommodation process, as ten years of Accessibility Resource Center (ARC) student data do not reflect national trends. One example is that 80% of students with ARC support services are retained after the second semester compared to 78% of students without support services at the University of New Mexico. I also understand that students with support services do not always initiate accommodations in a timely, effective manner and that teaching decisions by faculty center on the effectiveness of an entire class not one student with accommodation needs. Every effort to suspend personal bias with trustworthiness occurred so that the viewpoints and perceptions of the participants without personal interjection occurred to the greatest level possible.

Reflexivity

Reflexivity is a broad category within rigor through which the researcher examines one's personal and theoretical commitments throughout the entire qualitative research process (Creswell, 2007; McMillan & Schumacher, 2006). Creswell included all cultural, value, and personal bias as the areas needing checking by the researcher. It is essential that the researcher acknowledge the writer's stance (Creswell). Mayan (2009)

questioned the ability of a researcher to be truly reflexive as how can we be both the gazer and the object of one's gaze. She stated, "[R]eflexivity needs to be about grappling with self-awareness and politics, and how we frame reality, as we conduct our research and as we write" (p. 138). Darawsheh (2014) suggested steps to maintaining reflexivity:

1) situating the researcher, 2) conducting transparent research, 3) discerning an approach to data analysis, 4) adjusting researchers' actions, and 5) the research process. The previous section details my positionality as a researcher and director of a DS department and Chapter 3 addresses conducting transparent research, approaching data analysis, adjusting of the researcher's actions, and the research process.

Purpose and Significance

While time has brought significant improvements in education for students with support services at the postsecondary level, the need for federal intervention on their behalf continues to be the impetus for change (Madaus, 2011). One would hope that change becomes more proactive when individuals with support services demand immediate access through improved technology and universal design of the environment rather than accommodations afforded after the fact. One way of becoming proactive is to examine the experiences and qualities of those involved in the transition to postsecondary education. The three groups involved in the transition to postsecondary education are: postsecondary education faculty, students with support services, and disability service (DS) providers. There is ample representation in the following literature review chapter by individuals with support services and DS providers, but few articles with postsecondary faculty as participants. The purpose of this study was to explore the perceptions of exemplary faculty at a four-year public university report while supporting

students with support services as they transition from secondary to postsecondary education.

Research Questions

The central research questions for this study were:

- 1. What faculty qualities do students with support services identify as supportive of their success?
- 2. What qualities of and interactions with students registered with Accessibility Resource Center do faculty describe?
- 3. What advice do faculty offer to new faculty when accommodating students with support services?

Chapter 2

Review of the Literature

This chapter has four main sections. The first section is a summary of legislation and litigation that shapes academic adjustments and service delivery for students with support services. The second section is a review of 47 research studies that examined students, disability services providers, and faculty on the success of students with support services in postsecondary education. The third section compares outcomes of the studies to AHEAD Program Standards and Performance Indicators. The chapter concludes with implications for future research.

Postsecondary Education and Students with Support Services Legislation

Vocational Education Act of 1963. The Vocational Education Act of 1963 funded community colleges and vocational technical institutes serving students with support services (Madaus, 2000). It is this first piece of legislation at the postsecondary level that set the foundation for future transition initiatives for students with support services as they exited from secondary school. A series of amendments with the most influential changes occurred in 1984; the Carl Perkins Vocational Education Act (U.S.C. § 2301-2471) provided the following services to students with support services: (a) assessment of interests and abilities related to vocational education; (b) special services through adaptation of curriculum, instruction, equipment and facilities; (c) vocational counseling conducted by professional counselors; and (d) counseling services during transition from secondary school to postsecondary employment (Hasazi, Collins, & Cobb, 1988).

Section 504 of the Rehabilitation Act of 1973. The Rehabilitation Act (RA) originated in 1918 by the federal government as a rehabilitation intervention for military veterans from World War I (Ashbaker, 2011). Section 504 of the RA amendment reads:

[N]o otherwise qualified individual with a disability in the United States... shall, solely by reason of his or her 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 (29 U.S.C.A. § 794(a)).

The definition of disability, which includes mental or physical impairments that limit one or more major life activity, is within Section 504 (Beirne-Smith, et al., 2005). Ashbaker noted Section 504 is the predecessor to the Americans with Disabilities Act.

Failure to adhere to the guidelines of Section 504 results in the denial of federal funding for any program or service that denied participation by individuals with disabilities (Sobsey & McDonald, 1988). Sobsey and McDonald explained further that the law applied to employment under Subpart B and education under Subparts D and E. Section 504 covers the provision of assistive technology, reasonable accommodations, and auxiliary aids or services (Ashbaker, 2011). The term "auxiliary aids and services" includes: (a) qualified interpreters or other effective delivery method for individuals with hearing disabilities; (b) qualified readers, taped texts, or other effective means for access to print materials; (c) acquisition of equipment; and (d) other similar actions (Ashbaker, 2011).

President Reagan amended the Rehabilitation Act in 1986 (Braddock, Hemp, & Fujiura, 1988). Braddock, et al. stated that notable changes included use of supported employment as an acceptable outcome for vocational rehabilitation services. It extended

the provision of services beyond the time limited or "traditional" length of time for graduation. It established the State Grant Program, which assisted states in the development and implementation of supported employment services (Braddock, et al.). Both secondary and postsecondary educational institutions must adhere to Section 504 (Madaus, 2000).

The Family Educational Rights and Privacy Act (FERPA) of 1974. FERPA allows parental access to all personally identifiable information available concerning their minor children at their local school district (Ashbaker, 2011). Additionally, FERPA allows parents and students at the age of majority (Turnbull & Hathaway, 2007) to amend records when they contain inaccurate or misleading information (Ashbaker). Education records are defined as "those records, files, documents, and other materials, which: (a) contain information directly related to a student and (b) are maintained by an educational agency or institution or by a person acting for such agency or institution" (20 U.S.C. § 1232f(a)(4)(A)). According to Ashbaker, FERPA is applicable to all agencies and institutions that receive federal funding. It includes elementary and secondary schools, colleges, and universities.

Americans with Disabilities Act (ADA) of 1990. The momentum of the 1970s returned with the enactment of the ADA of 1990 and the reauthorization of EHA in the form of the IDEA (Madaus, 2000). The ADA is the first civil rights legislation for individuals with disabilities in the public sector and provides a clear, specific mandate to end discrimination against individuals with disabilities (Ashbaker, 2011; Beirne-Smith, et al., 2005). It was divided into five titles covering employment, public services including state and local government and transportation, public accommodations,

telecommunications relay, and miscellaneous provisions (Brinckerhoff, et al., 1993). The national attention from the ADA increased awareness of institutional responsibilities for equal access to all campus facilities, services, and programs (Brinckerhoff et al., 1993; Madaus, 2000).

Evidence of the impact of the ADA is visible in our physical environment with curb cuts, captioning of videos, sign language interpreters at public meetings, and access to public transportation (Ashbaker, 2011). The ADA requires employers to accommodate individuals with disabilities in the workplace and consider their application for employment equal to individuals without disabilities if they can perform the major functions of the job (Ashbaker). Both secondary and postsecondary educational institutions must adhere to the ADA (Madaus).

Litigation

Southeastern Community College v. Davis (1979). Francis Davis, an individual with a serious hearing disability, sought training as a registered nurse (Turnbull, Stowe, & Huerta, 2007). Southeastern Community College denied her admission into the program because she was unable to perform the requirements of a registered nurse. Turnbull, et al. reported that the U. S. District Court concluded Davis was not "otherwise qualified" with a disability and not protected by Section 504 because she could not otherwise function sufficiently in the position because of the disability. The U. S. Court of Appeals for the Fourth Circuit reversed the decision not due to a disagreement with the District Court decision, but because Southeastern Community College did not attempt to accommodate or modify the program before denying admission to Davis (Turnbull, et al.). The case then went to the U. S. Supreme Court and reversed the U. S. Court of

Appeals for the Fourth Circuit's decision. The Supreme Court agreed with the original decision by the U. S. District Court that Davis did not meet the technical standards for the nursing program.

Grove City v. Bell (1984). Grove City College, a small church-run college, claimed exemption from Section 504 of the Rehabilitation Act because it received no direct federal funds. The U.S. Department of Health, Education, and Welfare requested the College sign a statement promising to comply with Title IX of the Education Act Amendments of 1973 (Brinckerhoff, Shaw, & McGuire, 1993). The College refused to sign and the Department of Education moved to cut off financial aid assistance to students. The case went to the U.S. Supreme Court and it ruled that the College received indirect federal funding through student financed education in the form of Pell grants and was required to comply with Section 504 (Brinckerhoff, et al). The Supreme Court ruling was extremely narrow and only required the financial aid office to comply with the federal law. Congress then addressed the narrowness of the Supreme Court decision by enacting the Civil Rights Restoration Act in 1987 and requiring entire institutions to abide by the federal mandate (Brinckerhoff, et al).

Wynne v. Tufts University School of Medicine (1992). The case involved a first year medical student at Tufts University School of Medicine diagnosed with a learning disability at the University's expense after failing eight of 15 courses (Brinckerhoff, et al., 1993). The student requested an alternative type of test in the form of oral exams and the school rejected the request (Brinckerhoff, et al). Tufts School of Medicine explained that he requested to take a reduced course load during his second attempt at the first year. The school denied both requests, but did allow him to repeat the first year and provided

special tutoring in all failed courses, use of note takers and assistance in learning study skills. He failed two classes during the second attempt and was allowed to retake the exams, passed one and failed the other (Brinckerhoff, et al.). Tufts School of Medicine dismissed him from the medical school and he filed suit claiming the denial of a different test format deprived him of equal access to a medical education. Tufts denied the accommodation based on the decision from *Southeastern Community College v. Davis* and Wynne's inability to meet an essential requirement of the degree. Ultimately, after two appeals the district court ruled in favor of Tufts. Oral exams would fundamentally alter the medical curriculum and Wynne was not otherwise qualified (Sahlen & Lehmann, 2006).

Guckenberger et al. v. Boston University et al. (1997). Guckenberger et al. filed a class action suit against Boston University alleging the University failed to provide course substitutions to students with learning disabilities as an accommodation and required students to obtain overly-burdensome documentation to establish eligibility and qualify for accommodations. The court found in favor of Boston University stating course substitutions for all students with learning disabilities was unconstitutional (Sahlen & Lehmann, 2006). Additionally, Sahlen and Lehmann stated the court did uphold the ability for students with learning disabilities to seek course substitutions on a case-by-case basis and the University changed the evaluation policy to allow for a wider range of acceptable evaluators (Sahlen & Lehmann).

Bartlett v. New York State Board of Law Examiners (1998). The New York State Board of Law Examiners denied Bartlett's request for unlimited exam time, permission to tape record essay responses, and circle responses directly on the exam

(Sahlen & Lehmann, 2006). On remand from the U.S. Supreme Court with earlier decisions vacated, the Board was found in violation of Section 504 of the Rehabilitation Act, and restitution was paid to Bartlett for past attempts at the bar examination and lost wages (Sahlen & Lehmann).

Zukle v. Regents of the University of California (1999). A student with a learning disability in the area of visual processing sued the University of California, School of Medicine because they denied her request for additional time in activities related to reading and comprehension when under time constraints. The court found in favor of the University and determined Zukle unable to meet the essential requirements of the program with reasonable accommodations (Sahlen & Lehmann, 2006).

To summarize, Southeastern Community College v. Davis in 1979 was the first court decision on the interpretation of Section 504 and affirmed the rights of individuals with disabilities at the postsecondary level. This was followed by the Grove City v. Bell (1984) decision requiring private colleges to abide by Section 504. Three court decisions, Wynn v. Tufts School of Medicine (1992) and Zukle v. Regents of the University of California (1999) stressed the necessity for students with support services to meet the essential requirements of a degree program while Bartlett v. New York State Board of Law Examiners (1998) determined testing conditions must allow for students to use accommodations similar to those used in the past. Finally, the Guckenberger et al. v. Boston University et al. (1997) decision recognized the need to consider each accommodation request on a case-by-case basis.

The number of students with support services enrolling in postsecondary institutions reached 11 percent in 2009 (National Center for Education Statistics, 2009).

McMenanim and Zirkel (2003) stated one reason for the increase is the passage of federal legislation, such as Section 504 of the Rehabilitation Act and the ADA. The six court decisions previously discussed illustrate one method of appeal available to students with support services when they believe discrimination occurred (McMenanim & Zirkel). McMenanim and Zirkel explained that the U. S. Department of Education's Office of Civil Rights (OCR) handles enforcement of federal legislation. It is critical for DS providers to be knowledgeable of court cases as they offer "additional guidance as to the parameters of the law" (Brinckerhoff, et al., 1993, p. 64) and drive academic adjustment decisions.

Research on Students with Support Services in Postsecondary Education Method

A three step method of: (a) electronic database search, (b) inclusion and exclusion, and (c) reading articles was used to review research involving disability services providers, students with support services, and faculty. First, I conducted an electronic search using EBSCO Host to identify all publications between 1990 and July 2017 of research studies on disability service providers, students with support services, and faculty at the postsecondary education level and their attitudes and perceptions of services and accommodations.

Electronic database search. Selection was a three-stage process using three computer search databases (Academic Search Complete, Education Research Complete, and Psych ARTICLES). The following search terms were combined with transition or disability as the anchor term in each search until all possible variations were exhausted: transition, disability, postsecondary education, faculty, professor, instructor, parent,

services, accommodation, and research study. This resulted in 3.214 articles. The number of articles decreased to 107 using the following inclusion and exclusion criteria. Inclusion criteria were: (a) individuals with disabilities 18 years old or over and in postsecondary education; (b) postsecondary education disability services personnel responsible for accommodations for students with support services; (c) published articles; (d) peer review journals; (e) qualitative, quantitative, mixed methods, or case study research; (f) federal government reports and white papers; (g) English language articles; (h) primary or secondary data analysis; (i) studies completed since 1990; and (j) retention and graduation related outcomes or data analysis. Exclusion criteria were: (a) individuals with disabilities younger than 18 years, or not in postsecondary education; (b) postsecondary education disability service personnel with no direct participation in accommodations for students with support services; (c) non-published articles; (d) non-peer reviewed journals; (e) essays, opinion articles, stories, or narratives; (f) non-English language articles; (g) articles not found in EBSCO Host; (h) studies completed prior to 1990; and (i) solely non-transition related outcomes or data analysis.

Inclusion and exclusion. The in and out step consisted of reading the title and abstract to determine appropriateness according to the inclusion and exclusion criteria. Use of this step resulted in decreasing the pool from 107 to 47 articles. The 47 articles were determined to be candidates for complete review.

Reading articles. Three types of descriptive studies emerged. The first type described programming for students with support services by disability service providers. The second type described characteristics of students with support services, such as self-determination, help-seeking patterns, and attachment behaviors and rationale for seeking

services at the postsecondary level. The final type described perceptions and knowledge of faculty in accommodating students with support services.

Analysis Procedures

The first step was to read the 47 articles in totality. The next step was to analyze the headings and subheadings to determine similarities and differences within the articles. The articles span 24 years of the evolution of disability service departments, increase in students with support services attending postsecondary education, and faculty perceptions of accommodating students with support services. The task of analysis began with the development of tables to record key points within the three categories. The final step was to scrutinize the tables, analyze the evidence, and conceptualize themes.

The review of the 47 research articles collapsed into three categories: (a) faculty, (b) students with support services, and (c) disability service providers. Those categories collapse into three shared subcategories: (a) success, (b) experiences, and (c) knowledge. Three articles analyzed research studies from 1999 to 2010 to compare postsecondary services (Mull, Sitlington, & Alper, 2001), students with ID participation in postsecondary education (Thoma, Lakin, et al., 2011), and transition (Webb, Patterson, Syverud, & Seabrooks-Blackmore, 2008). Second, four studies (Sharpe & Johnson, 2001; Sharpe, Johnson, Izzo, & Murray, 2005; Stodden, Roberts, Picklesimer, Jackson, & Chang, 2006; Tagayuna, Stodden, Chang, Zeleznik, & Whelley, 2005) from 1999 to 2001 sponsored by the National Center for the Study of Postsecondary Education Supports (NCSPES) examined results from the National Survey of Postsecondary Education Supports for students with support services. Finally, the remaining 40 studies (Baker, Boland, & Nowik, 2012; Banks, 2011; Bento, 1996; Bourke, Strehorn, & Silver, 2000;

Buchanan, St. Charles, Rigler, & Hart, 2010; Cawthon & Cole; 2010; Chiba & Low, 2007; Connor, 2011; Dowrick, Anderson, Heyer, & Acosta, 2005; Dutta, Kundu, & Schiro-Geist, 2009; Field, Parker, Sawilowsky, & Rolands, 2013; Garrison-Wade, 2012; Getzel & Thoma, 2008; Harbour, 2009; Hicks-Coolick & Kurtz, 1997; Hong & Himmel. 2009; Janiga & Costenbader, 2002; Kirkendall, Doueck, & Saladino, 2008; Kranke, Jackson, Taylor, Anderson-Fye, & Floersch, 2013; Kurth & Mellard, 2006; Lightner, Kipps-Vaughan, Schulte, & Trice, 2012; Lombardi, Murray, & Dallas, 2013; Morningstar, et al., 2010; Murray, Lombardi, Bender, & Gerdes, 2013; McEldowney Jensen, McCrary, Kramps, & Cooper, 2004; Murray, Wren, & Keyes, 2008; Olney & Brockelman, 2005; Patrick & Wessel, 2013; Phillips, Terras, Swinney, & Schneweis, 2012; Quinlan, Bates, & Angell, 2012; Shepler & Woosley, 2012; Skinner, 2007; Stein, 2013; Thoma & Getzel, 2005; Thoma, et al., 2011; Trammell & Hathaway, 2007; Vogel, Leyser, Burgstahler, Sligar, & Zecker, 2006; Vogel, Leyser, Wyland, & Brulle, 2000; Walker & Test, 2011; West, et al., 1993; Zafft, 2004) analyzed disability service providers, current students with support services or recent graduates with disabilities, and postsecondary education faculty to determine level of student success, disability services success, participants' perceptions, and participants' knowledge of accommodations.

Three Research Reviews

Knowledge. Mull et al. (2001) conducted a systematic analysis of 26 research studies from 1985 to 2000 on postsecondary services for students with support services. The 26 studies were analyzed for 11 program indicators: (a) definition of learning disability, (b) characteristics of adult learners with learning disabilities, (c) type of institution, (d) special admission procedures, (e) assessment services, (f) program

accommodations, (g) support services, (h) institutional adjustments, (i) instructional staff training, (j) direct service staff training, and (k) program evaluations. There was no agreement of a learning disability definition. Characteristics of adult learners with learning disabilities included deficits in academic skills and social skills. Fewer than half of the studies had special admission criteria. Assessment services, such as diagnostic evaluations, ability level assessment or academic achievement assessments were available 31% to 42% of the time. The most common indicators mentioned by all 26 studies were instructional adjustments and support services.

Thoma, et al. (2011) investigated postsecondary education programs for students with ID from 2001 to 2010 to determine changes in programming, outcomes, and postsecondary preferences. The 24 research studies showed changes to admissions, supports, and program features. The studies provided more details on the types of classes available and described the changes made by faculty to ensure inclusion. They found programs evolved over time and implemented new supports and adjusted others. Thoma, et al. found only one study (Zafft, 2004) linking PSE participation to employment outcomes. The authors did not reach a definite conclusion as to whether postsecondary education participation outcomes are greater than other outcomes.

The final analysis by Webb, et al. (2008) reviewed evidence-based studies from 1995 to 2006 to determine what transition practices optimize potential for success for students with support services at the postsecondary level. They concluded there are five common practices that enhance the potential for success. Those practices are: (a) self-determination skills, (b) social and interpersonal skills, (c) academic preparation, (d) accommodations, and (e) assistive technology. Webb, et al. (2008) agreed with Kurth and

Mellard (2006) that the voices of the participants provided the needed information to initiate systematic change in the preparation of students with support services during the transition process.

Four Studies by the National Center for the Study of Postsecondary Educational Supports (NCSPES)

Knowledge of disability services and students with support services. The first of three studies examined knowledge of disability services. Sharpe and Johnson (2001) conducted the first study coming from NCSPES, which was a 20/20 analysis of high and low level capacity of services by 259 two-year and four-year postsecondary institutions. The purpose of the 20/20 analysis was to look at the parameters of services to understand the nature and range of supports provided to students with support services. The pool consisted of 69% disability service (DS) providers from public institutions and 31% from private institutions. The most significant difference found 84% of public institutions were in the High Capacity group with only 16% of the private institutions being in the High Capacity group. Institutions of 10,000 students or more made up 44% of the High Capacity group and only 9% of the Low Capacity group. The ten accommodations shared by all institutions were: testing accommodations, personal counseling, advocacy services, note takers/readers, study skills, interpreter/transliterator, priority registration, class relocation, and Learning Center Laboratory. Low Capacity institutions had a lower staff to student ratio. The High Capacity institutions served a wider range of disability types and a larger proportion of students compared to total enrollment. The final analysis of policies showed High Capacity institutions more often offered policy handbooks, conducted workshops, and provided consultation.

Stodden, et al. (2006) conducted two NCSPES surveys of disability service providers or designees in public and private postsecondary institutions in 1999 and 2001. The first survey distribution resulted in 650 responses with 418 in the second distribution. The purpose was to determine the range of assistive technology (AT) supports, accommodations, and services available to students with support services; the level of opportunities through distance learning for students who are deaf or blind; and the level of changes over the two-year period.

The first area of analysis was frequency of AT supports. Access to AT equipment and software across campus showed the greatest increase over the two-year period with 61.5% indicating AT availability in 2001 compared to 49.5% in 1999. The other area of growth was document conversion increasing from 40.9% in 1999 to 51.4% in 2001. Finally, the availability of adaptive furniture was in the 50% range during both periods. Availability of distance learning for deaf and blind students was at a low to medium frequency. On-line library services were available by 47.8% of the institutions in 1999 and 55.3% in 2001. On-line student services offered by 33.5% of the institutions during the first survey increased to 52.2% with the second survey. Accessible TV courses grew from 20.3% to 30.1% over two years. Finally, accessible web-based courseware increased to 51.2% from 34.2%. Two-year postsecondary institutions provided significantly more AT supports compared to four-year institutions (Stodden, et al., 2006).

The study by Tagayuna, et al. (2005) was the final study to use the data from the two NCSPES surveys. The survey divided educational supports into seven categories with a total of 33 support services across the categories. All institutions offered the 33

supports to some degree in 1999. The most common accommodations were test accommodations, note takers, personal counseling, and advocacy. The two-year span of the study showed an overall increase with 88% of the 33 specific support services offered at all institutions. The most common support was testing accommodations. The least common support in 1999 was real time captioning with 71% not offering the support, the least common support in 2001 was summer orientation programs with 65% of the institutions not offering the support. Developmental instruction and learning laboratories saw a significant increase from 1999 to 2001.

The final study by Sharpe, Johnson, Izzo, and Murray (2005) used a structured interview questionnaire consisting of 50 questions on instructional accommodations, assistive technology, and employment outcomes of 139 college graduates with disabilities to determine their level of accommodation knowledge. Results showed that individuals used instructional accommodations, such as extra time for tests, quiet location for tests, and recording of lectures at a higher rate than at high schools or workplace settings. The only instructional accommodation used consistently in all settings was enlarged print materials. Students used scanners, talking books, portable note taking, and assistive equipment with greater frequency at the postsecondary level. Postsecondary settings focused more on implementation and training of assistive technology compared to high school settings through collaborative efforts between DS providers and students.

Postsecondary Education General Studies

Disability service providers. Four studies (Collins & Mowbray, 2005; Harbour, 2009; Hicks-Coolick & Kurtz, 1997; Janiga & Costenbader, 2002) of DS providers

examined factors for success and providers' perceptions of students with support services at the postsecondary level.

Success. Collins and Mowbray (2005) surveyed 275 DS providers from 10 states, five with three or more supported education programs and five with no supported education programs. The purpose of the study was to provide more specific information on the services available for students with psychiatric disabilities. Results indicated the types of psychiatric disabilities as anxiety (34%), affective disorders (25%), psychotic disorders (15%), mixed disorders (15%), other disorders (5%), and eating disorders (3%). The open-ended questions provided specific information on the types of barriers faced by students with psychiatric disabilities. Fifty percent of faculty and staff reported needing more information on intervention methods, classroom behavior, attendance, and ability to handle courses. The most common responses to barriers for students with psychiatric disabilities were fear of disclosure (24%), lack of knowledge of services available (19%), fear of stigmatization (19%), and lack of appropriate resources (16%).

Harbour (2009) used data of 424 DS providers taken from the larger international survey by the Association on Higher Education and Disability (AHEAD) for the purpose of examining how campus and office characteristics vary dependent upon administrative reporting lines within academic affairs or student affairs. Results showed 69% of the DS offices affiliated with student affairs with 82.9% of those departments providing centralized services for the entire campus. Disability Services was the most common title among offices at 33.9%, with the least common title being Access Center at 4.7%. The average number of staff was 8 when reporting to student affairs and 4 when reporting to

academic affairs. Finally, the percentages of students receiving services from DS offices was higher within academic affairs (6.7%) compared to student affairs (3.9%).

Experiences. Hicks-Coolick and Kurtz (1997) interviewed nine counselors in learning disabilities programs from nine postsecondary schools on the personal characteristics needed by students for academic success. The findings reported three interrelated factors: (a) motivation, (b) preparation, and (c) self-advocacy. For the purpose of this study, motivation included the characteristics of goal oriented, determined, and hard working. Preparation included academic background, knowledge of study skills and learning styles, and time management skills. Self-advocacy pertained to self-awareness; self-acceptance; knowledge of laws, policies, and resources; assertiveness skills; and problem-solving skills. The counselors reported these factors as critical for students to possess prior to attending college and the responsibility of secondary education to instill.

A study by Janiga and Costenbader (2002) supported findings from the previous study. Seventy-four disability services coordinators from New York State reported on students with support services' preparedness to college. Coordinators reported a lack of preparedness in the ability to self-advocate during transition services. Additionally, coordinators were dissatisfied with the documentation presented by the students and the lack of information provided to the coordinators regarding postsecondary education services.

Students with support services. Twenty-four studies (Baker, et al., 2012; Cawthon & Cole, 2010; Chiba & Low, 2007; Connor, 2011; Dowrick, et al., 2005; Dutta, et al., 2009; Field, et al., 2013; Garrison-Wade, 2012; Getzel & Thoma, 2008; Kirkendall,

et al., 2008; Kranke, et al., 2013; Kurth & Mellard, 2006; Lightner, et al., 2012; Morningstar, et al., 2010; Murray, et al. 2013; Olney & Brockelman, 2005; Patrick & Wessel, 2013; Quinlan, et al., 2012; Shepler & Woosley, 2012; Stein, 2013; Thoma & Getzel, 2005; Walker & Test, 2011; West, et al., 1993; Zafft, 2004) examined students' knowledge regarding disability services, perceptions as students with support services in college, and student success.

Knowledge. The first of six studies interviewed 42 students with a learning disability attending a state university concerning their: (a) reasons for seeking DS when they did, and (b) transition services in high school (Lightner, et al., 2012). Eighty-one percent of the group sought services during times of academic crisis. Students seeking services earlier performed better academically in comparison to students waiting to initiate services. Those students with more transition services in high school tended to be more proactive. Students receiving little to no information regarding services at the postsecondary level viewed the lack of knowledge as a barrier. The authors indicated four major reasons for delaying initiation of services. Those were: (a) lack of time, (b) lack of knowledge, (c) desire to establish an identity independent of disability status, and (d) inability to determine realistic status of current progress. One other study (Kranke, et al., 2013) conducted similar research. Kranke, et al. categorized reluctance of disclosure for students with psychiatric disabilities into three categories: (a) fear that the disability would limit functioning necessary for academic success, (b) stability of disability, and (c) stigma if students with psychiatric disabilities disclosed presence of a disability.

Dowrick, et al. (2005) conducted focus groups in 10 states involving students and college graduates with disabilities. The purpose was to identify barriers to access, use of

support services, and employment. Results showed DS providers were a valuable human connection to the institution, but often understaffed. Participants reported the focus should center on individual needs rather than disability. Factors that assisted with transition to employment were faculty mentors, internships, and job training. Yet, these factors were often inaccessible. AT was a valuable tool to aid in transition to employment. Stigmatization was a problem because of a misconception that disability equals inability.

Cawthon and Cole (2010) surveyed 110 current students with support services on: (a) knowledge of their disability, (b) use of accommodations, (c) barriers or opportunities in transition, and (d) self-advocacy skills. Results compared use of accommodations in high school to those used at college. Students were more likely to use a classroom assistant, extended time, separate setting to take exams, attend counseling, and receive reduced course loads or priority registration in college than high school. Students indicated a reluctance to contact faculty regarding their disability with only a third making contact. They were more likely to contact the DS office with 485 seeking services. A similar study interviewed students with psychological disabilities to determine the benefits and challenges of accommodations, utilization of services, and academic experiences (Stein, 2013). Students reported the benefits of accommodations during times of increased symptoms related to their disabilities. The most used accommodation was note taking as well as testing accommodations. The accommodation of deadline extensions for homework was seldom available, but ranked as important during times of elevated symptoms. Affiliation with disability services was important

during times of stress. Finally, students reported feelings of stigma when disclosing their disability to faculty and friends.

Field, et al. (2013) assessed the impact of coaching on students with Attention

Deficit Hyperactivity Disorder (ADHD) on study skills, self-regulation, and well-being.

The Edge Foundation provided coaching to students in the experimental group. Coaching involved an initial session, weekly phone sessions, and status checks as needed for six months. Results showed the coaching group had higher scores on the Learning and Study Strategies Inventory (LASSI) compared to the control group. Additionally, the coaching group scored higher on the College Well-Being Scale.

The final study by Zafft (2004) explored the experiences of three students with ID, their parents, faculty, and DS provider to determine the students' level of knowledge in the accommodation process. All students enrolled in credit courses and earned passing grades at the time of the interviews. It took additional time to teach students and parents the meaning of reasonable accommodation and how to implement accommodations. Finally, specialized tutoring allowed for greater opportunity for success in the classes.

Success. Three studies examined the role of disability services in student success. The first by West, et al. (1993) surveyed 761 students with support services in Virginia to determine levels of satisfaction with accessibility, services, and accommodations. The overall results showed more than 50% of the students with support services were satisfied with services, accommodations, and access to new buildings. Retrofitted buildings and campus grounds did not hold the same level of satisfaction. There were differences in levels of satisfaction across school types. More private college students with support services indicated higher levels of satisfaction than those in two-year and four-year public

schools. Students from community colleges reported satisfaction with physical access, absence of barriers to their education, and absence of need to change policies.

Two studies (Getzel & Thoma, 2008; Thoma & Getzel, 2005) reported on the same study conducted in six Virginia colleges or universities. They explored the role of self-determination in transition to college and subsequent success. Both studies used a focus group of 34 students with a variety of disabilities. Students typically delayed self-disclosure of a disability, failed, and then sought services. Keys to success were problem-solving, setting priorities, realistic goal-setting, use of time management skills, and taking it one step at a time. Knowledge of one's disability was critical in formation of self-determination. The students indicated seeking services, forming relationships with professors, developing a support system, and self-awareness as important for all students with support services (Getzel & Thoma; Thoma & Getzel).

Murray, Lombardi, et al. (2013) examined the effects of social support on 179 students with support services. The presence of social support and satisfaction with support was significant in the adjustment to college for students. Additionally, they examined the factor of financial stress to determine the role it played in adjustment to college. Financial stress did not negatively impact students with adequate social support or those satisfied with the level of social support in their lives.

Experiences. Twelve studies (Banks, 2011; Chiba & Low, 2007; Connor, 2011; Dutta, et al., 2009; Garrison-Wade, 2012; Kurth & Mellard, 2006; Morningstar, et al., 2010; Olney & Brockelman, 2005; Patrick and Wessel, 2013; Quinlan, et al., 2012; Shepler & Woosley, 2012; Walker & Test, 2011) examined the effect of student perceptions on success. Kurth and Mellard (2006) surveyed 108 students with support

services and conducted focus groups with 104 students from 15 community and technical colleges in California, Minnesota, and Kansas. Students with support services over the age of 25 expressed dissatisfaction with certain accommodations and the process more than students under 25. The three factors used in selecting use of an accommodation were: availability, level of independence, and ease of use. Cost, social acceptance and training were not important factors in overall satisfaction. Accommodations rated as most effective were note takers, extended test time, AT, assignment of specific location in classroom, and public transportation for 80 to 88% of the participants. Four recurring themes emerged from the focus groups: (a) sense of belonging, (b) access to academic information, (c) supports for independence, and (d) labeling and discrimination.

Dutta, et al. (2009) surveyed 445 students with support services and four DS providers at four universities through questionnaires. The purpose of the survey was to identify alterable issues, such as empowerment, advocacy, accessibility, faculty awareness, and quality of services. Students reported 12 ways to improve services and access: (a) designation of staff to be a liaison between disability providers and other on and off campus service providers, (b) shuttle services throughout campus, (c) better facilities and equipment maintenance, (d) improved accessible dissemination of information, (e) career counseling and disability training, (f) special appeal process, (g) better communication, (h) improved academic support, (i) more testing rooms, (j) more qualified staff, (k) recreation opportunities, and (l) establishment of student organizations. Disability service providers expressed similar results with needs for better utilization of technology, expansion of staff, and increased usage of electronic materials.

Olney and Brockelman (2005) conducted a similar qualitative study with 25 university self-selected students with psychological or cognitive disabilities and examined the differences of responses by gender and hidden versus visible disability. Four categories emerged: (a) self-perception, (b) self-presentation, (c) meta-perception, and (d) perception of supports and accommodations. The study did note noticeable differences between genders and hidden versus visible disabilities. Women discussed their disabilities more directly and focused on strengths. Men appeared more confident and performance oriented. Those with visible disabilities did not distinguish themselves from others with disabilities and showed more stable identification with their disability. Those with hidden disabilities differentiated themselves from those with visible disabilities.

Patrick and Wessel (2013) conducted research on the role of faculty mentoring students with support services as they transition to postsecondary education. The DS office selected "disability friendly" faculty to participate and attempted to pair students with a faculty member within their major. Twelve students with support services participated in the interview and shared viewpoints on how faculty mentorship contributed to their success in transitioning to college. Contributions by faculty included: (a) advice, (b) awareness of campus resources, (c) opportunities to establish close relationships with faculty, and (d) social and academic support.

The study also gathered data on the transition experience for students with support services to college life (Patrick & Wessel, 2013). Students reported challenges with the academic rigor of college, perceptions by others in the classroom regarding disability, and lack of knowledge regarding resources as inhibiting transition. The social aspect of

college brought new struggles for acceptance and feelings of stigmatization. Students also lacked understanding of the accommodation process and their increased responsibility for the initiation of accommodations. Shepler and Woosley (2012) compared levels of social integration, academic integration, institutional satisfaction, and homesickness of students with support services to students without disabilities. Results showed no significant differences between the two groups.

A similar study by Garrison-Wade (2012) examined perceptions of 59 students with support services and six DS providers from community colleges and four-year universities in a qualitative study using focus groups. Student conversations centered on three themes: (a) necessity for self-determination, (b) initiation of formalized planning, and (c) need to improve support at the postsecondary level. They indicated problems with accommodations, financial assistance, and physical barriers, but found mentoring from DS providers to be an asset.

Morningstar, et al. (2010) examined student perceptions of transition services during high school to levels of self-determination in college. Students with high levels of self-determination, internal locus of control, and hope related better to components within their transition programs. The most influential factor on students' development of skills needed to succeed in college was parents. Students' ability to self-advocate provided the necessary foundation to request accommodations, set goals, and manage their academic needs. Chiba and Low (2007) interviewed current and previous students with support services completing a course designed to assist students with learning disabilities in transition to college. Similar to Morningstar, et al., they found the course aided students in acceptance and understanding of their disabilities.

Two studies examined the role of perceptions on success for African American students with support services (Banks, 2014; Walker and Test, 2011). The first by Banks indicated students felt conflicted between identifying as students with support services or as African American and as a result tended to not disclose a disability. Two other factors influenced the non-disclosure of a disability. The first was a perception that faculty equated disability with deficit. The other factor was a lack of understanding of their disability. Walker and Test taught self-advocacy skills through role-playing to three African American students with support services. Results showed students continued to use self-advocacy skills one to two weeks beyond the training period.

Connor (2014) interviewed three students with support services on academic demands, social expectations, and personal growth to determine the intrinsic motivators used by students to succeed. An interesting finding was that the students reported social demands to be as challenging as academic demands and they purposefully decided not to seek out friendships in order to devote more time to academics. Finally, all students reported ambivalence toward their disability labels. Quinlan, et al. (2012) explored students' perceptions of faculty reactions to accommodation requests. Students reported three types of reactions: (a) non-accommodation, (b) formal accommodation, and (c) accommodation for all students. The non-accommodation by faculty was the assertion to not accommodate because they did not believe it was necessary or denial of the presence of a disability. Formal accommodations carried out the intent of the request while accommodation for all students provided the accommodation for the entire class to maintain fairness. Finally, Kirkendall, et al. (2009) examined the role of social integration in dormitory living for students with ID. Students with ID reported similar normative

perceptions to students with other types of cognitive disabilities. They improved in daily living skills, self-awareness, goal setting, and increased maturity at the conclusion of the program.

Postsecondary Education Faculty

Knowledge. A study by Vogel, et al. (2006) examined experience, knowledge, and attitudes toward accommodations of faculty for students with support services through a 35 item survey of 420 faculty from a large public university. Results indicated: (a) 93% would provide one-on-one assistance, (b) 88% comments to a paper draft, (c) 80% assist with exam preparation, (d) 94% would allow alternative location for exams, (e) 93% would allow extended time for exams, (f) 91% indicated use of a teaching accommodation as fair, and (g) 87% indicated provision of an exam accommodation as fair. Younger faculty were more willing to meet with students needing extra assistance, but older faculty were more willing to provide accommodations.

The second study by Vogel, et al. (2000) used the same survey to compare faculty willingness to accommodate from a public university, private university, and community college. Faculty from the community college tended to include a disability statement on their syllabi and faculty from the private university had the greatest disability knowledge. Bento (1996) explored the barriers to accommodating students by 35 faculty and 18 students with support services at a mid-size state university. She found three types of barriers: (a) informational, (b) ethical, and (c) attitudinal. Informational barriers were a lack of understanding various disabilities and limited knowledge about federal legislation. Ethical barriers occurred when faculty weighed the needs of a student with a disability to the common good of the class. Faculty indicated ambivalence in

accommodating students with support services because of a belief that the students were less able and they needed to confront their challenges.

The final study explored faculty knowledge of accommodating students with support services in online classes (Phillips, et al., 2012). Seventy-five percent of the faculty had no requests to accommodate students with support services for online classes. They perceived it may be more difficult to accommodate students taking online classes and the ease of accommodating is based on the type of disability. Phillips et al. concluded that faculty need resources on how to accommodate online courses and recommended training be available to them for assistance.

Experiences. Two studies (Murray, et al., 2008; Skinner, 2007) analyzed the role of and willingness by faculty to accommodate students with support services. In the first study, Skinner examined faculty willingness to accommodate students with support services according to school affiliation, rank, and specific accommodation requests for students with LD. Overall, faculty reported willingness to provide extended time, an alternative location, and use of a laptop or calculator for exams. According to rank, assistant professors and senior instructors were more willing to accommodate. School affiliation found faculty for Arts and Education to be most willing to accommodate. Finally, Murray, et al. (2008) explored faculty willingness to accommodate students with LD and found faculty more willing to provide minor teaching accommodations compared to major accommodations. Minor accommodations included copies of PowerPoint presentations and copies of lecture notes, while major accommodations included reduced readings, allowance for extra credit assignments, and grading students with LD on a curve.

A study by Hong and Himmel (2009) explored faculty perceptions of personal time constraints, performance expectations of students with support services, believability of disabilities, willingness to accommodate, and knowledge of campus disability resources and legislation. One hundred-sixteen faculty participated in the 35-item survey. Seventy-five percent of the faculty responded positively in willingness to work with students with support services while only 45% indicated adequate knowledge to assist. The majority (66%) of faculty indicated the time needed to accommodate as an issue with 95% perceiving students with support services capable of success in college. Finally, 79% of faculty believed students had verified disabilities. Bourke, et al. (2000) found somewhat different results in examination of faculty perceptions. Faculty with greater understanding of disabilities and belief in the need for accommodations were more likely to accommodate. Also belief in support by the university to accommodate students positively influenced the provision of accommodations.

A study by Buchanan, et al. (2010) examined faculty acceptance toward students with ADHD. They found older faculty more likely to categorize ADHD as a disability and requiring accommodations. Middle aged and older faculty tended to not describe students with ADHD as "bad" or lacking discipline. Yet, the overall ranking by faculty of seven types of disabilities resulted in ADHD received the lowest ranking in all age groups of faculty (Buchanan, et al.).

Lombardi, et al., (2013) examined faculty perceptions after participation in training regarding students with support services at two universities. They compared results from the Inclusive Teaching Strategies Inventory (ITSI) to different groups of faculty. The subscales were: accommodations, disability law and concepts, accessible

QUALITIES AND INTERACTIONS OF FACULTY

course materials, inclusive lecture strategies, inclusive classroom, and course modifications. The first group at University 1 had a typical process for initiation of accommodations through the DS office and notification to faculty through letters.

University 2 provided training on inclusive instructional practices through an intensive four-day workshop, print resources, and website resources. Results suggested training in accommodations, disability laws and concepts, accessible course materials, inclusive classroom, and inclusive assessment influenced faculty attitude. Comparisons between universities indicated that any type of training led to improved faculty attitudes towards students with support services.

Success. Two studies examined success of students with support services (Baker, et al., 2012; Trammell & Hathaway, 2007). Baker, et al. explored 76 faculty and 268 students' perceptions of campus climate toward students with support services. Faculty rated campus climate as more welcoming and inclusive than students. The two groups did agree on the willingness to provide accommodations in the classroom. Fifty-three of the 268 students were students with support services. Students with support services and students without disabilities tended to perceive all students as capable while faculty tended to feel some students were less capable than others. The final study by Trammell and Hathaway (2007) compared the help-seeking patterns of students with support services to students without disabilities through faculty logs on the number of office visits of students during a semester.

The research review studied similar groups of individuals: (a) faculty, (b) students with support services, and (c) DS personnel, but only one (Zafft, 2004) of the 47 articles included parents as a part of the study. Forty (Baker, et al., 2012; Banks, 2011; Bento,

1996; Bourke, et al., 2000; Buchanan, et al., 2010; Cawthon & Cole; 2010; Chiba & Low, 2007; Connor, 2011; Dowrick, et al., 2005; Dutta, et al., 2009; Field, et al., 2013; Garrison-Wade, 2012; Getzel & Thoma, 2008; Harbour, 2009; Hicks-Coolick & Kurtz, 1997: Hong & Himmel. 2009: Janiga & Costenbader. 2002: Kirkendall. et al., 2008: Kranke, et al., 2013; Kurth & Mellard, 2006; Lightner, et al., 2012; Lombardi, et al., 2013; McEldowney Jensen, et al., 2004; Morningstar, et al., 2010; Murray, et al., 2013; Murray, et al., 2008; Olney & Brockelman, 2005; Patrick & Wessel, 2013; Phillips, et al., 2012; Quinlan, et al., 2012; Shepler & Woosley, 2012; Skinner, 2007; Stein, 2013; Thoma & Getzel, 2005; Thoma, et al., 2011; Trammell & Hathaway, 20076; Vogel, et al., 2006; Vogel, et al., 2000; Walker & Test, 2011; West, et al., 1993; Zafft, 2004) of the 47 articles centered on a wide range of participants' experience of success by students with support services or DS offices, as well as knowledge of accommodations by all three groups. Eleven (Baker, et al., 2012; Bento, 1996; Buchanan, et al., 2010; Hong & Himmel, 2009; Lombard, et al., 2013; Murray, et al., 2008; Phillips, et al., 2012; Skinner, 2007; Trammell & Hathaway, 2007; Vogel, et al., 2006; Vogel, et al., 2000) of the 40 articles used faculty as participants and focused on knowledge of accommodations and perceptions, such as willingness, experience, and overall attitudes towards the students with support services. Two (Baker, et al., 2012; Trammell & Hathaway, 2007) of the 47 articles examined students with support services' potential for success at the postsecondary level. Research at the postsecondary level examines students' and DS providers' experiences of student needs and potential for success, but rarely seeks out parents or faculty perceptions. There was no research that examined faculty experiences

of students with support services' potential for success outside the classroom or success beyond postsecondary education.

Comparison of Literature Review to AHEAD Programs Standards and Performance Indicators

An analysis of the 47 articles by program standards and performance indicators provides important information on how well the studies match the essential components established by AHEAD regarding state of the art programs and areas of need for further research

Consultation/Collaboration

The role of DS providers in consultation and collaboration is to facilitate equal access through advocacy and representation on campus committees (Dukes, 2006; Shaw & Dukes, 2006). Collins and Mowbray (2005) indicated the importance of collaboration between faculty and staff through the implementation of academic accommodations in each classroom. Dowrick et al. (2005) and Dutta et al. (2009) described the need for DS providers' participation on campus wide committees in an effort to eliminate barriers. Five studies (Harbour, 2009; Patrick & Wessel, 2013; Sharpe & Johnson, 2001; Stodden, et al., 2006, & Tagayuna et al. 2005) recommended increased collaboration between DS providers, students with support services, and faculty to provide high quality services.

Information Dissemination

Section 504 requires students with support services to self-identify and seek out services (29 U.S.C. § 794). It is essential that DS providers provide policy and procedural information, campus access information, documentation guidelines through a wide array of electronic communication and printed media while ensuring availability of assistive

technology to access this information (Dukes, 2006; Shaw & Dukes, 2006). Dutta et al. (2009) was the only descriptive study to specifically explore dissemination of information as a factor in determining quality of services. Collins and Mowbray (2005) and Tagayuna et al. (2005) indicated a need for improving awareness and education through dissemination of information. In addition, five studies (Banks, 2014; Cawthon & Cole, 2010; Lightner, et al., 2012; Webb, et al., 2008; & West, et al., 1993) with students with support services as participants showed the importance of information prior to enrolling in postsecondary education and the need for knowledge of where to access services. Nine studies (Baker, et al., 2012; Bento, 1996; Hong & Himmel, 2009; Lombardi, Murray & Dallas, 2013; Skinner, 2007; Phillips, et al., 2012; Vogel, et al., 2006; Vogel, et al., 2000) described the link between dissemination of information and faculty willingness to accommodate.

Faculty/Staff Awareness

Disability service providers have the responsibility of informing the campus community of general services, academic accommodations, legal responsibilities, programmatic modifications, and availability of disability awareness training (Dukes, 2006; Shaw & Dukes, 2006). The majority of studies (Baker, et al., 2012; Bento, 1996; Buchanan, et al., 2010; Collins & Mowbray, 2005; Dutta et al., 2005; Hong & Himmel, 2009; Lombardi, et al., 2013; Phillips, et al., 2012; Skinner, 2007; Vogel, et al., 2006; Vogel, et al., 2000) with faculty as participants measured levels of awareness by faculty and staff on the types of services provided and knowledge of disability legislation. Disability services providers are the conduits for implementation of accommodations in the classroom and across campus. Five studies (Collins & Mowbray, 2005; Harbour,

2009; Kurth & Mellard, 2007; West et al., 1993) recommended an increased effort toward faculty/staff awareness.

Academic Adjustments

It is the responsibility of disability departments to determine reasonable appropriate accommodations, maintain records, and collaborate with faculty to ensure there is not a fundamental alteration of the essential functions of a course (Dukes, 2006; Shaw & Dukes, 2006). All studies (Baker, et al., 2012; Banks, 2011; Bento, M; Bourke, et al., 2000; Buchanan, et al., 2010; Cawthon & Cole; 2010; Chiba & Low, 2007; Collins & Mowbray, 2005; Connor, 2011; Dowrick, et al., 2005; Dutta, et al., 2009; Field, et al., 2013; Garrison-Wade, 2012; Getzel & Thoma, 2008; Harbour, 2009; Hicks-Coolick & Kurtz, 1997; Hong & Himmel, 2009; Janiga & Costenbader, 2002; Kirkendall, et al., 2008; Kranke, et al., 2013; Kurth & Mellard, 2006; Lightner, et al., 2012; Lombardi, et al., 2013; McEldowney Jensen, et al., 2004; Morningstar, et al., 2010; Mull, et al., 2001; Murray, et al., 2013; Murray, et al., 2008; Olney & Brockelman, 2005; Patrick & Wessel, 2013; Phillips, et al., 2012; Quinlan, et al., 2012; Sharpe & Johnson, 2001; Sharpe, et al., 2009; Shepler & Woosley, 2012; Skinner, 2007; Stein, 2013; Stodden, et al., 2006; Tagayuna, et al., 2005; Thoma & Getzel, 2005; Thoma, et al., 2011; Trammell & Hathaway, 20076; Vogel, et al., 2006; Vogel, et al., 2000; Walker & Test, 2011; Webb, et al., 1993; West, et al., 1993; Zafft, 2004) surveyed some type of academic adjustment either through provision by DS providers or level of satisfaction by students or graduates with support services. Kurth & Mellard (2007) found students with support services valued accommodations that increased independence most and that the cost of accommodations did not influence perceived value by students.

Counseling and Self-determination

Disability services delivery models should provide avenues for fostering independence in students with support services (Dukes, 2006; Shaw & Dukes, 2006). Twenty-six studies (Banks, 2014; Cawthon & Cole, 2010; Chiba & Low, 2007; Connor, 2011; Dowrick, et al., 2009; Field, et al., 2013; Garrison-Wade, 2012; Getzel & Thoma, 2008; Hicks-Coolick & Kurtz, 1997; Janiga & Costenbader, 2002; Kirkendall, et al., 2008; Kranke, et al., 2013; Kurth & Mellard, 2006; Lightner, et al., 2012; Morningstar, et al., 2010; Murray, et al., 2013; Olney & Brockelman, 2013; Patrick, et al., 2012; Sharpe & Johnson, 2001; Shepler & Woolsey, 2012; Stein, 2013, Thoma & Getzel, 2005; Walker & Test, 2011; West, et al., 1993; Zafft, 2006) involving students with support services as participants indicated the importance of independence, self-advocacy, and selfdetermination in student happiness, retention, and success. Tagayuna, et al. (2005) found over 60% of DS provider's surveyed offered career/vocational assessments and counseling. It would seem that this was not a component stressed in the majority of studies. Kurth and Mellard (2007) found students with support services valued selfdetermination and attributed success to this intrinsic factor. Trammell and Hathaway (2007) was the only study with faculty as participants involving this standard as they explored the role of help-seeking behaviors of students without support services compared to students with support services.

Policies/Procedures

Postsecondary institutions must have written policies and guidelines for determining and accessing reasonable accommodations, providing services, student rights and responsibilities, settling formal complaints, and ensuring confidentiality of disability

information (Dukes, 2006; Shaw & Dukes, 2006). Implementation of accommodations begins with the establishment of policies and procedures. While all studies dealt with academic adjustments or accommodations, only three (Collins & Mowbray, 2005; Dowrick et al., 2005; Kurth & Mellard, 2007) looked at the interaction of merely policies and procedures in relation to implementation and satisfaction of accommodations. Kurth and Mellard (2007) recommended that DS providers embrace the spirit of the law rather than policies and procedures that adhere to the letter of the law.

Administration and Evaluation

Disability departments must be in alignment with institutional missions, collect data, implement regular departmental assessments, purchase adaptive equipment to ensure equal access, and provide fiscal management of the department (Dukes, 2006; Shaw & Dukes, 2006). Mull, et al. (2001) stated that 79% of the 26 studies analyzed did not perform program evaluations. Sharpe and Johnson (2001) and Tagayuna, et al. (2005) recommended implementation of program evaluations for all DS departments. Sharpe and Johnson (2001) examined the correlation between program administration and institutional capacity. Stodden, et al. (2006) found online library services having the highest degree of access from 1999 to 2001. Finally, Thoma, et al. (2011) examined program administration changes between 2001 and 2011.

Professional Development

Staff must have opportunities for professional development, gain knowledge of institutional programs and policies, and adhere to relevant Code of Ethics (Dukes, 2006; Shaw & Dukes, 2006). There was no discussion of the need for professional development by any of the studies. Mull, et al. (2001) did state professional training was necessary for

all staff to enhance services and better address the needs of students with support services

In conclusion, the 47 studies point to three key areas of importance for DS providers in the next decade. They are: (a) the importance of assistive technology in fostering independence and mastering work related skills, (b) the importance of student involvement in the accommodation process, and (c) the importance of collaboration and consultation with the entire campus community in determining reasonable, appropriate academic adjustments. Disability services do not occur in a vacuum. Factors outside the control of DS providers play a critical role in the success of students with support services because the majority of academic adjustments are within the classroom setting. It is important for DS providers to increase the amount of faculty/staff training opportunities, faculty awareness, and dissemination of information. Evaluations on the effectiveness of programs and services allow for a proactive approach built on data to provide evidence-based services (Shaw & Dukes, 2006). Disability service providers need to measure the impact of services on student success if true advances are to become a realistic accomplishment for students with support services. The Program Standards and Performance Indicators initiated by AHEAD can serve as the starting point for future research. There is a need to examine the experiences and interactions of faculty regarding students with support services and their potential in the future in an attempt to determine evidence-based services along with effective institutional policies and procedures.

Chapter 3

Methodology and Methods

Qualitative Methodology

This was a case study of faculty nominated as exemplary by students with support services. My research questions were: (a) what faculty qualities do students with support services identify as supportive of their success?, (b) what qualities of and interactions with students registered with Accessibility Resource Center do faculty describe?, and (c) what advice do faculty offer to new faculty when accommodating students with support services? The review of research detailed in the previous chapter indicated a lack of research regarding faculty in postsecondary education and their knowledge of disabilities and services, experiences of individuals with disabilities, and in particular, experiences and interactions toward students with support services attending postsecondary educational institutions. In order to understand the qualities and interactions between faculty and students with support services, I chose qualitative research as my method of research.

Trustworthiness

This study used the quality criterion of trustworthiness established by Lincoln and Guba (1985) to assure credibility of data collection, analysis, and interpretation.

According to Lincoln and Guba (1985), trustworthiness occurs through a series of steps throughout the research process to ensure the quality and criterion of a naturalistic paradigm (Mayan, 2009). Trustworthiness as a quality criterion parallels validity, generalizability, and reliability for rigor (Mayan, 2009). Lincoln and Guba (1985) used the terms credibility, transferability, dependability, and confirmability to operationalize

trustworthiness. Trustworthiness is accomplished through prolonged engagement, persistent observation, triangulation, peer debriefing, negative case analysis, and member checking (Lincoln & Guba, 1985). The importance of maintaining trustworthiness is so researchers are able to determine with some level of confidence on the appropriateness of applying the results to future analysis (Lincoln & Guba, 1985). The current study used students with support services nominations of exemplary faculty from 2012-2014 as the potential participant pool. Students with support services had an opportunity to nominate past faculty who distinguished themselves by not only accommodating a student, but also understanding why the accommodation is important in providing access to course content.

Assuring Quality

Quality assurance was maintained through the operationalization of trustworthiness using credibility, transferability, dependability, and confirmability. Credibility is equivalent to internal validity and attempts to verify that the analysis of data includes multiple realities along with a methodology that likely results in convincing findings (Lincoln & Guba, 1985). Credibility was maintained through prolonged engagement, persistent observation, and triangulation, which are discussed in greater detail below. Transferability was the replacement for external validity and was accomplished as I used thick descriptions of my research findings during data analysis and interpretation. The use of thick descriptions allowed others to determine whether or not the results transfer to similar settings (Lincoln & Guba, 1985).

Spillett (2003) explained another method of transferability through the role of a peer-debriefer who facilitates the researcher's consideration of methodological processes

and provides feedback on the accuracy and completeness of data collection and analysis. The author stressed the importance of selecting a peer-debriefer with adequate methodological training and experience in conducting qualitative research. The current study implemented use of a peer-debriefer at the onset of the study in an effort to minimize validity threats (Spillett, 2003). Detailed notes were taken during the peer-debriefer process and included specific details on the peer-debriefer, how many sessions over what time period and length were held, what changes were made as a result of consultation, and how peer-debriefing assisted in the effects of the research (Spillett, 2003). Next is dependability, which is associated with the long-term stability and phenomenal factors of observed changes (Lincoln & Guba, 1985). Maintenance of dependability and confirmability occurred through use of the same techniques for credibility (prolonged engagement, persistent observation, and triangulation) along with an audit trail during data collection and analysis.

Ethics

Brinkmann and Kvale (2005) acknowledged that qualitative research is saturated with ethical issues. It requires the researcher to take into account the cultural context of the study, thus examining potential ethical issues at the microethics and macroethics levels. Issues at the microlevel involve the research and participants. Issues at the macrolevel involve the effect of research on humans and society in general.

Six ethical considerations were used to address the microlevel. First, participants in the study were provided a letter explaining the research procedures and requesting their consent to participate before beginning the interviews. Next, every effort was made to avoid deception by clearly outlining the intent of the study and the parameters involved

in participation through the letter of invitation (*Appendix A*). The consent form clearly explained the right of each participant to withdraw from the study at any point in time including during the interview. Fourth, debriefing happened at the end of the interviews when the full intent of the study was explained. Fifth, they will be provided access to any publications, including the dissertation once completed. Finally, confidentiality was maintained with the use of numbers rather than names and no identifying information that led to the identity of any participants in any publications was used.

Macroethics considers the impact of the study within the culture as well as on humans. I addressed macroethics by using concrete ethical perception and judgment. This was addressed "by describing the world adequately, by getting close enough to the phenomena, by being objective concerning particular situations" (Brinkman & Kvale, 2005, p. 175) related to macroethics and microethics.

Methods

Design of Study

Case study research "involves the study of an issue explored through one or more cases within a bounded system" (Creswell, 2007; Mayan, 2009). Creswell (2007) stated that case study is both a methodology and a product of inquiry as it involves multiple sources of information and structures the results as a case description with case-based themes (Creswell, 2007). Mayan (2009) stated the focus is on the case and understanding the intricacies of that specific case. In this study, the case was faculty nominated by students with support services as exemplary and the purpose was to explore faculty qualities and interactions with those students.

Description of Setting and Participants

Setting. The study took place at a Hispanic-Serving Institution (HSI) with very high research activity according to the Carnegie Classifications of Institutions of Higher Education. The University has an enrollment of over 25,000 students offering 238 degree and certificate programs taught by 2,255 faculty.

Participants. The DS department within the university provided students with support services an opportunity to nominate faculty from 2012 to 2014 for recognition of their willingness and assistance in the provision of accommodations. Selection of nominated faculty as the participation pool was based on their known willingness to accommodate students with support services. A total of 32 of the 2,255 faculty received recognition. The purposive sampling of 32 participants decreased to 29 with the elimination of three faculty, with one member no longer at the university and two other faculty nominated by nonstudents.

A letter of invitation (*Appendix A*) was sent to the 29 faculty members requesting participation in a semi-structured interview. The ideal number of faculty willing to participate was 15 as interviewing over 50 percent of the 29 faculty allowed for thick descriptions, prolonged engagement, persistent observation, and multiple types of data collection (Mayan, 2009; Willig, 2008). Seven faculty participated in two interviews. During the first interview, participants responded to the grand tour questions (*Appendix C*). The second interview was a follow-up to the first and allowed for greater elaboration and clarification of initial responses.

Collection and Recordings

Procedures. The use of multiple data sources, time periods, theoretical replications, and methods that result in similar findings allowed for the triangulation of

data and the enhancement of credibility (McMillan & Schumacher, 2006). I used three data sources to maintain triangulation: (a) interviews with participants with notes taken by me during the interviews (b) students with support services' comments on nomination forms including notes taken by me on potential themes related to the comments, and (c) journaling by me throughout the research process. All data were stored in a locked file cabinet in my locked office at ARC.

Interviews. Qualitative studies collect data from a variety of sources with the main source being semi-structured interviews as they are compatible with various types of data analysis and easy to arrange (Willig, 2008). It is appropriate to use semi-structured interviews independently or in tandem with observation and documentation (Mayan, 2009; Seidman, 2006). Semi-structured interviews occurred in faculty offices and lasted approximately 60 minutes. Participants signed a consent form informing them of their rights and responsibilities prior to the interviews. The consent forms were stored in a locked file cabinet and locked closet accessible only by me at ARC.

The interview questions (*Appendix C*) were descriptive and open-ended allowing the participants to talk about their teaching styles, interactions, and experiences of students with support services, along with potential advice to new faculty on how to assist students with support services. The interviews began with grand tour questions on teaching in the twenty-first century and overall teaching style and then moved into specific, guided, and task-related grand tour questions (Spradley, 1979). *Appendix C* lists eight questions and probes I asked during the interviews. The use of each question took into consideration the type and length of responses by the participants. The second

interviews were spent clarifying points from the first interview and asking additional related questions as follow-up and member checking.

All semi-structured interviews were digitally recorded. I recorded using a digital recorder with a separate microphone to ensure quality recording. I saved each recorded interview as a digital file on my personal computer. The digital file was then used to write each transcript. Handwritten notes were taken noting observations and thoughts that occurred while conducting the interviews.

Other data sources. Three other data sources for this study were: (a) student comments on nomination forms, (b) demographic information completed by faculty once agreeing to participate (*Appendix D*) and (c) a researcher journal. The answer to the first research question regarding what faculty qualities do students with support services identify as supportive of their success originated from the student comments on the nomination forms. In addition, student comments were compared to responses from faculty on what advice they would offer to new faculty when accommodating students with support services to determine similarities and differences between the two groups' experiences of the accommodation process. I based the demographic questions in *Appendix D* on demographic information from the 2013-2015 Fact Book published by the Office of Institutional Analytics.

I kept a research journal throughout the data collection and analysis process. The journal contained thoughts similar to the following: (a) selection of participants; (b) willingness or reluctance by faculty to participate; (c) observations, thoughts and feelings prior to, during, and after each interview; (d) initial observations, thoughts, and feelings when listening for the first time to the interviews; (e) observations, thoughts, and feelings

during each stage of analysis; and (f) observations, thoughts, and feelings during interpretation of the results (Creswell, 2007).

Plan and Timelines

The first step was to complete the necessary application and gain permission to conduct the semi-structured interviews from the Institutional Research Board (IRB) in October 2016. Selection of faculty took place late in fall semester 2016 through letters of invitation to participate. Semi-structured interviews were conducted December 2016 through April 2017. Data analysis began after transcription of the first interview and continued until finalization of results in spring 2017.

Data Collection and Analysis

Analysis of student nominations forms. Students with support services had an opportunity to nominate faculty who worked closely with ARC and students with support service in the provision of accommodations each spring from 2012 to 2014. The nomination form asked to briefly describe the reasons for nominating a faculty member from the past year. Twenty-eight nomination forms were analyzed. The descriptions contained adjectives describing faculty and specific assistance given to accommodate a student. I separated the two descriptions and analyzed each for commonalities and differences. I looked for prominent and reoccurring categories and themes. I then produced a summary table of the themes and used it later in the narrative section detailed at the end of this chapter.

Processing data into analyzable text. The first step in the process was to prepare transcripts of all semi-structured interviews using word processing software.

QuickCaption prepared the transcripts; this is a company used by ARC for the last ten

years to provide real-time captioning in the classroom and closed captioning for videos. I converted all handwritten notes into analyzable text while QuickCaption prepared the transcript for each interview. I then imported the documents into a Computer Assisted Qualitative Data Analysis Software (CAQDAS) program called Dedoose (http://www.dedoose.com/). I selected Dedoose as the CAQDAS program because of its ability to: (a) transcribe field notes; (b) edit text (c) code through attachment of tags to segments of text; (d) search and retrieval of relevant text; (f) connect data segments, form categories, cluster information; (g) write reflective commentary, (h) analysis of content, (i) display data in condensed, organized format, (j) draw conclusions and verify interpretations; (k) assist in theory building, (l) contribute to graphic mapping, and (n) prepare reports (Miles, Huberman, and Saldãna, 2014).

Transcription protocol. The transcription protocol was based on naturalized transcription where all words and utterances are transcribed and written as a script (Oliver, Serovich, & Mason, 2005). Each participant was assigned a number and the number was used in place of the name (Mayan, 2009). The first entry on the page was in the header and included the participant code, number of interviews done, location and date of the interview, and page number (Mayan, 2009). The numbers assigned to the participants are written at the beginning of their dialogue, and the capital letter J for me was used to denote who is speaking (Oliver, et al., 2005). Each line was numbered to easily locate direct quotes later (Mayan, 2009). Davidson (2010) provided a list symbols for use in a transcript, which in turn alters the normal use of punctuation (*Appendix E*). The symbols allowed for noting significant verbal and nonverbal occurrences in the

interviews, such as tone, changes in intonation, and where the transcriber could not understand a word (Davidson, 2010).

First cycle of coding. The next step in data analysis was the first cycle of coding. It was critical to understand the coding process before beginning the task. Miles, et al. (2014) suggested preparing a "start list" of deductive codes prior to fieldwork based on research questions, hypotheses, problem areas, and key variables. This took place prior to the first interview and was a part of the first entries into my journal. Saldana (2013) defined a code as "most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data" (p. 3). The author referred to the coding of a single word, full paragraph, or entire page to text as a coded datum that captures primary content and essence. Each transcript, journal data entry, and student comments were read, reread, and coded for every datum. I used a different color for each descriptive code. I used quote marks to denote any text taken verbatim from a participant (Saldana, 2013). Analysis continued with repetition of codes and addition of new ones until the entire text was analyzed. This process took place after the preparation of each interview transcript. The codes in Dedoose were saved in a codebook with development of definitions for each type and linked to specific excerpts (Dedoose, n. d.) along with listing of categories and abbreviations (Miles, et al., 2014).

Second cycle of coding. The second cycle of coding involved grouping the segments into pattern coding or collapsing the categories into a smaller number (Miles, et al., 2014). The authors explained that it pulls together a large amount of material from the first cycle into "more meaningful and parsimonious units of analysis" (p. 86). Miles, et al.

(2014) named four types of pattern codes: (a) categories or themes, (b) causes/explanations, (c) relationships among people, and (d) theoretical constructs. Dedoose allowed me to filter or drill down to specifics according to the questions. I developed a code tree or map that linked together pattern codes. Miles, et al. (2014) explained that during the second cycle pattern codes are qualified by clarifying the parameters and strengthening the validity. The pattern codes were then checked during the next interview through engagement of "if-then" tactics or checking out a rival explanation (Miles, et al., 2014).

Member checks. Member checking is a way to deal with bias in research through presentation of notes to the interviewees to ensure the accuracy of their experiences (Lincoln & Guba, 1985; McMillan & Wergin, 2010). Each participant was given an opportunity to view themes and a brief report through participation in a second interview. Carlson (2010) stressed the need to be specific and complete in communicating the member-checking process to maximize the opportunity for participants to provide feedback on what was said during the interview.

Creating categories and themes. The patterns were determined through the first and second cycle coding so the next step was to create categories and themes. Saldāna (2013) stated, "A theme is an extended *phrase* or *sentence* that identifies what a unit of data is *about* and/or what it *means*" (p. 175). Butler-Kisber (2010) explained the process of creating themes as a time to extract verbatim statements, formulate meaning about them, and cluster the meaning into organized themes. I read and reread each transcript, coding patterns, and clusters looking for prominent and reoccurring categories and noting them in Dedoose. It is suggested that developing superordinate themes, sub-themes

within each superordinate theme, and examples of illustrative quotes is an approach to theme development. I used this iterative process of moving back and forth between the analytic steps in an effort to safeguard the integrity of what the participants said (Smith & Eatough, 2007). The peer debriefer was asked to read excerpts from the interviews that were included in the next chapter. The peer debriefer and I discussed the similarities and differences we found in the creation of categories and themes.

Production of summary table of themes. Next was the development of a table (Storey, 2007) or matrix (Miles, et al., 2014) composed of superordinate themes, subthemes within each superordinate theme, and examples of illustrative quotations. I did this in Dedoose. Dedoose allowed me to determine the frequency of each pattern in all transcripts. It then allowed me to export the information to spreadsheets or text. The ability to visualize the frequency of patterns assisted me in determining categories. The production of summary theme tables assisted in starting the process for cross-case analysis by producing common themes and directional processes that was tested and checked for accuracy during subsequent phases of data collection and analyses (Miles, et al., 2014). Once the gestalts of each participant's words were determined, the cross-case analysis that represented all participants was done (Storey, 2007) and a table developed. Smith and Eatough (2007) stressed the importance of maintaining details of the individual participants within the final summary table of themes. In addition to the development of summary theme tables, I used a peer debriefer (Creswell & Miller, 2000) to ensure that there was maintenance of the integrity of participants' words, and agreement with the superordinate themes and sub-themes.

65

Presentation of analysis in narrative form. Miles, et al. (2014) defined the presentation of the analysis as a report in display according to themes. They noted the importance of determining the audiences and effects prior to writing so the analysis allows "the reader to perceive social life in different and insightful ways" (p. 325). The narrative form presents the superordinate themes and sub-themes with each superordinate theme and sub-theme labeled and augmented with the participants' words. This narrative according to Creswell (2007) includes verbatim examples of data collected, data analysis, synthesis of data, meaning units, clustered themes, descriptions, synthesis of meaning, and the essence of the experience. The final step in the process was to write summary narratives for each participant as well as a combined narrative of all participants.

QUALITIES AND INTERACTIONS OF FACULTY

Chapter 4

Findings

In this chapter, findings from the seven semi-structured interviews, observations, demographic information, and student comments on the nomination forms are reported according to the three research questions:

- 1. What faculty qualities do students with support services identify as supportive of their success?
- 2. What qualities and interactions with students registered with Accessibility Resource Center do faculty describe?
- 3. What advice do faculty offer to new faculty when accommodating students with support services?

As mentioned in chapter 3, summary narratives for each participant as well as a combined narrative of all participants are described according to the categories and themes created during the data analysis process. The first cycle of coding began with a "start list" of 12 deductive codes (Miles, et al., 2014): (a) great quotes, (b) faculty advice, (c) future in higher education, (d) faculty responsibilities, (e) classroom environments, (f) teaching strategies, (g) students with disabilities, (h) students without disabilities, (i) nonverbal engagement, (j) verbal engagement, (k) intrinsic value by faculty, and (l) extrinsic value by faculty. I listened to each interview; edited transcripts prepared by QuickCaption when necessary; and coded single words, full paragraphs, or entire pages as coded datum (Saldāna, 2013). The second cycle of coding reduced the 12 parent codes to five parent codes: (a) classroom, (b) faculty, (c) future, (d) great quotes, and (e) students with disabilities. The next step, I created the categories and themes from the five

parent codes resulting in six superordinate themes and five sub-themes. Table 1 below shows the names and sequencing of the final codes.

Superordinate Themes	Sub-themes
Classroom	Engagement and Environment
Disability is	NA
Faculty	Advice, Pedagogy, and Strategies
Future	Higher Education, and Students
Great Quotes	NA
Students with Disabilities	NA

Table 1: Superordinate themes and sub-themes

This chapter examines student comments, participant demographics, individual participant narratives, combined narratives, participant advice to faculty, linkage to AHEAD Program Standards and Performance Indicators, and concludes with the social construction of disability in relation to participant narratives.

Student Comments

Descriptions of faculty interactions with students with support services collapsed into three themes: (a) academic adjustment process, (b) faculty interpersonal skills, and (c) faculty-student relationships. The most common comments were related to faculty interpersonal skills, followed by the academic adjustment process, then faculty-student relationships the least mentioned.

Academic Adjustment Process. A total of 35 comments related to the academic adjustment process. Students commented on how use of accommodations resulted in academic success. Examples included using extended time on exams, additional time spent to understand the material, assistance on an outline, and use of a student volunteer to serve as a sighted guide for a blind student. One student stated, "The professor made accommodations for me and my test grade went from a C to A- with a final grade of B-" (personal communication).

Several students commented on the normalization of academic adjustments by faculty. Comments varied from "provided more equal access to education than any other faculty member" (personal communication), "never singled me out or made me feel uncomfortable" (personal communication), to "aware of the impact of disabilities on the learning process" (personal communication). Students noted when faculty worked well with ARC; stood up for students with support services; and provided fair, equal access to the student.

The other comments were related to comparisons or the lack of differences in treatment between students with support services and students without support services. Faculty went the "extra mile in helping students especially myself who has a documented disability" (personal communication). Another stated, "Demonstrates respect and professional rapport with students receiving accommodations" (personal communication). The student who captured the importance of similar treatment as other students explained, "I was no longer just a 'sure we can enlarge your exam to X font' kind of student" (personal communication).

Faculty Interpersonal Skills. Students with support services noted the interpersonal skills faculty used in the faculty-student relationship. Faculty were interested, helpful, inspiring, compassionate, open, articulate, professional, flexible, encouraging, and caring. One student commented faculty "gave of herself" (personal communication). Another stated the "subject came to life" (personal communication) when the faculty member lectured. Yet another explained the faculty member was "supportive to all students" (personal communication). Finally, the faculty member "listened openly as I spoke of past frustrations" (personal communication).

Faculty-Student Relationships. Faculty-student relationships had the fewest student comments and indicated student interest in the class and success. Students noted faculty took extra time, went the extra mile, used an inclusive tone, showed encyclopedic knowledge, mentored students, provided guidance, explained questions thoroughly, and were academically supportive. One student explained, "Keeps in touch by replying quickly to my concerns" (personal communication). They noted the faculty dedication to academic success and unwillingness to let engaged students fail. The faculty member's courses "were thorough, challenging, very well organized, and immensely informative" (personal communication). Faculty commented on course material, volunteered to provide a reference for employment in the future, and served as a mentor.

Participant Demographics

Demographics of the seven participants included: (a) faculty rank, (b) faculty title, (c) administrative reporting line, (d) college, (e) highest degree earned, (f) gender, (g) ethnicity, (h) number of years teaching at the postsecondary level, and (i) frequency teaching students with support services. Five participants had tenure, and two participants were non-tenure track. All shared the title of professor, with two assistant professors, two associate professors, and three full professors. The two non-tenured professors were in the Colleges of Arts and Sciences and School of Medicine-Basic Medical (SOM-BM). Six of the seven report to Academic Affairs, and one reports to Health Science Center (HSC). Three of the tenured faculty belonged to the College of Arts and Sciences and the other two to the School of Management. All earned doctorate degrees. Two of the participants were female, and five were male. Ethnicity varied, with one Hispanic, two no response and four white. The number of years teaching at the postsecondary level was

two participants teaching 5-10 years, three teaching 15-20 years, and two teaching more than 20 years. Finally, the frequency of teaching students with support services was three participants teaching one or more per academic year and four teaching one or more per semester.

Individual Participant Narratives

Sam. Sam provided a rich description of his teaching pedagogy and compared it to acting. Early in his career, he taught an undergraduate introductory class and stated, "What they didn't realize I was in heaven. I had 600 undergraduates and a microphone. You know, and I'd do a Phil Donahue and go up and down the aisles" (personal communication). In addition, he stated,

I never had a course in how to teach, which is somewhat silly. We train content experts then we go out and we expect them to do something we have never trained them to do which is teach their content. That is an ongoing, uniform complaint among students, here, other universities is that he is a great statistician, but he could not teach his way out of a paper bag. I mean, just be entertaining. You can be controversial. You can make jokes, you know. Literally, it is a little bit of acting (personal communication).

He now teaches only graduate level seminar classes that allow him to engage people. "You kind of turn the floor over to one of them to do something. So it's much less, you know, pedantic than lecture courses" (personal communication).

His teaching strategies do not include exams to determine if students are learning. "I've never given an exam at the graduate level. They're all essay assignments or written assignments" (personal communication). He teaches using PowerPoint and noted, "I

never have to look at the PowerPoint. I know exactly where I am. I know exactly what the next slide is, but that comes from experience. I've been doing this for over three decades" (personal communication).

Classroom engagement is something he sees in students' faces:

You can see it in their engagement. You can see it in the way they pay attention.

You can see the way they come and talk to you after class. It is a lot of little things, but you know. You just look at the sea of faces and you know immediately whether they are engaged or not (personal communication).

Student faces show you "who's engaged, who's bored, who's mystified" (personal communication). He commented,

I think that students are looking for somebody who they can see is interested in them. Not even necessarily as a person. I am never going to get close to any of these people, there are too many of them, and it is not my job. But if I am doing my job well they see that I am truly interested in them and their learning, even if it is just for a brief moment and then we are off again (personal communication).

Additionally, he stated, "I think showing that you have respect for them is part of it. That they can have experiences that are just as valuable as the ones you can talk about. I think respecting their diverse opinions" (personal communication) is important.

His advice to faculty when teaching students with support services is:

The mistakes I see people making with people with disabilities are the same in and out of the classroom. There are a lot of people without disabilities who do not have experience with people with disabilities. They are intimidated by the disability. They really do not know what to do. They are intimidated somehow,

whether it is somebody in a power wheelchair, somebody with a ventilator, somebody with a sign language interpreter. They forget the rules of common sense that there is still a person there (personal communication).

He compared the errors made by faculty as similar to the public:

I see other professors making the same mistakes people make in the mall. You know, somebody comes in a wheelchair and they think they need help with spelling. Well they might, but it is not because of their wheelchair. They do not treat them as people I think is the quick way to say it. I think that is the biggest mistake I see other faculty make or they are very self conscious and they try to pretend we are all equal when they do not mean it (personal communication).

Sam is concerned about the preparedness of students as they enter graduate school. Another shift among graduate students, "there's a shift from the kind of traditional students who finish their undergraduate degrees and come in to people who are working full-time" (personal communication). He also stated, "The students in classes tend to be a little younger than they used to be. They are less well prepared academically and know very little about the public sector in general" (personal communication).

They are less well prepared in terms of doing research. They are less well prepared in terms of knowledge of government in the public sector and, frankly, some of their basic skills are not as good as they used to be. You know basic spelling, grammar these kind of basic communication skills (personal communication).

The qualities he notes in students with support services do not differ from students without support services. "They're a normal distribution. There are two kinds of students

with disabilities I've had in my class: deaf or hard of hearing or some kind of learning disability" (personal communication). "I think some are really, really good and some are not quite so good" (personal communication). He told of a particular student,

It is hard to know how much is them and how much is the disability. I know the disability is part of them, but the student who was very successful; who is deaf was also incredibly smart, incredibly engaged. She was very committed to deaf and hard of hearing issues. She was not an ideologue. Her heart and soul was in improving services for the deaf community. She read, she asked good questions. She was very thorough and very good. She participated and her deafness was part of her, but she engaged in normal conversation (personal communication).

He also talked about another student with support services who was not as successful:

Her thoughts were largely unformed. She went all over the place in her questions. She alienated many of the other students because she would go on and on and on. I have had students without support services who were that way too (personal communication).

He commented,

People without disabilities commit one of those kinds of cardinal errors. They are either over solicitous. "Oh, you're so brave. You are so strong. You're a hero." You know. They marginalize them. They think there is a deficit model (personal communication).

Sam has taught for over 30 years and his interactions with students with support services parallels his viewpoint on disability culture:

Culture is experiential. There has been a good twenty years now, a whole school of thought around cultural competence. I think its hokum. I have said so to other people's chagrin. I could move to the Navajo nation and live there until I was 240. I will never experientially know what Navajo culture is. You have to be part of it. I can never be competent in somebody else's culture except my own (personal communication).

He does not "know if there is a true disability culture. I think that having a disability is like... saying people. It is like saying Native American. Well, there is not one thing" (personal communication). Rather than culture competence, he views cultural safety as a more appropriate term. "You do not have to try to be competent in somebody else's culture. Cultural safety is creating something, "a place where they will feel safe with you in terms of their culture" (personal communication).

You create something in the way you talk, the way you approach people in what you do so they feel safe, that you will not abuse their culture. Even if you do not understand it completely that you will respect it, that you will not trample on it, that you will respect their beliefs. I find that a much better approach than this idea of culture (personal communication).

Each type of disability has its own priorities and needs:

Politically in this state, as in most others, the disability communities are kind of competitors. Commission for the Deaf fights the Commission for the Blind. Not fights, but the Governor's Commission on Disability and the DDPC and The Arc. We compete for resources. We compete for attention. We compete for public policy (personal communication).

With regard to the future for students with disabilities, he noted that:

It depends on their talents. It depends on the opportunities they will be given. It depends on a hundred million things not under their control. It depends on another hundred million to some degree that are in their control. I do not mean to be obtuse but, there is just good old luck. You know good luck, bad luck, but luck (personal communication).

In conclusion, the view of Sam on the future of higher education is as follows,

I think education is going to change. It was before Christmas, a speech by the commissioner or the secretary of higher education. It went unnoticed, but it was profound. She was thoughtfully questioning the structure of higher education in this state. This state wanted to make education more affordable and more accessible so they opened up all not just other universities, but now they have branch campuses and they are a branch campus of us. Another university has a branch campus in three other cities. She made the point that he is not sure that is sustainable and as a state, we need to think about significant restructuring (personal communication).

He commented, "I think there will be great change. I think post-secondary education of the traditional type will become less popular. I think technical trades will increase. I think we'll see shrinkage" (personal communication).

Ryan. The interview with Ryan involved talking about classroom changes over the last five years:

I really say about the students within the past five years, students have been a lot more sensitive, and we are still having very difficult and very complex discussions but that they are much less quick to anger. People will say what I would term as crazy. I had a student say that women should not work outside of the home when you have greater than 50% of women in the class; it is an inflammatory statement. I probably heard it ten years ago, and people went nuts. I think that people face those situations now with a little more sensitivity (personal communication).

His teaching strategies involve a variety of activities throughout a class period:

I try not to do any one thing for more than about 22 minutes at a time. If I lecture, I keep it to 20 to 30 minutes maximum. Then we will do a quick activity or take a break or watch a video clip and have lots of things within one class period. Most of my class periods are two and a half hours, so mixing it up (personal communication).

Students desire changes and participation. "I'm not a circus act up there, but they want more activities, and I bring in more. Maybe I am pushing them a little too far but they are an insatiable audience. Yet they are appreciative of it" (personal communication).

Comments and information provided to him after the class ends determines how much students learned:

I know students are learning when they come back to me later on, or I run into them, and they say, "Oh my gosh, I used something from your class sometime, or I still remember when you talked about this, and I don't remember exactly what you said, but I went out and found it." There are different ways that they are learning, because you have seen how they are developing over the semester, make more intelligent comments because of something, but I do not think you can

actually see it until much later (personal communication).

He spends time at the beginning of the semester "telling them stupid stuff about me, like, mundane things. Like, I have two kids and two dogs and also telling them a story to create an environment" (personal communication).

His advice to other professors working with students with support services is to relax:

I mean we have new faculty, and they get the letter, right, the first week of class. They get concerned about it and wonder what do I do? I am going to do all of these things, and I think that it is not that big of a deal, right? Over 90 % of those students, if you did not have those letters, you would never know, and you should treat it as if you never knew (personal communication).

He explained further, "You know that most of these students do not want these things emphasized. They just want to be successful on their own and usually they will try to do it without accommodations" (personal communication).

Ryan has taught many students with support services over his career. He told one story of a successful student with support services:

I had a graduate student with a visual disability a couple of semesters ago.... He lost his sight later in life, so he had a very interesting perspective. I teach diversity and brought that to the class, and he was very open about talking about it. He was very well loved in class (personal communication).

It was important to Ryan that the student with support services had a choice in how much he shared. He spoke to the student and explained,

I do not want you be a mouthpiece for everyone who has a disability here but this

is a great opportunity for you to talk about it. He was cool about it. Given it was the first visual disability that I had I realized stuff that I do is very visual so it cued me to adapt some things later on (personal communication).

The relationship he developed with the student who was blind brought many aspects related to his teaching style to the forefront:

I am showing these videos, and we are talking about race and ethnicity. If you cannot see these people, you really do not know if they are of a different background. You cannot make assumptions because you cannot see them so it is interesting. It also creates an additional teachable moment because what if you were watching this video and you could not see it. What if you had someone visually describing to help him, but it has someone else's filter on it. It was a good experience (personal communication).

Ryan had several concerns about students and higher education. "The value of the college degree is decreasing, yet the cost is increasing. So there are obvious challenges that need to be faced with this barrier to entry within the job market" (personal communication). It is more difficult to create a cohesive learning environment because:

The cohorting model does not happen anymore, because it is not that flexible. Students do not live on campus a lot. They are not in the same place all of the time. They are in and out of campus. They are taking the bus, working and doing all sorts of things. So if we can give them a platform that is accessible that is flexible we make a flexible opportunity to interact socially (personal communication).

He views the things students want from education not necessarily matching what they

need:

What I think people want is moving away from the traditional degree program concept. They want targeted specific training. They want 16 weeks, intensive classes on leadership or management or computer coding or sign language translation, whatever. They want to do chunks, piece things together. They want to get training rather than the holistic thinking of a traditional college education. What I think they need and lack is the big picture kind of stuff, such as critical thinking, social interaction, soft skills (personal communication).

Phil. The things observed by Phil in the classroom vary depending on whether students are undergraduates or graduates. Regarding undergraduate students, "there's a pretty broad range of students in terms of training and skill level" (personal communication) and in graduate classes "there's less variability in terms of training and capability levels" (personal communication). One observation was that "there's a relatively small proportion it seems of students who actively take written notes, which for me, is how I went through school and learned" (personal communication). He noted the impact on students of outside commitments.

There are students who come in late. There are students who have attendance issues. I've learned over the years that you have to work with people because there's a lot of people who have kids or adults to care for (personal communication).

The focus of teaching strategies centered on large, undergraduate introductory classes. He uses different activities to engage students including:

I do activity sheets. I can give you some examples. I try to do many group discussions even in large classes. You know, have students, you know if it is hundred-seat class or bigger, I have students turn to a neighbor and talk about things. I try to do a number of different learning strategies or I try to do active sorts of activities, active learning techniques. I do use PowerPoints, but I try to make them interactive and not just notes that I read up there. I try to use animations when they are appropriate to have that visual effect (personal communication).

He stressed the importance of participation by informing students of how it will benefit them later:

If you make it clear that they are going to have to do it, if you make it clear that there is a benefit to them doing it, whether it is one of these questions on the test or building a sense community in the class it happens (personal communication).

He noted, "The upper level classes, the topical content tends to engage student more simply I think because they choose the course based on content" (personal communication).

It is important to him that he is approachable to students so he uses informality as one method of approachability. He stated, "I do want students to succeed so I make it clear you can come to my office. You can meet with me outside of class. I try to be informal" (personal communication).

Another method Phil used to alter his teaching strategies is through his children. "I have kids. They are 8 and 10. I learn through them about what their teachers are doing,

and I see that there are many other ways to learn and do things that are good" (personal communication).

The cost of students' education was a critical determinant for Phil on his teaching style and course content as well as a barrier in the classroom for students. He tries "to keep textbook prices low so that people feel comfortable accessing them" (personal communication). He also reserves copies in the library for students who cannot afford to purchase the textbook. Cost to students also changed how he measured student learning over the years. "I used to use the clicker systems in class and that gave me relatively quick feedback on whether students could answer the question that I put in front of them" (personal communication). He stopped using the clicker system for two reasons; the first, cost to students. The second reason was "I just found that my activities in class were being driven by the need to have some questions up there so they can click the button and use the things they paid money for" (personal communication). In the smaller classes, he "can more easily engage with individual students, talk to them, and see what's going on" (personal communication). In a discussion-based class he can easily eavesdrop and hear how they are engaging" (personal communication).

His advice to new faculty centered on two things. First, "For the most part there's not much to deal with. They need additional time on tests. They need different testing formats, and that's easy to deal with" (personal communication). Second, "There are a handful of students that do require attention and patience and that is really crucial" (personal communication).

Phil recounted two students with disabilities in his large lecture class in the past.

The first student talked about being an ARC student:

He was very up front: "I need these accommodations and what not." We talked a lot after class. He came to my office hours and things fell apart for him over the semester. I do not know exactly what was going on, but he failed the class (personal communication).

The student reenrolled in the course later, worked hard, talked with Phil throughout the semester, and passed the second time. The second student was also successful and passed the course the first time, but the faculty-student relationship did not evolve over time. He came to office hours each week to complete his assignments. The student expressed concern "that I appeared frustrated at times because of the time commitment and simply because I just did not know how to communicate" (personal communication). Phil ended the story with, "I'm glad he passed because he put a lot of work into it. But I just never felt convinced he got it" (personal communication).

The future of higher education for Phil is worrisome because of decreasing enrollment, increasing costs, and reduced state funding. In regards to costs, there are two pressures: degree completion and student fees. He stated, "Departments have pressures to reduce the number of credits that a degree requires" (personal communication) so students graduate quicker. Second, "departments are introducing fees for simply enrolling in classes so hidden fees come to students" (personal communication), and the department uses those fees to provide necessary equipment and supplies needed in the classes.

Tom. Tom has taught at two postsecondary schools. In his current position, I do see students here take very much less for granted than in other institutions that I have worked at. In that regard I do think that there is a certain level of

parallel living that takes place, for lack of a better term. Students bring multiple realities to the room (personal communication).

He elaborated on what he sees in the classroom:

It is common for students at this university to be working one or even two jobs while they are taking their courses. They are either working or they are very much invested in trying to figure out and sort out the new life about being a college student if they are dorm life students. Many of those students come from places where that kind of life is entirely alien to their experience (personal communication).

While the majority of the students are in-state students, "I get a lot of students from the Midwest and/or about a third of my students are international students" (personal communication), so the diversity of the classroom is a part of the environment. He elaborated and told of a recent event in the classroom. Students were learning about cultural entrepreneurship and selling biscochitos in Estonia. An out-of-state student had never heard of a biscochito:

It is emblematic of all of the little minor details that make, I guess, a host institution kind of figure out that it actually hosts students. The two ways that could have gone, that could have been an alienating moment or it could have been an invitation for this celebratory kind of aspect of the nuances of where we are. Luckily, I feel lucky that it was the latter, but you know, there are hundreds of moments in a class a week that have that potential (personal communication).

An important part of his early goals for his class is for students to understand the concept of "othering" and the role it plays in international management. He described it

as "what things are not. Laws usually prescribe what you cannot do, not what you can do" (personal communication). Othering is how global organizations, nations, villages define themselves in addition to determining those who belong and those who do not belong. He ended the discussion with "it is really important to identify it as a very integral process to the way in which human beings create solidarities and alliances and how they don't" (personal communication).

Tom shared several key teaching strategies. The first is to "explain my shared vulnerability in the classroom. It's essential for me" (personal communication). He is "skeptical of the PowerPoint presentation paradigm" (personal communication). He tells students "I'm going to come to class every single time well prepared, but I'm not going to build off of a set of bullet points and I'm not going to recreate the clichés of rhetoric that they're so often expecting" (personal communication). "I actually get pretty Meta during the presentations and they really appreciate that because they start to see that I am actually struggling" (personal communication). He invites them to help think through a problem.

The advice Tom gave to new professors was to show their vulnerabilities. It is through the act of being vulnerable that people can be themselves or "appear. It is easy in a crowd for people to get lost. It's easy to minimize somebody's value; it's very easy to silence someone" (personal communication). Students see the vulnerability and react by showing their own vulnerabilities.

The experience he shared of working with a student with support services involved a psychological issue. The student had "massive anxiety attacks and was really at a point where in order to hide that kind of sensitivity he tried sitting in the middle of

the class and locked himself in the middle of a storm" (personal communication). The student shared his problem with anxiety, and Tom determined he would be more comfortable sitting in an aisle seat where he could leave easily. Tom then made sure an aisle seat was open each time. "He actually showed up almost like clockwork about a minute after class started because he wanted to enter after everybody had picked their seats and I had actually made sure there was a seat there in the corner. I would always say, 'Well, actually I have a special observer that might show up" (personal communication) so a seat remained free. The semester progressed, and he noted the student was able to hold short conversations with other students and return to sitting in the middle of the row. "I always give him a good nod: it was a good moment" (personal communication).

Tom defined disability in a quote from Nietzsche, "who said that contempt is the highest form of pity and the highest form of contempt is the anxiety of a populous" (personal communication).

You can very easily move from a general anxiety that people have to a form of subtle but vicious contempt. You can pity somebody; especially somebody that you think has a disability. The word disability is such an interesting word in and of itself. It is just like, well, whatever that is it is also not an imperative. It is not the thing in and of itself. This person is not unable, right. It is a word we use in the place of a shared vulnerability that does exist that we are trying to figure out (personal communication).

The future of higher education is dependent upon "us to figure out the new frontiers for what education is supposed to do" (personal communication). Students in the

future have the "task of building this new vocabulary and this new society and maintaining it" (personal communication). He further commented,

It's not just, I'm going to build a job and put my shingle up and hope that people know that that's what it is I do and I'll make a good living off of it. You really have to maintain that discourse and there are parallel responsibilities that we have amongst each other that are going to be present especially when we deal with immigration issues when we deal with issues of global competitiveness from a national perspective (personal communication).

Sean. Sean teaches a combination of large lecture classes for lower division undergraduate students and upper division undergraduate and graduate seminar classes. The most important factor in the classroom for him is student engagement. He stated, "So the crucial things that I just pay attention to is are they engaged are they paying attention, not falling asleep" (personal communication). This is critical "in those large lecture classes" (personal communication). He assesses student engagement in three ways. "You know, looking at the PowerPoint, depending on where they should be looking.

Responding, laughing is part of it. Then, I assess them through quizzes, assignments, and what not" (personal communication).

The strategies he uses to engage students center on multimedia activities. He uses images, videos, and music embedded in PowerPoint slides rather than slide after slide of text. Another way is for students to understand why course content is important while connecting with students:

What I have to do is figure out a way to convey why what you are talking about is important to students. It is very hard to do because you do not necessarily connect

with each of these individual students; they have very diverse interests and backgrounds. I have to explain why studying the arguments for and against absolute monarchy matter to students today (personal communication).

He assesses student learning using two methods:

One would be quizzes that we do usually on a weekly basis. It measures if they are paying this sort of basic level of attention, are they following the overall trend of what we are talking about in class. It is not really to assess comprehension. It is to establish a baseline. So that then if we have a discussion or if there is an upcoming assignment or whatever I can gauge where to start the discussion (personal communication).

The second way to assess involves writing:

The main way that I assess it is through essays, through writing assignments, which I use in all of my classes, even big ones. It is the best way to engage students because they get a certain amount of choice about what they write. That gives them a little time to think through what they have been learning. It gives me the opportunity to actually see what they are interested in but also what they understand and what they do not understand (personal communication).

The advice Sean gave to new professors is to focus on students with needs different from themselves when adopting teaching strategies. This was particularly important for Sean when asking students to write essays. Initially the assignments required students to select an appropriate topic, as this was how he preferred it as a student. He then adapted to meet the needs of all students:

I have swung between a very open-ended approach to a much more traditional sort of quizzes and in class tests approach to somewhere in the middle. I give students who are most interested the most amount of freedom but give students who have the potential to be interested enough guidance so that they feel invited in (personal communication).

Sean focused on note taking as a successful accommodation when asked to tell about a student with support services in his classes. He found the note taker provided an extra resource for the student with support services and sees the value in providing notes to all students in his classes. In addition, students with support services validated the importance of the accommodation to him. When asked about students with support services who were unsuccessful he talked about "students with speech impairments because it is difficult to figure out a way to include them into the class. It negatively affects the students throughout the semester. He commented, "They don't tend to get into the flow of the semester like other students" (personal communication). He found online discussions through LEARN to be an effective alternative for students as they will make comments in writing, and he then discusses those comments during lectures.

Sean commented on the importance of socialization for students in higher education. It is where people meet and learn about others. In addition, it provides a place to spread knowledge. Socialization and sharing of knowledge is greater when done in person rather than electronically.

Virginia. Virginia teaches upper division undergraduate and graduate students. When she looks at students in the classroom, she sees anxiety, interest, and knowledge:

I see they have a lot of anxiety about whether they are going to do well in the class, but they also have a tremendous amount of interesting things to say and knowledge to share. They are very generous with that. It is my experience they have interesting things to say as it relates to the topic and how the topic is relevant in their lives (personal communication).

The strategies she uses to engage students are "have them read an article and then ask them questions about the article. I talk about it myself and ask them to talk about it as well. I like to do group activities with exercises and talk games (personal communication).

She knows students are learning through student engagement:

They make comments or ask questions about the material that is appropriate and relevant. I know that they are learning when they do a writing assignment that shows they have understood the material. I know they are learning when they look at me and smile (personal communication).

She prefers class discussion rather than lecturing. She is "pretty informal and I joke around" (personal communication). The articles assigned to students mirror the type of research paper they write at the end of the semester, as well as being a subject of interest to them. She stated, "I choose papers that have a nice clear structure that they could just think about when thinking about their own paper. It is a model" (personal communication).

Her method of assessing learning is through short quizzes and end-of-semester research papers or projects. She commented, "It's a blast" (personal communication). In

addition, she stated, "I think it's just much more valuable" (personal communication). She does give quizzes during lectures, but viewed exams as unrewarding.

Her advice to a new professor was to "get to know every student because every single one of them has special needs of one kind or another" (personal communication). In addition, she recommended not giving exams as a form of assessment:

I have not given exams in many years because it produced too much anxiety in the classroom that made me anxious, and you know they are not paying attention. I really recommend writing assignments. I think having them do written assignments and having them do one larger research paper is more valuable for them and way more interesting for me and it cuts down on the kinds of problems that some students have (personal communication).

Virginia shared several experiences teaching students with support services throughout her 20 plus years of teaching. The example she told was of a student who was blind:

We had a woman who was blind in the department, and she was a very successful story. She did well in her classes. I've had blind students before so I knew when I wrote on the board to say exactly what I was writing or if I were doing a diagram to explain it clearly so she would know too (personal communication).

She described individuals with support services as being a typical part of the educational process. "They don't seem disabled to me; they're simply way smarter than me and more accomplished" (personal communication). She commented, "This state is in many ways a friendlier place for the kind of diversity we have in our student population. I'm referring to ethnicity, gender, abilities, and disabilities, all of those things to me make for better living" (personal communication).

The future in higher education centered on two things. The first is to help students to learn how to think critically. The second is to learn how to articulate ideas effectively. This allows graduates to have the needed skills to work in a variety of fields related to journalism, acquisitions, as well as teaching English as a second language.

Cassie. Cassie has taught two different courses in the past, while much of her time is spent working one-on-one with students in academic jeopardy. What she saw in the courses was that "people signed up for it were participating and sharing stuff and people that got placed into were not participating and wanted to get it over" (personal communication). Students reported, "They got something out of it because they told us they did. The different techniques and things they learned they would use" (personal communication). For several years, she taught groups of seven, eight, or nine students for a whole block on the process used to learn basic sciences. She noted,

The kinds of problems that they talk about are mostly with the anatomy course because it's taught so differently and graded so differently and the tests are multiple multiples, which means that you can pick number one, which is A, number two, which is A and B, number three, which is A, B, C, you know, and they mix up the letters, so you really need to know your stuff (personal communication).

The course later changed from 10 weeks to six months and became more manageable for students. She explained, "Now it is chunked, and it is a little bit easier to digest the material because they have longer to learn it. It is still hard. They cannot fail anything, but they can fail one test and retest" (personal communication).

Faculty refer students to her when they need study skills or additional skills for coping with the pressures of school. While there are others students may see, for those issues, she is "the only one that has the background in Education and Psychology to bridge the two things with a little experience in disabilities" (personal communication). She is able to address both the achievement and emotional components of being a student.

Learning for students occurs "when they tell me they passed a test, when they implemented learning or study strategies or test taking strategies, when they get results and their grades are improved" (personal communication). She also knows when they report, "They used a coping strategy, they did breath work, and it really helped them calm down. When they reframe their thinking, and they feel better, they got it. That is how I know (personal communication).

Some of the students referred to Cassie are students with support services who have received services in either the past or requesting services for their current educational programs. One successful student with support services used a manual wheelchair and "against many odds and not getting a whole lot of support from faculty, she figured out how to accommodate all situations. She figured out how to make it work for her" (personal communication).

It is essential for Cassie to be herself when teaching students. Her teaching strategies include asking questions, teaching study strategies, practicing time management, and examining why students answered test questions incorrectly. She further comments,

I will draw on the board and get every hour, every day of the week, and ask them when they go to bed, when they wake up, when they exercise, when they eat, when they study, where they study, how they study, how long they study, on what topics, how they're going to decide what to study. I mean, it is detailed. I also explain how to work with test questions and how to review (personal communication).

The advice she gave to new professors is to

Let them know they exist from the get-go. Let them know where they are, how they work, what the process is. Information sharing. Do not diagnose your students. Talk with them. Ask them if they are okay, if you are seeing something that is not what you normally see or are concerned about. Treat them as a person (personal communication).

Identification of students with support services has changed while she has worked there. Students receive a copy of the technical standards required to perform in the program. At that time, they can request accommodation to perform the standards. She has found "the benefit is that the people that reach out get what they need early, and we can work with them to get what they need early" (personal communication). In addition, it has "helped the programs be more accountable and clear to what they are responsible for teaching the students and what is reasonable and what is not as far as accommodations" (personal communication).

According to Cassie, an understanding of knowledge about disability for other colleagues is based on "a medical model. They look at the students as either exhibiting attributes that are going to make them successful or ones that we consider dysfunctional

that we need to fix" (personal communication). What is forgotten about students with support services is "they are really smart" (personal communication).

Her hope for students in the future is that "they keep the passion of what they need to do, keep their confidence, and keep their eye on the goal, so they can get through and help people that they want to help and be successful" (personal communication). In regards to the future of higher education, "I think it's time to look at the kind of learners that we have, the kind of people that are coming to college and graduate school, and help them learn to learn" (personal communication). She further commented,

We learn by doing. That is how we learn the best. People are smart, so they know how to learn, and they can learn. We are all different kinds of learners. There are readers. There are writers. There are verbalizers. There is audio visual. Here is what you need to learn. Here are the resources (personal communication).

It is important to keep up with the needs of students in order to keep their interest and provide opportunities for success.

Combined Participants' Narrative

Dedoose provides frequency distribution tables and excerpt tables according to superordinate and sub-themes as a part of the analysis. The groupings aid in the comparison analyses of the participants' comments. For this study, the majority of time was spent discussing the classroom and the role of faculty in the classroom. There are 171 superordinate classroom codes and 213 excerpts highlighted in the superordinate code of faculty. The next superordinate code in frequency of excerpts was the future totaling 105, followed by 94 excerpts for students with disabilities, 38 excerpts for disability is..., and 19 great quotes.

The most common descriptions given in the classroom related to the environment. Participants recognized students had many responsibilities beyond the classroom and were not always prepared to study. Tom provided the most poignant example. He told the story of a student who was late for an exam and apologized for her lack of preparedness when turning in the exam:

She came back later on for her grade. She had a perfect score on the exam, but she was also running across the street on a weekly basis to come to class because she was taking care of her two-year-old who had cancer (Tom, personal communication).

Ryan shared similar comments on the seriousness of current students: and "[W]ithin the past five years, students have been a lot more sensitive, and we're still having very difficult and very complex discussions, but they are much less quick to anger" (personal communication).

Another consistent observation of the classroom environment was the lack of preparedness or active learning by some students. Sam explained, "They are less prepared in overall knowledge and basic skills such as spelling, grammar, you know these kind of basic communication skills" (personal communication). Phil agreed, stating, "For undergrads, there's a pretty broad range of students in terms of training and skill level" (personal communication).

Phil also commented on the lack of active learning he sees in the classroom. "I always remark on how there's a relatively small proportion of students who actively take written notes" (personal communication). Finally, Cassie focused on the need for students to learn the skills that lead to preparedness. She commented, "Let me take a little

bit of knowledge and then work with people, and let me do it again and again" (personal communication).

Every participant mentioned student engagement in the classroom as essential. Two participants assign no exams and use this strategy to increase engagement. Sam stated, "I've never given an exam at the graduate level". They're all essay assignments or written assignments" (personal communication). He also commented on judging engagement:

You can see it in the questions they ask. You can see it in their engagement. You can see it in the way they pay attention. You can see when they come and talk to you after class. It is many little things (personal communication).

Ryan engaged students by asking questions, in particular asking opinionated students as a method of increasing interest and participation:

I do not want to do one thing, not even two things, the whole time, but keeping it different changing it up and then allowing the students to talk. I may almost incite not confrontation, but a little bit of clash among students, which seems to be helpful to talk. You always have those couple of opinionated students that usually annoy the other students, and I will use them to my advantage. I will direct questions to them, and then others will be annoyed and want to get in there (personal communication).

Additionally Ryan explained, "I try to do a lot of group discussions even in large classes. If it is a hundred seat class or bigger, I have students turn to a neighbor and talk about things" (personal communication). Virginia agreed, stating, "I don't lecture much. I much prefer a class discussion" (personal communication).

Teaching strategies varied from how to make students comfortable to effective use of PowerPoint slides during lectures. Cassie succinctly stated, "Lecture, in my opinion, lecture is dead" (personal communication). Ryan stated, "I want students to feel comfortable talking to me and bringing things up. I take three or four minutes during break and walk around and create a more comfortable environment" (personal communication). Sean had similar comments: "Whatever multimedia it is, I try to get them to focus on several different things in a typical class, but I want them to do one thing at a time" (personal communication).

Phil explained how he used PowerPoint slides: "I try to make them interactive and not just notes that I read up there. I try to use animations when they're appropriate to have that visual effect" (personal communication). Tom's classes are discursive: "I'm very skeptical of the PowerPoint presentation paradigm" (personal communication) because students comment that attendance is not necessary if there are PowerPoint slides covering the material. He establishes the importance of attendance and engagement through knowing all students' names and writing a response paper back to their papers.

Advice faculty gave to new faculty when working with students with support services suggested three things. First were the suggestions specific to disability types. The student with support services examples provided by faculty discussed two Deaf students, two blind students, four students with psychological impairments, one student with an undefined disability, and one student with mobility impairment. The most frequent advice was to treat the student as a "colleague like a friend" (Cassie, personal communication) or "they don't seem disabled to me" (Cassie, personal communication). Ryan was direct and to the point, "relax" (personal communication), while Sam

stressed, "There's still a person there" (personal communication). A participant commented on the value having a sign language interpreter in class.

I have learned a great deal from having an interpreter at the front of the class because it slows my pace and it allows me to check students understanding, just because I am watching the interpreters, and I am watching the students (Virginia, personal communication).

The advice for working with blind students was, "I knew when I wrote on the board to say exactly what I was writing or if I was doing a diagram to explain it clearly" (Virginia, personal communication). Another participant spoke of the "stuff that I do is very visual so it cued me to adapt" (Ryan, personal communication). Ryan spoke with the student and learned "he needs everything as a PDF ahead of time, so he can use his screen reader and headphones and all this stuff" (personal communication). They were able to negotiate a timeline that addressed both of their needs and provided additional time for the student to prepare.

The most frequent comment by the participants on advice to faculty noted there were minimal adaptations for students with support services. Phil stated, "There is not much to deal with. I mean, most students, they need additional time and tests. They need different testing formats and, that is easy to deal with" (personal communication). Ryan commented, "Over 90 percent of those students, if you didn't have those letters, you would never know, and you should treat it like you never know" (personal communication).

All participants were quick to provide an example of a successful student with support services, and three of the seven participants provided examples of unsuccessful

students with support services. Ryan noted, "They just want to be successful on their own, and usually they will try to do it without accommodations. If they are not successful, they will come to you, and that is when it is useful for that previous communication" (personal communication). Sam commented about a Deaf student, "Her heart and soul was in improving services for the deaf community. She read, she asked good questions. She was very, very thorough and very good and participated" (personal communication).

The participants reported unsuccessful students with support services as those who did not use accommodations effectively. Cassie stated, "It does seem that people that are not successful with a documented disability that was not identified until medical school have a much harder time getting accommodations and being successful" (personal communication). Tom had a student who did not contact ARC or anyone else until midsemester when she had already missed an assignment. At that point, she requested an accommodation for an assignment and insisted she submitted it, but never did. Another student with support services struggled with communication. "Her thoughts were largely unformed. She went all over the place in her questions. She alienated a lot of the other students because she would just go on and on and on" (Cassie, personal communication).

Three common themes came out regarding the future of higher education. They were concerned about the growing costs in general, potential negative consequences related to the increased costs, and movement towards specialization training and away from the typical liberal arts education. Ryan commented, "The value of the college degree is decreasing, yet the cost is increasing" (personal communication). The other ways of controlling costs mentioned by the participants were to decrease the number of

credit hours required in a degree program, allow high school students to enroll as dual credit students, or control costs by charging lab fees so departments can afford things necessary for teaching in high tech classrooms. Ryan commented,

I am concerned about the dummying down of the quality of education. I think dual education is a good thing, but it concerns me. We are trying to force too much into a short period, and I am concerned about the development of some of these options (personal communication).

The participants stated that there are several things that traditional college teaches that cannot be replicated through online education. Sean explained traditional college is a socializing instrument and what matters in college are the people you meet and the sort of society you are brought in to (personal communication). He expanded his comments on use of technology in higher education, "You can open up the college experience to a wide variety of people through technology. I think it is great. I think it's a great way of spreading knowledge, but I don't think it will necessarily recreate that benefit of a college education" (Sean, personal communication) He stated this university in particular has a distinct social role in the area, one that is not possible to create electronically. Phil explained, "The old way of universities was you build the person, you feed their curiosity, you make sure they're well rounded, and then they'll succeed wherever they end up becoming a CEO or custodian" (personal communication).

Finally, Tom described the future of higher education as a grand metaphor for that lack of certainty:

It is a grand metaphor for equipping people with a kind of light that will help you navigate the unknown. We are no different from people who were trying to figure

out the Arctic passage in the mid-19th century. We are not that different from people who wanted to explore the moon. We are just dealing with a different kind of ocean; that ocean is tumultuous, and it has to do with these deeply embedded perceptions about identity and about humanity (personal communication).

In conclusion, the narrative information gathered during seven semi-structured interviews provided increased understanding of the teaching qualities and interactions with students with support services by faculty. Four things stand out. First, participants described little if any difference in comparison of students with support service to students without support service. Second, faculty told more stories of successful students with support services than stories of failure. The stories of failure often resulted in future success (Phil, personal communication) or increased understanding of the student (Sam, personal communication). Third, faculty preferred students with support services to self-initiate accommodation requests so necessary adaptations to the curriculum and teaching methods occurred. The faculty-student relationship allowed for natural implementation of Universal Instructional Design (UID) in the classroom. Finally, faculty knowledge of disability legislation, litigation, or policies and procedures played a secondary role to the faculty-student with support services relationship.

Chapter Five

Discussion

Disability services providers implement and oversee the accommodation process for 11% (NCES, 2009) or fewer undergraduate students at any given postsecondary institution. Yet, graduation rates for students with support services are 17% lower than students without support services (GAO, 2009). My analysis of research on DS providers, students with support services, and faculty from 1990 to October 2014 indicated three key areas. Those areas are: (a) the importance of assistive technology in fostering independence and mastering related skills, (b) the importance of student involvement in the accommodation process, and (c) the importance of collaboration and consultation with the entire campus community in determining reasonable, appropriate academic adjustments.

Collaboration and consultation often begins with professional development opportunities for DS providers and faculty/staff to share knowledge and processes regarding students with support services. Getzel, Briel, and McManus (2003) analyzed responses to a yearly online survey completed by 21 universities and colleges between 1999 and 2002 regarding professional development activities for administrators, faculty, staff, and students with support services who were funded by U.S. Department of Education's Office of Postsecondary Education (OPE). Similar findings to the current study included UID principles (Ostiguy, Peters, & Shlasko, 2016), legal rights and responsibilities, and methods on educating students with support services as important components of faculty development in the area of disability (Getzel, et al., 2003). In a second study, Madaus, Lalor, Gelbar, and Kowitt (2017) analyzed the content from 1987

to 2012 of the most well known journal on postsecondary education and disability called Journal of Postsecondary Education and Disability (JPED). The journal is published quarterly by AHEAD and covers topics related to research, integration, innovation, and policy analysis (JPED Author Guidelines, 2014). Madaus, et al. (2017) determined articles fell within four topical areas: (a) program or institution level studies, (b) student studies, c) construct development studies, and (d) faculty and non-disability support staff studies. The authors found 32 articles related to faculty that described knowledge, attitudes, beliefs, training, and teaching practices. In addition, 28 articles on construct development centered on conceptual models and Universal Design (UD). Another study in the same JPED edition by Leake and Stodden (2017) explored disability as a component of diversity. The authors (Leake & Stodden, 2017) analyzed five journals devoted to postsecondary education from 2006 to 2012. They found 906 diversity articles, but only 11 of the 906 examined students with support services, "suggesting that this population is not a high priority in higher education generally and also that disability researchers and advocates seldom seek to publish in 'mainstream' higher education journals" (p. 400).

The studies by Getzel, et al. (2013) and Madaus, et al. (2017) indicated a need to expand beyond faculty and staff training on the topics of general services, academic accommodations, legal responsibilities, and programmatic modifications (Dukes, 2006; Shaw & Dukes, 2006). Shaw and Scott (2011) contended, "Faculty support and training must keep pace with the dynamic and evolving context of higher education" (p. iv). In addition to expansion of training beyond typical topics, the current study found two common ground themes during analyses: (a) use of social justice pedagogy, and (b) use

of UID (Ostiguy, Peters, & Shlasko, 2016). This chapter contains five sections: (a) relevance of current study to past research, (b) importance of current study results to AHEAD Program Standards and Performance Indicators, (c) common ground, (d) limitations of the study, and (e) implications for AHEAD.

Faculty Qualities and Interactions with Students Using Support Services

Student with Support Services Viewpoint of Faculty. The viewpoint of students with support services in the current study does not support the two previous studies detailed in chapter 2. Student comments in chapter 4 indicated positive views of faculty. Cawthon and Cole (2012) noted reluctance by students to contact faculty regarding their disability and a preference to contact the DS office for academic assistance. While the current study only reported on students with support services who initiated academic adjustments, they reported a positive relationship with faculty, and did not indicate feelings of stigma as reported by Cawthon and Cole (2012). Dowrick, et al. (2005) indicated DS providers focused on the individual student rather than the disability in comparison to faculty. The current study noted faculty focusing on the individual, normalizing disability, and supporting the use of academic adjustments during their interactions.

Two studies illustrated positive outcomes when students with support services request academic adjustments from faculty. The results from Murray, Lombardi, et al. (2013) support student comments in this study that indicated faculty provided social support to students and assisted in their adjustment to college. Kurth and Mellard (2006) reported 104 students in a focus group described sense of belonging, access to academic information, and supports for independence in the faculty-student relationship. Student

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comments from chapter 4 shared similarities with the Kurth and Mellard (2006) study. The students indicated equal treatment by faculty, provision of the same opportunities as all students, and faculty guidance in finding necessary academic information.

Patrick and Wessel (2013) conducted research similar to this study and used "disability friendly" faculty as mentors to students with support services. The contributions made by faculty to student transition to college included: (a) advice, (b) awareness of campus resources, (c) opportunities to establish close relationships, and (d) social and academic support. The current study provided examples of the four contributions by faculty in the Patrick and Wessel (2013) study. Faculty advice included suggestions on how to prepare for the course, comments to outlines, and encouragement in the use of accommodations. Faculty referred students to ARC and mentioned campus resources during one-on-one meetings and through emails. The student-faculty relationship led students to nominate faculty for recognition. Students indicated the relationship and knowledge learned from faculty contributed to academic success, provided a foundation to assist in securing future employment, and established an environment conducive to achievement. Students addressed the final area of social and academic support through their description of faculty as interested, helpful, inspiring, compassionate, open, articulate, professional, flexible, encouraging, and caring.

Faculty Qualities. The current study demonstrated the importance of faculty knowledge, experiences, and success when teaching students with support services. Four studies (Bento, 1996; Phillips, et al., 2012; Vogel, et al., 2000; Vogel, et al., 2006) examined faculty knowledge. Vogel, et al. (2000) examined faculty willingness to accommodate students with support services and then examined experience, knowledge,

and attitudes toward accommodations. Faculty from community colleges and private four-year schools showed the greatest knowledge regarding support services (Vogel, et al., 2000). Older faculty were more willing to provide accommodations when compared to young faculty, but overall 80% or more indicated they would provide one-on-one assistance, exam preparation, alternative location for exams, and comments to a paper draft (Vogel, et al., 2006). The seven participants from the current study taught for a minimum of 5-10 years with five teaching 15 years or more. All indicated assisting students with support services with one-on-one assistance, exam preparation, alternative location for exams, and comments to a paper draft.

Bento (1996) examined faculty reported barriers to accommodating students. The three types of barriers: (a) informational, (b) ethical, and (c) attitudinal only occurred once in the current study by Ryan indicating a need for more information on types of disabilities. Finally, Phillips, et al. (2012) determined faculty lacked the knowledge of how to accommodate students with support services for online courses. None of the participants in the current study mentioned teaching exclusively online courses, and all expressed they possessed the necessary knowledge to accommodate students with support services.

Skinner (2007) compared faculty willingness to accommodate to school affiliation, rank, and specific accommodation requests. Results indicated assistant professors and senior instructors were more willing to accommodate while the current study included two assistant professors, two associate professors, and three full professors willing to accommodate. Skinner (2007), Murray, et al. (2008) and the current study found faculty willing to provide minor accommodations, such as copies of

PowerPoint slides, copies of lecture notes, extended exam time, and use of a laptop during lectures. The same study found faculty were unwilling to provide reduced readings, allowance for extra credit assignments, or grading students with support services on a curve (Murray, et al., 2008).

Hong and Himmel (2009) examined faculty perceptions of personal time constraints, performance expectations of students with support services, believability of disabilities, willingness to accommodate, and knowledge of campus disability resources and legislation. Seventy-five percent of faculty in the Hong and Himmel (2009) study indicated willingness to work with students with support services, this result compares with 100% in the current study. The entire faculty in the current study reported students with support services capable of success compared to 95% in the Himmel and Hong (2009) study. One of the seven faculty in the current study stated need for more knowledge to assist students with autism while 65% of the faculty in the Himmel and Hong (2009) study needed more knowledge. The current study shared similar results to the Bourke, et al. (2000) study. Bourke, et al. (2000) reported faculty with more knowledge of disabilities and belief in the need for accommodations were more likely to accommodate. A study by Buchanan, et al. (2010) stated middle aged and older faculty tended to not describe students with ADHD as "bad" or lacking discipline with no faculty in the current study describing students with ADHD as "bad."

Lombardi, et al. (2013) examined faculty perceptions after participation in training regarding students with support services. Results suggested training in accommodations, disability laws and concepts, accessible course materials, inclusive classroom, and inclusive assessment influenced faculty attitude. No faculty from the

current study mentioned past training as an influence on their attitude toward students with support services.

Baker, et al. (2012) surveyed faculty and students' perceptions of campus climate toward students with support services. Faculty rated campus climate as more welcoming and inclusive than students did. The current study found no mention of negativity by students without support services toward students with support services. In addition, Ryan detailed the positive relationship between students without support services and a student with support services in his diversity class.

The final study by Trammell and Hathaway (2007) found no differences in help-seeking behaviors by students without support services compared to students with support services. The current study reported one faculty member commented on a student with support services attended office hours each week to complete homework. The other participants did not make any comparisons between students without support services to students with support services.

Necessary Skills for Effective Accommodations. Three previous studies (Collins & Mowbray, 2005; Hicks-Coolick & Kurtz, 1997; Janiga & Costenbader, 2002) of DS providers examined factors of success and providers' perceptions of students with support services. While the current study did not examine DS providers, results of the four previous studies share commonalities with faculty interactions involving students with support services. Collins and Mowbray (2005) reported 50% of faculty and staff needing more information on intervention methods, classroom behavior, and ability to handle courses. Ryan commented needing greater understanding of students with autism as a way to improve his interactions and assist in the student grasping the course

requirements and content. Phil and Tom stated students seeking academic adjustments later in the semester limited their abilities to provide effective interventions.

Hicks-Coolick and Kurth (1997) interviewed nine counselors and determined the characteristic needed for success was self-advocacy. Janiga and Costenbader (2002) indicated 74 DS providers reported students with support services lacked the necessary self-advocacy skills needed to transition successfully to postsecondary education. The seven participants in the current study provided examples of successful students with support services and only three provided examples of unsuccessful students with support services. The participants told detailed stories of students' ability to explain their academic adjustment needs, negotiate implementation of the adjustments, and successfully complete courses. Ryan indicated a blind student in a graduate level course demonstrated many of the factors taught in his diversity course. He commented,

He lost his sight later in life, so he had a very interesting perspective. I teach diversity and brought that to the class, and he was very open about talking about it. He was well loved in class (personal communication).

The Role of AHEAD Program Standards and Performance Indicators by Faculty

As detailed in chapter 2, the AHEAD Program Standards and Performance Indicators are: (a) consultation/collaboration, (b) information dissemination, (c) faculty/staff awareness, (d) academic adjustments, (e) counseling and self-determination, (f) policies/procedures, (g) administration and evaluation, and (h) professional development. The current study found examples from six of the eight program standards and performance indicators. The results did not find any examples for administration and evaluation of program standards.

Consultation/Collaboration

The most common consultation/collaboration role for DS providers is representation on campus committees (Dukes, 2006; Shaw & Dukes, 2006), but the participants did not share any comments related to campus committees during the semi-structured interviews. Five studies (Harbour, 2009; Patrick & Wessel, 2013; Sharpe & Johnson, 2001; Stodden, et al., 2006; Tagayuna et al., 2005) from chapter 2 stated, collaboration between faculty, DS providers, and students with support services provided increased opportunities for quality services.

Another component of consultation/collaboration is the establishment of technical standards for use in the determination of reasonable accommodations (Madaus, 2000). Cassie discussed the formation of technical standards as important for two reasons. First, it established a specific point in time for students to request support services. The second positive outcome was the formal accountability by programs to provide accommodations.

Dissemination of Information

Disability service providers disseminate information to faculty on students with support services through electronic communication and printed media (Dukes, 2006; Shaw & Dukes, 2006). Nine studies (Baker, et al., 2012; Bento, 1996; Hong & Himmel, 2009; Lombardi, et al., 2013; Skinner, 2007; Phillips, et al., 2012; Vogel, et al., 2006; Vogel, et al., 2000) described the link between dissemination of information and faculty willingness to accommodate. Five participants in the current study commented on the accommodation memo and following the necessary procedures to implement the academic adjustments. Sean and Phil announced the need for volunteer note takers during class in the past. Ryan mentioned receiving accommodation memos, looking at the

information, and setting it aside until a student with support services approached him. Sam and Virginia noted the accommodation memos generally did not pertain to their classes because they did not administer exams.

Academic Adjustments

Disability service providers determine reasonable, appropriate accommodations (Dukes, 2006; Shaw & Dukes, 2006), but most accommodations happen in the classroom under the supervision of faculty. All studies (Baker, et al., 2012; Banks, 2011; Bento, 1996; M; Bourke, et al., 2000; Buchanan, et al., 2010; Cawthon & Cole; 2010; Chiba & Low, 2007; Collins & Mowbray, 2005; Connor, 2011; Dowrick, et al., 2005; Dutta, et al., 2009; Field, et al., 2013; Garrison-Wade, 2012; Getzel & Thoma, 2008; Harbour, 2009; Hicks-Coolick & Kurtz, 1997; Hong & Himmel, 2009; Janiga & Costenbader, 2002; Kirkendall, et al., 2008; Kranke, et al., 2013; Kurth & Mellard, 2006; Lightner, et al., 2012; Lombardi, et al., 2013; McEldowney Jensen, et al., 2004; Morningstar, et al., 2010; Mull, et al., 2001; Murray, et al., 2013; Murray, et al., 2008; Olney & Brockelman, 2005; Patrick & Wessel, 2013; Phillips, et al., 2012; Quinlan, et al., 2012; Sharpe & Johnson, 2001; Sharpe, et al., 2009; Shepler & Woosley, 2012; Skinner, 2007; Stein, 2013; Stodden, et al., 2006; Tagayuna, et al., 2005; Thoma & Getzel, 2005; Thoma, et al., 2011; Trammell & Hathaway, 20076; Vogel, et al., 2006; Vogel, et al., 2000; Walker & Test, 2011; Webb, et al., 1993; West, et al., 1993; Zafft, 2004) indicated some level of satisfaction with academic adjustments provided either through DS departments or satisfaction by students or graduates with support services. Participants in the current study shared similar comments of accommodations varying from digital recorder,

volunteer note taker, and extended exam time to specific accommodations, such as alteration in teaching strategies, to ensure equal access for all students.

Faculty/Staff Awareness

Disability service providers have the responsibility of making faculty and staff aware of general services, academic accommodations, legal responsibilities, programmatic modifications, and offering disability awareness training (Dukes, 2006; Shaw & Dukes, 2006). Eleven studies (Baker, et al., 2012; Bento, 1996; Buchanan, et al., 2010; Collins & Mowbray, 2005; Dutta et al., 2005; Hong & Himmel, 2009; Lombardi, et al., 2013; Phillips, et al., 2012; Skinner, 2007; Vogel, et al., 2006; Vogel, et al., 2000) measured faculty and staff awareness of the types of services provided and disability legislation. Four studies (Collins & Mowbray, 2005; Harbour, 2009; Kurth & Mellard, 2007; West et al., 1993) recommended DS providers provide more training opportunities. The seven participants from the current study impressed students with support services with their ability to accommodate specific needs in the classroom, normalize the use of accommodations, and provide constant feedback on performance.

Counseling/ Self-determination

Disability service providers must provide avenues for students with support services to develop independence (Dukes, 2006; Shaw & Dukes, 2006). Students with support services commented on the importance of self-determination in 25 studies (Banks, 2014; Cawthon & Cole, 2010; Chiba & Low, 2007; Connor, 2011; Dowrick, et al., 2009; Field, et al., 2013; Garrison-Wade, 2012; Getzel & Thoma, 2008; Hicks-Coolick & Kurtz, 1997; Janiga & Costenbader, 2002; Kirkendall, et al., 2008; Kranke, et al., 2013; Kurth & Mellard, 2006; Lightner, et al., 2012; Morningstar, et al., 2010;

Murray, et al., 2013; Olney & Brockelman, 2013; Patrick, et al., 2012; Sharpe & Johnson, 2001; Shepler & Woolsey, 2012; Stein, 2013, Thoma & Getzel, 2005; Walker & Test, 2011; West, et al., 1993; Zafft, 2006) Student comments in the current study supported the previous studies on the level of importance self-determination played in the development of a satisfying student-faculty relationship.

Policies and Procedures

Disability service providers must provide written policies and procedures on how to access services; determine reasonable accommodations, inform students of their rights and responsibilities, maintain confidentiality of student records, and inform students of the appeal process for complaints (Dukes, 2006; Shaw & Dukes, 2006). Three studies (Collins & Mowbray, 2005; Dowrick et al., 2005; Kurth & Mellard, 2007) analyzed the relationship between policies and procedures to the implementation and satisfaction of accommodations. In the current study, the seven participants discussed the process for note taking, extended exam time, and use of a digital recorder, but did not provide extensive comments on the accommodation process. Student commented on the provision of accommodations by faculty, additional time explaining course content, and relationship with ARC. Satisfaction in accommodations showed when one student commented; "The professor made accommodations for me, and my test grade went from a C to A- with a final grade of B-" (personal communication).

Common Ground: Social Justice Education and Universal Instructional Design

Analysis of transcripts from the interviews discovered two topics often touted in disability research as methods of inclusion for students with support services. They are social justice education and UID. None of the participants referred to either topic, but

provided multiple examples throughout the interviews of their use in the classroom. Students referred to components of those topics as the reason for nomination.

Social Justice Education. The way individuals construct disability determines the type of disability model used to remove physical, attitudinal, and institutional barriers that segregate or minimize the opportunities for individuals with disabilities (Bogdan & Knoll, 1995). One model of disability is the social justice model. It evolved from the social justice movement in the United States that included civil rights, women's rights, and New Left movements in the 1960s and 1970s (Bell, 2016). Social justice education is to "enable people to develop the critical analytical tools necessary to understand the structural features of oppression and their own socialization within oppressive systems" (Bell, 2016, p. 4). In addition, Bell stated, "Social justice education aims to help participants develop awareness, knowledge, and processes to examine issues of justice/injustice in their personal lives, communities, institutions, and the broader society" (Bell, 2016, p. 4). Studies from chapter 2 discussed social justice education as a part of optimal environments. One example found that faculty training in accommodations, disability laws and concepts, accessible course materials, inclusive classroom, and inclusive assessment influenced faculty attitude (Lombardi, et al., 2013). Patrick and Wessel (2013) determined students with support services mentored by "disability friendly" faculty reported the mentor relationship contributed to their success in transitioning to college.

The faculty-student relationship between students with support services and faculty in the current study found positive students' comments specific to social justice education, such as "Allows for appropriate accommodations to ensure access" (personal

communication). Other students' comments included, "Truly wanted me to do well" (personal communication), "If it was not for her support I would not be receiving the support that is drastically helping my writing ability" (personal communication), and "Works with students across all levels of learning to make sure that they are learning the information in a way this is understandable" (personal communication). The participants also illustrated use of social justice education in their classrooms through multiple comments. Sam stated, "Disability is a part of them" (personal communication), and students with support services are "A part of the normal distribution" (personal communication). Ryan stated, "Students within the past five years have been a lot more sensitive, and we are still having very difficult and very complex discussions" (personal communication).

Universal Design (UD). Innovations in technology offer many improvements and greater physical access (Sullivan, 2011). One method is the use of UD. According to Goff and Higbee (2008), universal design is "the consideration of the needs of all potential users in the planning and development of space, products, or program an approach that is equally applicable to architecture and education" (p. 1). Universal design began in the field of architecture with Ron Mace at North Carolina State University (Goff & Higbee, 2008). Two types of universal design in higher education are UID and universal design for learning (UDL) (Evans, Broido, Brown, & Wilke; 2017). The seven principles are: (a) equitable use, (b) flexibility in use, (c) simple and intuitive use, (d) perceptible information, (e) tolerance for error, (f) low physical effort, and (g) size and space for approach and use (CUD, 2008) applicable to physical design as well as curriculum design (Evans, et al., 2017). LaRocco and Wilken (2013) conducted a faculty action-research

project in the area of UDL and indicated "Professional development is most effective when it is focused on curricular and instructional strategies that are needed to teach all students effectively" (p. 11).

The current study provided examples of participant use of UD. Phil indicated the use of multimedia as a method of engaging all students in the classroom through the use of lecture, student participation, videos, group activities, and pictures. This illustrated the UD principles of equitable use, flexibility in use, and low physical effort. Ryan indicated he does not allow any activity to last longer than 22 minutes in an effort to maintain student engagement. This illustrated the UD principles of flexibility in use and simple and intuitive use. Sam and Virginia discussed inclusion of sign language interpreters in the classroom and the benefits of adapting their teaching styles to meet the needs of the interpreters. This showed equitable use and flexibility in use.

Limitations

The first limitation of the study is the transferability of the findings to other research. The seven participants out of a pool of 29 at a university with 2,255 full-time and part-time faculty are applicable to only that group at that point in time. The study does provide information on faculty interactions and qualities students with support services seek. The homogeneity of the participants limited the interactions from female faculty and faculty below the rank of assistant professor. In addition, the participant pool was generated by nominations from students with support services, who indicated exceptional willingness and provision of accommodations and limits the generalizability of the findings.

The second limitation of the study in the use of triangulation through data collection and analysis focused on three data sources, but did not examine the context of the data. Any relationship between the type of university, location of the university, or the number of years of teaching experience by the participants was not taken into account as a part of the data analysis. A maximization of triangulation was maintained through semi-structured interviews, journaling, and student comments on nomination forms. This added to the depth of faculty qualities and interactions captured in the study. In addition, the use of member checking with the participants on their agreement or disagreement of the superordinate and sub-themes assisted in the analysis.

The final limitation is my position as director of the disability services department, which may have created anticipation by the participants of the topic and potential questions prior to the interviews. In order to minimize bias, no questions contained any references to the DS department, my position within the department, or past professional interactions.

Future Direction

The current study examined faculty interactions with students with support services and the exemplary qualities noted by students. The findings suggest disability played a supporting role between faculty and students with support services. Every participant mentioned student engagement in the classroom as essential. It must be interactive, engaging, refreshed frequently, and it must hold students' attention. The most frequent comment by the participants on advice to faculty noted similar assistance for students with support services as students without support services. "They just want to be successful on their own and usually they will try to do it without accommodations. If they

are not successful, they will come to you and that is when it is useful for that previous communication" (personal communication). The results of this study indicated accommodations for students with support services are merely one facet in the multifaceted teaching strategies used daily in the classroom of the participants. It is advantageous for DS providers to promote accommodations as just one facet of social justice education in the classroom that "leads to creating a more inclusive environment" (Cory, 2011, p. 34) for all students. In addition, social justice education "is stronger when both those who benefit and those who are disadvantaged by a particular ism, or cluster of isms, are able to work together in a sustained way to create change" (Bell, 2017, p. 22).

A review of the literature determined three reoccurring topics devoted to faculty training: (a) understanding and awareness, (b) legal responsibilities, and (c) disability knowledge. Faculty in this study rarely mentioned training or the need for it. Disability served as an introduction to the faculty-student relationship with the determination of accommodations, but the majority of each session focused on curriculum, projects, assignments, and exams.

It is time to address faculty/staff training from a social justice perspective and recognize disability is only one facet of multi-faceted faculty, staff and students. The development of training in collaboration with other minority groups including ethnicity, gender, and sexual orientation provides a greater context in which to address the needs of all. Collaboration with other academic and student affairs departments shares the cost and addresses the needs of the greater campus community. In addition, training based on UD principles allows for equal access to the curriculum for all participants at all times. The UD curriculum then provides an example for faculty to follow during future course

development. Use of social justice education and UD in collaboration with other departments and programs across campus enhances current programming and places training within the context of other student characteristics recognizing students with support services as full participating members in all aspects of the campus community.

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Appendix A

Letter of Invitation

Dear Faculty Member:

I would like to invite you to participate in a research study. This study is researching the success of students with support services in postsecondary education from the viewpoint of faculty who interact with them on a weekly basis in the classroom. You are asked to participate in this study because of a past nomination by a student with support services between 2012 and 2014.

If you agree to participate, the following things will happen: 1) participation in one 60 to 90 minute semi-structured interview and 2) participation in on 30-minute interview to verify the accuracy of a short report of themes.

Participation in this study provides additional information on what is effective for students with support services at the University of New Mexico. All information is confidential and will not be shared with others. Real names will not be used and all participants will be assigned a pseudonym and those pseudonyms will be used in the reporting of results.

If you decide to participate in this study, please contact me via email at jegreen@unm.edu or phone at (505)277-7787. Additional information regarding your consent to participate will be given to you through a consent form at the beginning of the interview. If you have questions or concerns, Dr. Ruth Luckasson, Chair of Educational Specialties in the College of Education will be glad to answer them at (505)277-6510. If you would like to speak with someone other than the research team, regarding complaints or your rights as a participant, you may call the UNM Institutional Review Board (IRB) at (505)277-2644.

Sincerely,

Joan Green, Director Accessibility Resource Center

Appendix B

Consent Form

Exploration of the Qualities and Interactions of Post-Secondary Faculty Identified as Exemplary by Students with Support Services Consent to Participate in Research

March 7, 2016

Purpose of the study: You are being asked to participate in a research study that is being done by Joan Green the Principal Investigator from the Accessibility Resource Center. The purpose of this study is to research the success of students with support services in postsecondary education from the viewpoint of faculty who interact with them on a weekly basis in the classroom. You are being asked to take part in this study because a student with support services from Accessibility Resource Center nominated you as exemplary in the provision of classroom accommodations between 2012-2014.

This form will explain what to expect when joining the research, as well as the possible risks and benefits of participation. If you have any questions, please ask one of the study researchers

What you will do in the study: Participation in this study will take a total of 1.5 to 2 hours over a period of 3 months and involves two separate meetings. The first time involves a 60 to 90 minute interview held in at your UNM office. The second is a follow up 30-minute interview to member check the themes and brief interpretation of semi-structured interview. This may be done individually or with other participants as a focus group to check the appropriateness of the themes from the analysis process. You may skip any question that makes you uncomfortable or stop the interview at any time. All semi-structured interviews will be digitally recorded. I will save each recorded interview as a digital file on my personal computer. The digital file is then used to write a transcript. I will take notes on observations and thoughts that occur while conducting the interview. The transcript and notes will be stored in a locked filing cabinet in my office at UNM Accessibility Resource Center.

Risks: There are risks of stress, emotional distress, inconvenience, and possible loss of privacy and confidentiality associated with participating in a research study. Every effort will be made to minimize the loss of privacy through the use of pseudonyms on all materials including results of the study.

Benefits: There will be no direct benefit to you from participating in this study. However, it is hoped that information gained from this study will lead to a better understanding of students with disabilities' success in the classroom as they transition from secondary education to postsecondary education.

Confidentiality of your information: The semi-structured interviews will be digitally recorded. I will save each recorded interview as a digital file on my personal computer.

The digital file is then used to write each transcript. Handwritten notes will be taken noting observations and thoughts that occur while conducting the interviews. All data will be stored in a locked file cabinet in my locked office at Accessibility Resource Center. We will take measures to protect the security of all your personal information, but we cannot guarantee confidentiality of all study data. The University of New Mexico Institutional Review Board (IRB) that oversees human subject research may be permitted to access your records. Your name will not be used in any published reports about this study.

You should understand that I am not prevented from taking steps, including reporting to authorities, to prevent serious harm of yourself or others.

Payment: You will not be paid for participating in this study.

Right to withdraw from the study: Your participation in this study is completely voluntary. You have the right to choose not to participate or to withdraw your participation at any point in this study without penalty. You may withdraw participation in writing via email or personal contact by phone or in person. If you withdraw from the study no data gathered will be used for the research. The digital file of the interview will be destroyed. You may be asked to withdraw as a participant if you are noncompliant with the previously stated study procedures

If you have any questions, concerns, or complaints about the research study, please contact:

Joan Green, Accessibility Resource Center, 1 University of New Mexico, Albuquerque, NM 87131. (505)277-3506. jegreen@unm.edu

If you would like to speak with someone other than the research team or have questions regarding your rights as a research participant, please contact the IRB. The IRB is a group of people from UNM and the community who provide independent oversight of safety and ethical issues related to research involving people:

UNM Office of the IRB, (505) 277-2644, irbmaincampus@unm.edu. Website: http://irb.unm.edu/

CONSENT

You are making a decision whether to participate in this study. Your signature below indicates that you have read this form (or the form was read to you) and that all questions have been answered to your satisfaction. By signing this consent form, you are not waiving any of your legal rights as a research participant. A copy of this consent form will be provided to you.

I agree to participate in this study.		

Name of Adult Participant	Signature of Adult Participant	Date
Researcher Signature (to be comple	eted at time of informed consent)	
-	participant and answered all of his/her quentiformation described in this consent form	
Name of Research Team Member	Signature of Research Team Member	Date

Appendix C

Interview Questions

The interview will take place after permission is given by UNM IRB. The questions are descriptive and open-ended allowing the participants to talk about their teaching styles, interactions and perceptions of students with support services, along with potential advice to new faculty on how to assist students with support services. The interview begins with grand tour questions then moves into specific, guided, and task-related grand tour questions.

The interview will begin with the participant being reminded that the interview will be digitally recorded, the interview will be transcribed, and all information will be kept confidential.

The interview will begin with introductions and general overview of the study.

Questions:

- 1. Tell me about what you see in the classroom regarding your students?
- 2. What strategies do you use to engage students?
- 3. How do you know when students are learning?
- 4. Tell a story when a student with a disability was successful or unsuccessful in your classroom.
- 5. What do you believe the future holds for your students?
- 6. You have been identified as successful by a student with disabilities, what advice would
 - you give to new faculty in teaching students with support services?
- 7. Tell me what is your overall teaching/interaction style?
- 8. Finally, tell me about the role of postsecondary teaching in the twenty-first century?

Possible Probes:

- 1. Could you tell me more about that?
- 2. So what you are saying is...
- 3. Why do you think that?
- 4. Then you disagree with that?
- 5. Do you think things would be different for students without support services?
- 6. Tell me about that.
- 7. Let me make sure I understand correctly, what you said is ...
- 8. Describe a specific example of that.
- 9. You mentioned...
- 10. Could you describe that in detail?

Appendix D

Demographic Survey

Please circle or bold the response to each question below that best describes you.

- 1. Faculty rank:
 - a. Tenure track
 - b. Non-tenure track
 - c. Temporary
- 2. Faculty title:
 - a. Tenure track
 - i. Instructor
 - ii. Assistant Professor
 - iii. Associate Professor
 - iv. Professor
 - v. Distinguished Professor
 - b. Non-tenure track
 - i. Clinician Educator
 - ii. Visiting Professor
 - iii. Research Professor
 - iv. Lecturer
 - c. Temporary
 - i. Adjunct Professor
 - ii. Retired Professor
 - iii. Post-doctoral Fellow
 - iv. Non-credit Instructor
- 3. Administrative Reporting Line:
 - a. Academic Affairs
 - b. Health Science Center
 - c. Branch Campus
- 4. College:
 - a. Anderson School of Management
 - b. Architecture and Planning
 - c. Arts and Sciences
 - d. Education
 - e. Engineering
 - f. Fine Arts
 - g. Law
 - h. Public Administration
 - i. University College
 - j. University Libraries
 - k. Nursing

- 1. Pharmacy
- m. SOM-Basic Medical
- n. SOM-Clinical
- 5. Highest degree earned:
 - a. Doctorate (examples Ph.D. and Ed.D.)
 - b. Professional Doctorate (examples M.D. and J.D.)
 - c. Other Terminal Degree (example M.F.A.)
 - d. Master's Degree
 - e. Other
- 6. Gender
 - a. Female
 - b. Male
- 7. Ethnicity:
 - a. Hispanic
 - b. African American/Black
 - c. American Indian
 - d. Asian
 - e. Native Hawaiian/Pacific Islander
 - f. White
 - g. Two or more
 - h. International
 - i. No response
- 8. Number of years teaching at the postsecondary level:
 - a. 1-5 years
 - b. 5-10 years
 - c. 10-15 years
 - d. 15-20 years
 - e. More than 20 years
- 9. Frequency teaching student(s) with support service:
 - a. One or more per semester
 - b. One or more per academic year
 - c. One or more every 2-3 years
 - d. One or more every 3-5 years

Appendix E

Transcription Symbols

	Overlap in speakers' talk		
]]	Utterances that begin at the same time		
=	Talk between speakers that latches or follows without a break between		
(0.2)	Used to indicate length of silences, pauses, and gaps in tenths of seconds		
(.)	Indicates micro intervals		
?	Rising inflection		
?,	Rising inflection that is less marked		
\uparrow	Marked rising intonation		
\downarrow	Marked falling intonation		
!	An animated tone		
<u>un</u>	Underline shows emphasis, with capitals indicating even greater emphasis		
SO	Upper case indicates loudness		
00	Indicates softness		
:::	Indicates that a prior sound is prolonged		
(it)	Indicates that the transcriber is uncertain about the word/s		
0	Empty parentheses indicate that word/s could not be worked out		
(())	These are used to indicate transcriber's verbal descriptions of talk, talk that cannot		
easily	be transcribed, or visual actions		
\rightarrow	Indicates lines of transcript of relevance to analysis or discussion at hand		