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A Mixed-Method Case Study of a Learning Disability Program at a Private College: Student and Staff Perceptions of Services & Classroom Accommodations

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Abstract

Although the types and availability of academic support services for college students with disabilities have greatly increased, there continues to be a lack of empirical research documenting the perceptions of college students with learning disabilities concerning appropriateness and effectiveness of support service. The mixed-method case study focused on exploring one disability support program offered at a private college from three perspectives – a student, the director (creator of the Program), and part-time staff member. The scope of the case study focused on perceptions of the classroom accommodations and disability support services as well as an examination of the retention and completion rates comparing SLD Program students and non-SLD Program undergraduate student outcomes. The SLD Program interviews revealed the importance of the program concerning students' overall growth in confidence and self-advocacy. Both participating program personnel reported the value of using the "Pulse pen" assistive technology by some students. SLD Program personnel interviewed shared the need to hire more staff for tutoring and the management of student weekly support services. In addition to more program staff training for enrolled students within the SLD Program with autism spectrum disorder and increased program salaries to attract possible new hires. Findings revealed the SLD Program had higher retention rates in comparison to the mainstream study group percentage and female enrollment surpassed male students within the SLD Program. Implications and recommendations for growth within the SLD Program and other similar programs are discussed.

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A Mixed-Method Case Study of a Learning Disability Program at a Private College:
Student and Staff Perceptions of Services & Classroom Accommodations

By

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Submitted in partial fulfillment
of the requirements for the degree
Ed. D. in Executive Leadership

Supervised by

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May 2018

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May 2018

Dedication

Completion of this dissertation was directed and supported by family, my dissertation team, the study site personnel, and friends.

I thank God, for giving me continued physical strength and the mental clarity to complete this process and for all my blessings.

Daughter, Alaya, instrumental in my dedication to succeeding at my goals since her birth and continues to guide my pursuits. Alaya, thank you, for being the wonderfully compassionate and creatively brilliant person you are and for supporting this journey.

Sister, Marjorie, influential in my academic success since my undergraduate years. My fiancé, Rafael, a passionate, supportive partner and overall advocate within my private and professional life. Rafael, words cannot thank you enough for your advice with this process. Jack, thank you, for being you and providing necessary cuddles and comic relief.

Dr. Hargrove, thank you, your guidance, persistence, and tireless support of this journey has been tremendous. Your assistance was instrumental in my reaching this goal.

Dr. Alleyne, thank you, for joining my committee always with a ready smile and the ability to catch the small yet important chapter details.

I want to thank all the departments and personnel who supported my data collection phase within the study campus site. Due to protecting the study pool identity, you are anonymous though remembered. For your willingness and continued support, from the Provost, the SLD Program Director, and a variety of departmental personnel on campus who made completion of this study possible.

Biographical Sketch

Cynthia Y. Palmer, is presently a Librarian within the Mount Vernon City School District. Within this capacity as a school leader she has held the following titles: District Librarians PLC Coordinator with SWBOCES, Hamilton Elementary School Leadership Committee-Teacher member, and Hamilton Elementary School Specialist PLC Coordinator.

Previously held an academic departmental chair position within higher education and as an Assistant Professor taught researching courses to undergraduate students. Started academic career as a Reference Librarian with an adjunct position for one year at Iona College within the Ryan Library.

Ms. Palmer graduated from Pratt Institute where she received a Master of Science degree in Library Research and holds New York State Department of Education Initial Certification as a Library Media Specialist in addition to University of the State of New York Public Librarians Professional Certification. Received a Bachelor of Science degree in Marketing and Communications from The Fashion Institute of Technology-State University of New York.

Cynthia began the dissertation journey at Saint John Fisher College in May 2012 and returned to the program in 2014 to complete course work towards earning the Education Doctorate (Ed. D) in Executive Leadership from the Ralph C. Wilson, Jr. School of Education at St. John Fisher College in March 2018.

Abstract

Although the types and availability of academic support services for college students with disabilities have greatly increased, there continues to be a lack of empirical research documenting the perceptions of college students with learning disabilities concerning appropriateness and effectiveness of support service. The mixed-method case study focused on exploring one disability support program offered at a private college from three perspectives – a student, the director (creator of the Program), and part-time staff member. The scope of the case study focused on perceptions of the classroom accommodations and disability support services as well as an examination of the retention and completion rates comparing SLD Program students and non-SLD Program undergraduate student outcomes. The SLD Program interviews revealed the importance of the program concerning students’ overall growth in confidence and self-advocacy. Both participating program personnel reported the value of using the “Pulse pen” assistive technology by some students. SLD Program personnel interviewed shared the need to hire more staff for tutoring and the management of student weekly support services. In addition to more program staff training for enrolled students within the SLD Program with autism spectrum disorder and increased program salaries to attract possible new hires. Findings revealed the SLD Program had higher retention rates in comparison to the mainstream study group percentage and female enrollment surpassed male students within the SLD Program. Implications and recommendations for growth within the SLD Program and other similar programs are discussed.

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Chapter 1: Introduction

“College students with learning disabilities have to deal with the unique challenges presented by their disability, as well as the daily stressors of college life. Taking advantage of academic accommodations available to support them in their classes is one of the ways students with learning disabilities may successfully access and move through the institution.” (Hadley, 2007, p. 13)

Approximately 15% of the U.S. population has some form of learning disability (LD), meaning approximately 45 million individuals have learning disabilities (LDs) (Lindstrom, 2007). Although learning disabilities occur in young children, disorders are usually not recognized until children attend school (Shriner, 2000). Eight to 10% of American children below 18 years of age have some type of learning disability (National Institute of Neurological Disorders and Strokes, 2013). When examining the literature relative to school aged children, it has been estimated that approximately three million school-age children have been classified with specific learning disabilities (Cortiella & Horowitz, 2014).

Specifically, in 2006, 5.6% of public school students in the US from 3 to 21 years of age were diagnosed with learning disabilities (e.g., attention deficit disorder [ADD] or dyslexia) (U.S. Department of Education [DOE]/National Center for Education Statistics [NCES], 2010). Despite the high numbers of diagnosed individuals, learning disabilities remain widely misunderstood (Horowitz, 2013). These misconceptions continue despite the definition clarity provided by the National Institute of Neurological Disorders and

Strokes (NINDS). In the report “What are learning disabilities?” NINDS (2018) defined learning disabilities as disorders that affect the capability to comprehend or use spoken or written language, process math equations, coordinate movements, or focus attention.

Parents and educators hold onto numerous myths or misinformation about LDs. Many people equate LDs solely with mental retardation. Other misconceptions presume that individuals with LDs do not need ongoing support services or treatment and that instead will eventually outgrow the disability over time. Contrary to this assumption, students with learning disabilities have shown the ability to work effectively within the disability, when the necessary support tools and services are provided (Cortiella & Horowitz, 2014). In fact, more and more students with learning disabilities go on to pursue higher education upon experiencing academic success within secondary institutions. Individuals with learning disabilities represented the largest percentage of college students with disabilities attending colleges and universities (Sanford et al., 2011). Within U.S. college campuses approximately two out of every 100 students have a reported disability (Vickers, 2010).

Sometimes called invisible disabilities, LDs incorporate a number of disabilities which include physical ailments such as traumatic brain injury (TBI). Some of these learning disabilities result from sickness or an accident (e.g., traumatic brain injuries in car accidents) (Patrick, Savage, McKinlay, McLellan, & Daffue, 2012). Additional learning disabilities include ADD, attention deficit hyperactivity disorder (ADHD) and the assorted dyslexia family of disorders (Vickers, 2010). ADHD has been defined as a condition affecting children and adults that is characterized by problems with attention, impulsivity, and overactivity. ADHD affects between 5-8% of school age children, and

between 2-4% of adults (Cortiella & Horowitz, 2014). ADHD is the current diagnostic label for a condition that has been recognized and studied for over a century. Over the years, it has been known by several other names including “brain damaged syndrome,” “minimal brain dysfunction” (MBD), “hyperkinetic impulsive disorder,” and ADD (Disorder, 2008). Defined by Griffin (2015) ADD is one of three subtypes of ADHD. Although the term ADD is still used by many parents and teachers, since 1994 doctors have called it by its formal name: ADHD, predominantly inattentive type. The other two subtypes are ADHD, predominantly hyperactive-impulsive type, and ADHD, combined type, which involves both hyperactive-impulsive and inattentive symptoms. Dyslexia disorders include; dysgraphia (difficulties in forming letters, dyscalculia (difficulty understanding math concepts), dyslexia (letter reversals), and dyspraxia (lack of language comprehension) (Jessamy, 2012). Studies demonstrate hundreds of thousands of college undergraduates have been diagnosed with dyslexia or another LD within the last decade (Vickers, 2010). Within the family of LDs, we find:

Executive functioning deficits used to describe weaknesses in the ability to plan, organize, strategize, remember details and manage time and space efficiently.

These are hallmark characteristics in individuals with attention deficit/hyperactivity disorder (ADHD) and are often seen in those with LD. (Cortiella & Horowitz, 2014, pp. 4-5)

Vickers (2010) noted The National Institute of Health (NIH) defines ADD/ADHD as a disorder whose symptoms include difficulty staying focused, paying attention, difficulty in controlling behavior, and hyperactivity (p. 4). Since there is no single test to determine whether a child has such a disorder, there can be, and there is, great variance in

the diagnoses from specialist to specialist and from demographic group to demographic group.

Individuals with learning disabilities represented the largest percentage of college students with disabilities attending colleges and universities (Sanford et al., 2011). Within U.S. college campuses approximately two out of every 100 students have a reported disability (Vickers, 2010). On college campuses, each self-identifying student with a disability is evaluated on a case by case basis (Vickers, 2010). In fact, individuals with LDs represented the largest percentage of college students with disabilities attending colleges and universities at 60.9 %, for any postsecondary attendance (Sanford et al., 2011; Vostal, Hughes, Ruhl, Benedek-Wood, & Dexter, 2008).

Previous research demonstrated that students with learning disabilities in college have lower completion rates and tend to shy away from 4-year programs (Sanford et al., 2011; Johnson, Zascavage, & Gerber, 2008). Specifically, 37% of LD students registered in community colleges whereas only 15% registered for 4-year programs. When examining success rates, a study by Sanford et al. (2011) revealed 38% of college students with disabilities graduated or completed their program in comparison to 51.2% of mainstream peers. Impacting these retention and graduation rates were students with learning disabilities who indicated feelings of being overwhelmed (Getzel, McManus, & Briel, 2004). College students with LDs will most likely require special academic support services in order to remain in college and graduate with a college degree. These assertions stem from the fact that students with LDs tend to experience one central academic barrier – academic study skills (Hadley, 2007).

Students with disabilities tend to have more difficulty than mainstream students with testing skills, note taking, concentration, auditory comprehension, organization, social skills, and self-confidence (Jessamy, 2012; O'Neill, Markward, & French, 2012; Hadley, 2007). This further conveys the need for special academic support services for college students with learning disabilities (Getzel et al., 2004). The next section of this introductory chapter will introduce the research problem, purpose of the present study, the research questions, and implications.

Problem Statement

Although the types and availability of academic support services for college students with disabilities have greatly increased over the past 20 years (O'Neill et al., 2012), there continues to be a lack of empirical research documenting the appropriateness and effectiveness of disability support services provided linked to retention and completion for college students with disabilities (Cortiella & Horowitz, 2014; Hadley, 2007). While it is clear that colleges and universities have implemented more academic services to meet the increasing utilization needs of the growing populations of college students with disabilities, there continues to be a deficit of evaluation as to the quality and effectiveness of these services. To date there have been a limited number of studies assessing student and staff satisfaction or other perceptions related to the academic accommodations that increase retention and completion rates among college students with learning disabilities. This understanding in the academic community has led to an increased number of colleges that are interested in researching student and staff perceptions pertaining to the quality of academic services for students with disabilities, to

ensure better implementation of effective services for students with disabilities (O'Neill et al., 2012).

Specifically, there is a need to inform the field concerning appropriateness of services from multiple perspectives. It is important to begin with perceptions of student satisfaction (Reinschmiedt, Sprong, Dallas, Buono, & Upton, 2013). Reinschmiedt, et. al. (2013) reported that student satisfaction is described as the relationship between what students desire concerning academic support services, and what they receive impacting their perceived quality of life. Student levels of satisfaction are a crucial component to identifying the use of proper academic support tools (Grossman, 2001). In examining student perception of quality of academic accommodations, students with disabilities in higher education noted this as an area of weakness “students interviewed expressed dissatisfaction with the student writing center because it was staffed by upper-classmen, rather than learning disabilities professionals with the level of expertise necessary to assist them with their writing issues” (Hadley, 2007, pp. 11-12).

Furthermore, Hadley (2007) is one of the few earlier studies to demonstrate the level of frustration concerning available academic support services and the perception of quality of these services as experienced by students with learning disabilities. There continues to be limited research including perceptions of student stakeholders and staff providing services. Additionally, findings show a lack of students' voice pertaining to the quality of services since the majority of studies conducted have been quantitative in methodology. Studies to date list recommendations for qualitative research to improve retention and completion for college students with learning disabilities. This will be further discussed within Chapter 2 covering review of literature (Reinschmiedt et al.,

2013; O'Neill et al., 2012; Sanford et al., 2011; Hadley, 2007). There continues to be a lack of in-depth data on the lived experiences of students with disabilities and staff involved with disability support programs (Reinschmiedt et al., 2013; O'Neill et al., 2012; Hadley, 2007).

Theoretical Rationale

Students with learning disabilities have been marginalized by the general population (Tinto, 2004). Therefore, critical theory was the most appropriate theory for this study seeking to raise the voices of students with learning disabilities within college campuses in need of continued and improved academic support services to increase their retention and completion rates in comparison to their mainstream counterparts. Critical theory has been used to understand and influence structures found in authoritarianism, militarism, economic disruption, environmental crisis, and the poverty of mass culture (Shaw, 1985).

Max Horkheimer (1895-1973) is labeled as the father of critical theory who as director of the Frankfurt-based Institute fur Sozialforschung; informed theoretical work to revitalize radical social and cultural criticism. Critical theory laid the theoretical foundation for critical race theory, feminist theory and pedagogy of the oppressed as theorized by Freire. Max Horkheimer first developed the critical theory of society as a response to the disappointment of traditional Marxism to challenge the dangers of capitalism in the 1920s. Specifically, Horkheimer developed critical theory in response to questions he had concerning human behavior individually and as a collective. He believed in the basic goodness of man and that with time a more ethical and independent thinking man would evolve. With German workers remaining uninterested and at times

hostile to those wanting to bring change, Horkheimer was forced to leave Germany in 1933 (Shaw, 1985). Critical theory experienced resurgence in the 21st century in applicability to modern social issues after being minimized due to thoughts that the theory was leaning towards a welfare state viewpoint. Critical theory is grounded in seeking positive outcomes even if the present situation or issue is bleak (Kompridis, 2005). This includes “educational issues centered on the needs of students with disabilities by bringing issues they face to light” (LaNear & Frattura, 2007, p. 90). Thus, this case study will act as a form of advocacy. “Advocacy research provides a voice for participants, raising their consciousness or advancing an agenda for change to improve their lives [becoming] . . . a united voice for reform and change” (Creswell, 2009, p. 9). Overall this case study was designed to give a voice to those students and disability programs.

Statement of Purpose

The qualitative case study focused on exploring one disability support program offered at a private college from three perspectives – a student, the director (creator of the Program), and a staff member. The scope of the case study focused on perceptions of the classroom accommodations and disability support services provided by the disability support program at a private college in the northeast. No previous studies examined actual personnel who created and provided services. The purpose of the qualitative case study was to evaluate staff and student perceptions of the academic services to increase administrative understanding as to what is effective and what does not work within program offerings, with the overall goal of improving the impact of services (O’Neill et al., 2012). This case study focused on enrolled students with learning disabilities: ADD,

ADHD, and the dyslexia family of disorders, in relationship to reading cognition and math computation ability (Vickers, 2010).

Research Questions

The study was guided by the following research questions:

1. What are the reflections of SLD Program students on their direct experiences with program academic support services provided during their college years? (e.g., Reinschmiedt et al., 2013)
2. What are the perceptions of SLD Program personnel concerning academic support services provided for students with learning disabilities? (e.g., O'Neill et al., 2012)
3. How do the retention rates of the SLD Program students compare to non-SLD Program students? (e.g., Sanford et al., 2011)

Potential Significance of the Study

This case study was designed to bring increased clarity pertaining to discussion, review, and implementation of academic support services for students with learning disabilities at the postsecondary level and beyond. Findings from this case study intended to provide data to enhance understanding of the effectiveness of academic support services as perceived and experienced by the college students identifying as learning disabled who received them. Specifically, the goals were to gather the interpretation of student and staff lived experiences to inform the field pertaining to evaluation, implementation, and assessment of services and tools impacting students with learning disabilities at the local level. Local level means review of academic support services at the individual college level, to add to research previously completed seeking

to inform the field on this topic of interest. Program personnel were interviewed to increase understanding from persons running the program and providing the support services. They were asked to assess strengths, weaknesses, and outlook within the next 5 to 10 years. This qualitative case study chose to include program personnel interviews to inform the field since one of the anchor studies reviewed (O'Neill et al., 2012) noted the limitation of not being able to gain feedback from program personnel.

Definitions of Terms

Academic Adjustments – include classroom and testing modifications, such as extra time on examinations (Grossman, 2001).

Academic Student Support Services – provided by a higher education institution that are aimed at the fulfilment of students' needs directly related to the process of studies (Sajiene & Tamuliene, 2012).

Accommodations – the term accommodation is used to indicate any change or adjustment to standard testing procedures or materials. Those changes are intended to enable a student with a disability to participate in state or district assessments or enable the student to better demonstrate knowledge and skills (Thurlow, Lazarus, Thompson, & Morris, 2005).

Attention Deficit Disorder (ADD) – whose symptoms include difficulty in staying focused and paying attention, difficulty in controlling behavior, and hyperactivity (Vickers, 2010).

Attention Deficit Hyperactivity Disorder (ADHD) – Characterized by developmentally inappropriate levels of inattention, impulsivity, and hyperactivity (Disorder, 2008).

Auditory Processing Disorder (APD) – impacts what is usually normal range hearing, persons having this disorder have difficulty processing and making meaning of sounds. Processing difficulty is increased within a setting with background noise interference (Understood.org, 2018).

Autism Spectrum Disorder (ASD) – a variety of brain disorders, those with the disorder exhibit repetitive behavior in activities with difficulty in interacting with others in social settings (National Institute of Neurological Disorders and Stroke, 2018).

Dyslexia – a learning disability that affects the ability to understand or use spoken or written language, process mathematical calculations, coordinate movements, or direct attention (Vickers, 2010).

Executive Functioning Disorder – impacts the ability to plan and remember upcoming activities, difficulty prioritizing and completing activities to complete overall goals, an ongoing inability to organize and plan (Rodden, 2018).

Individualized Educational Program (IEP) – an IEP is an important legal document. It spells out a child's learning needs, the services the school will provide and how progress will be measured. Several people, including parents, are involved in creating the document (Stanberry, 2018).

Learning Disability (LD) – abbreviation of the term learning disability or disabilities (Mull, Sitlington, & Alper, 2001).

Non-academic student support services – provided by a higher education institution, these are related to the fulfilment of students' emotional and social needs that are not directly related to the process of studies (Sajiene & Tamuliene, 2012).

Postsecondary – within the study, specifies 2-year and 4-year degree granting college programs.

Programs – beyond required academic support services, programs are additional services which students choose to receive for additional monies on top of tuition and room and board (Lewis, 2008).

Pulse Pen – records all that is written and spoken to increase effective note taking. The user is able to replay audio and download and save notes with applicable software (Frankenberger, 2017).

Reasonable Accommodations – include academic adjustments and reasonable modifications and the provision of auxiliary aides and services as tools for desegregating institutions and extending equal education opportunity to the disabled community (Grossman, 2001).

Shadowing – a technique used by a certified Applied Behavioral Analysis (ABA) trained therapist. The ABA shadower supports the social interactions of a person with Autistic Spectrum Disorder to navigate environments and improve overall interpersonal communication and academic outcomes (Monahan & Bryer, 2004).

Student Support – the system of services provided by a higher education institution, which fulfills students' emotional, academic, and social needs and is a precondition for increasing a student's individual welfare and academic success (Sajiene & Tamuliene, 2012).

Support service – resources available at no cost for students with disabilities including reasonable accommodations: some of which are, extended time for assignment

and testing, note-takers, use of a calculator, and preferential seating in classrooms (Lewis, 2008).

Chapter Summary

Chapter 1 covered information pertaining to reasoning for this case study and focused on increasing understanding of academic support services and how they enhance student academic outcomes. By gathering data on perception of students with learning disabilities at the postsecondary level, this study further informs the field concerning retention, completion, and career success. Enrolled students who identified as persons with learning disabilities provided reflections that add to ongoing dialog to improve access, implementation, and evaluation of services that impact successful college completion for this growing student population. The study focused on gaining increased understanding concerning impact of services within higher education from the perception of currently enrolled students with learning disabilities who received support services from a program created to academically support them. Gaining perceptions from program personnel and a review of program and campus-wide archival data pertaining to undergraduate student populations along with comparing demographics and retention rates were integral to this study. The direction for this study was based on the review of previous studies concerning this subject, with the goal of informing the field. Additionally, the study hoped to increase knowledge in the ability of colleges to effectively evaluate academic supports services impacting student completion and career readiness.

The theoretical rationale for choosing critical theory had to do with the desire to increase awareness of value of support services pertaining to self-identifying students

with learning disabilities within postsecondary programs. It was hoped that findings will assist in bringing increased clarity pertaining to how colleges may best support this growing segment of students completing degree programs at a higher rate and also decrease timeframe to graduation by implementing effective academic support services.

Chapter 2 continues with an in-depth review of policies and practices concerning academic support services for students with learning disabilities along with research concerning student and alumni perception of support services impacting, retention, program completion, and overall quality of life.

Chapter 3 discusses the mixed-method case study which incorporated an interpretative phenomenological analysis (IPA) approach to interview enrolled students and SLD Program personnel pertaining to academic support services provided to students identifying as learning disabled. In addition to the review of the SLD Program, archival quantitative data and campus-wide data of undergraduate students pertaining to retention and completion rates was undertaken for the purposes of triangulation. Data was obtained from the National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS). Previous research showed the continued need for in-depth qualitative data representing thoughts of students with learning disabilities to communicate their individual perception of support services effectiveness to inform the field. The case study incorporated reflection from program personnel and archival data assessment towards improved evaluation, implementation, and assessment of academic support tools provided on the college level.

Chapter 4 addresses the research findings from the study and Chapter 5 discusses implications, limitations of the study, and recommendations for future research.

Chapter 2: Review of Literature

Introduction and Purpose

Landmark legislation, the Rehabilitation Act of 1973, began the national dialog concerning students with disabilities (Vostal et al., 2008). The legislation addressed issues pertaining to individuals with sensory and physical impairments. Gregg, Coleman, Lindstrom, and Lee (2007) asserted adults with hidden disabilities, such as LDs were not at the forefront of advocates and policy makers concerning the legislation parameters. In addition to physical impairments and LDs, the third type is mental disabilities. Sanford, et. al. (2011) noted individuals with LDs represent the largest percentage of students with disabilities attending postsecondary colleges and universities.

In order to improve comprehension of current academic support services and the perception of program services as viewed by college students with learning disabilities, we must understand the history of disabilities services within the United States beginning with the most important national changes from the 1970s. Researching the history of educational institutions recognition and provision of accommodations concerning students with disabilities, led to analysis of provisions stated in Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Analysis was presented at one of the first conferences on the national level to discuss higher education issues concerning students with disabilities. This occurred at the First National Symposium on Accommodating Adults with Disabilities in Adult Education Programs during the 1996 National Association for Adults with Special Learning Needs

(NAASLN) Convention. The convention focused on laws concerning adults with disabilities centered on educational issues, learning disabilities, and testing modifications along with discourse on relevant court cases to assess judicial interpretation of said issues (Wilkinson & Dresden, 1997).

Most of the research concerning accommodations, a tangible part of support services addressing the needs of students with disabilities, has taken place evaluating primary and secondary education, with little assessment of services for students with disabilities on the postsecondary level and beyond (Shriner, 2000). DaDeppo (2009) noted several laws have contributed to the increase of individuals with LDs accessing higher education. The Individuals with Disabilities Education Act (IDEA) of 1990, amended in 2004, the Americans with Disabilities Act (ADA), and Section 504 of the Rehabilitation Act of 1973, contain provisions that have stimulated the increase in attendance of students with LDs at institutions of higher education. For example, IDEA requires transition planning and the participation of the student in such planning. Section 504 of the Rehabilitation Act and the ADA require that institutions receiving federal funding provide reasonable accommodations to college students who meet eligibility for having a disability.

However, postsecondary outcomes of individuals with LDs, including attendance at and graduation from institutions of higher education, continue to lag behind those of their nondisabled peers, particularly at 4-year institutions. ADA law pertaining to higher education concerning rights of students with disabilities falls under civil law stemming from the Civil Rights Act of 1871 since IDEA applies only until an individual student

turns 21 years of age (Chun, 2009). Pertaining to origin of ADA law, Chun (2009) stated:

Originally adopted as Section 1 of the Civil Rights Act of 1871 and known as the “Ku Klux Klan Act,” §1983 was enacted to help combat racial violence after the Civil War via provisions of the Fourteenth Amendment, providing a civil remedy in federal courts to individuals whose constitutional rights were violated. Today, §1983 is the primary means of enforcing federal statutory and constitutional violations. (p. 465)

Congress passed The Rehabilitation Act in 1973. Section 504 was one provision of this Act which provided that:

No otherwise qualified individual with a disability in the United States . . . shall, solely by reason of her or his disability, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. Practically every school district in the United States receives federal funding. Thus, §504 widely impacted public education. (LaNear & Frattura, 2007, p. 100)

The National Joint Council for Learning Disabilities noted:

It may be argued the perennial floodgates will be opened and the cohort of students with disabilities receiving academic accommodations will increase. However, the original intent of the law still stands. The impact of an individual’s disability on functional ability should be the main focus to determine what a reasonable academic accommodation is. The critical issue then becomes the determination of the impact of a

disability on a student's functional performance, and demonstration of the need for a specific accommodation. Students receive a Summary of Performance (SOP) document when they graduate from high school. Disability service personnel in postsecondary programs need to consider whether the SOP can provide data on the appropriateness of accommodations. (NJCLD, 2007, pp. 147-148)

Review of Literature

Current issues concerning students with learning disabilities go back more than 30 years with analysis and understanding of data from 1985-2000 on postsecondary education services for students with LDs. Program factors examined included: definition of learning disability, characteristics of adult learners, type of institution, special admission procedures, assessment services, program accommodations, support services, institutional adjustments, instructional staff training, direct service staff training, and program evaluation. Although 42 years have passed since the passage of the Rehabilitation Act of 1973, many of the recommendations and requirements of Section 504 are not being addressed in the literature. Successful transitioning of high school students to college is a main outcome of what is considered a successful process for students with disabilities. For students to succeed on the postsecondary level it is paramount they are trained to advocate for themselves effectively by knowing their academic strengths and skill deficiencies to seek appropriate support (Mull et al., 2001). This review assessed educational institutions policies and procedures pertaining to academic support services for students self-identifying with learning disabilities. Shriener

(2000) found studies pertaining to students with disabilities focused on primary and secondary school accommodation issues.

Since 2001, there has been little noticeable change concerning services, knowledge of student needs, or support services for students with LDs in college programs (U.S. DOE, 2012). Students with disabilities researching colleges should understand what services colleges are required to provide in comparison to what colleges may choose to offer for academic support services. Colleges are required by law to provide accommodations to students identifying disabilities and providing documentation (Lewis, 2008). In relationship to academic support services and what the law requires Grossman (2001) stated:

Before adoption of America's anti-discrimination statutes related to disability, most institutions of higher education were conforming participants in a society that, by indifference, prejudice, or structure, excluded individuals with disabilities from nearly every aspect of human endeavor. Several federal laws protect students with disabilities from discrimination by institutions of postsecondary education; the primary ones are Section 504 of the Rehabilitation Act of 1973, which applies to all colleges that receive federal financial assistance, and the Americans with Disabilities Act (ADA) of 1990, which applies to three primary groups: employers; government entities, such as state universities; and private entities that serve the public. (p. 1)

Local and state level confusion of education law and policies concerning accommodations is confounded by the limited knowledge within postsecondary

education and the disability field on what services and specific accommodations are required. Research shows, interpretation of ADA legislation and level of support with accommodations for students with learning disabilities vary in effectiveness among postsecondary programs (Lewis, 2008). Although much has been done to improve support services for students with disabilities overall, there is a need for more research to increase understanding of services required to effectively impact academic success for postsecondary students (O'Neill et al., 2012).

Demonstrating variance in postsecondary accommodations, the University of North Carolina-Chapel Hill turned down only one applicant for disability services, including accommodations. By contrast, the University of North Alabama turns down half its applicants for disability services, according to an estimate. If increased percentages of data concerning students receiving accommodations on the postsecondary level were made available for analysis and assessment, the rates of college refusal would be easier to measure. (Vickers, 2010, p. 8)

With increased clarity in educational institutions understanding the needs of this growing postsecondary student segment, across programs and states, we could experience significant gains in students with disabilities retention, improved GPA, and program completion (Vickers, 2010). In addition, it is understood that many academic programs and states will need federal financial support in order to increase necessary services (Erisman & Gao, 2006). The lack of data concerning students with learning disabilities and accommodations demonstrates the need for a more cohesive system, procedures, and

oversight pertaining to provisions and responsibility on the postsecondary level from state to state (Erisman & Gao, 2006).

Students who were eligible for services under IDEA 2004 are not automatically eligible for services under Section 504 and ADA in college and university settings. In most cases, postsecondary disability service providers interpret Section 504 and ADA guidelines to mean that a specific diagnosis with a clearly established functional limitation in a major life activity is required. However, kindergarten through secondary (K–12) education, states use a variety of terms (e.g., perceptual/communication or neurological impairment) that may not be readily familiar to postsecondary institutions. Furthermore, once eligibility for special education is established, states or school districts may not require a label, or may allow the option of not specifying a disability category. Within higher education, processes to evaluate the need of accommodations and services for students with disabilities are more fixed. Students seeking support services must demonstrate a history of services and/or accommodations used and documentation must be from services provided within the past three years for consideration.

Accommodations are for students with disabilities to close the gap in academic achievement between mainstream students that are governed by ADA law for students beyond K-12 education. As for diagnosing and providing services for this growing segment, there is no single test to determine whether a child has a learning disability and a number of scale testing instruments are used across the country. Psycho-educational evaluation instruments were reviewed for this study, a variety of intelligence and educational testing tools are used by schools and private organizations with specialists to diagnose the level of disability of students within the United States (Ross-Kidder, 2016).

Students diagnosed and having documented disabilities at the college level must present documentation to campus disabilities offices for review and academic support services decisions that are determined on a case by case basis. Documentation must be considered recent which usually translates as no older than 3 years since diagnosis was last documented. Depending on the college, the self-identifying student with a disability seeking academic support services may have to contact their prior college(s) or high school and request those documents be forwarded to the current educational institution for verification.

Colleges vary in the decision-making process and some are known for being more liberal than others in assigning support services based on documentation review. Some colleges have formed review committees to increase objectivity within the process concerning decisions confirming the need for supports and provision of academic support services for students with disabilities, instead of relying on a single person to make these decisions on a case by case basis. College campus creation and implementation of committees to assess academic support need increases review objectivity, improving decision outcomes. The formation of an academic support services committee to determine the needs of students with disabilities has been implemented at Rutgers University (Vickers, 2010). Creation and implementation of committees to assist with academic support service allowances support the theme of the case study to improve and increase academic support services for postsecondary students with learning disabilities towards degree program completion.

A study of faculty willingness and understanding of students with learning disabilities found substantial differences in attitude between faculty with prior support

services training and those without matching past research outcomes. Training faculty so they can better support students within disabilities may play a major role to ensuring students receive a richer educational experience. However, faculty with prior training were not found to more readily alter course materials for students with disabilities (Lombardi & Murray, 2011). Instructor support along with technological support aides increases academic performance for students with LDs. Providing access to computer writing software programs increases outcomes so that there is little difference in student performance of students with disabilities as compared to mainstream students. (Schumaker & Deshler, 2009).

To date, there is limited empirical data demonstrating the usefulness of operating program services on retention and graduation rates among college students with learning disabilities within the United States. In addition, there is a negligent level of data to guide college program planning to support students with LDs with academic support service offerings, which vary widely from campus to campus, affecting the level of support students received, thereby impacting academic success (Erisman & Gao, 2006; Mull et al., 2001). The number of students impacted continues to increase as more are assessed as learning disabled (Cortiella & Horowitz, 2014; Vickers, 2010). There is an increased need of academic support for students with disabilities, those of which represent approximately 9% of the total postsecondary population. The number of students with LDs attending colleges and universities has increased as a result of the efforts of postsecondary institutions to provide more support, services, and transition planning. Research reviewed for this study discussed the need to gather additional data covering academic support services for students with learning disabilities in higher

education, with a focus on gathering the perceptions of students with learning disabilities who receive these available services on the college level (Reinschmiedt et al., 2013; O'Neill et al., 2012; Sanford et al., 2011; Hadley, 2007).

A review of the literature led to studies, including a longitudinal study spanning six years (Sanford et al., 2011) designed to expand upon limited research concerning the academic support needs of students with learning disabilities within postsecondary programs and their academic outcomes. Researchers from studies reviewed, noted at times to selecting methodology due to time constraints, and therefore recommended future research should focus on gaining more input directly from student perception in addition to quantitative assessments which cannot tell the whole story. The following researcher was the first reviewed for the case study literature review.

Hadley (2007), using a mixed method approach at a small Midwestern 4-year college, found that identified students with learning disabilities excelled academically with appropriate academic support tools that were available on campus. Students identified as having dyslexia or reading problems were selected for the study, having responded to a letter from the Director of OSD (Office for Students with Disabilities) to participate in the study.

Hadley (2007):

Participants were placed in an initial focus group to discuss their transition from high school to college. Ten students, eight females and two males, began the study in the winter semester after completing one semester of course work. Researchers collected data through individual student artifacts, focus groups, and semi-structured individual interviews, ensuring

triangulation, which required data to be gathered from multiple sources and through multiple methods. Student artifacts included class schedules, copies of written assignments for their classes (which included grades and faculty comments), class syllabi, and any tutoring reports. The primary researcher collected a portfolio of writing assignments from each student and comment sheets that professors used to provide students feedback on their writing. From these, the researcher gleaned information about students discerning relevant information from class lectures and taking effective notes in class (p. 11).

Hadley (2007) focus group questions were based on Chickering's (1969) first vector of developing competence. Student study participants shared how they perceived themselves developing the skills they needed for college level work. The second focus group addressed Chickering's third vector of developing autonomy. Students discussed their feelings concerning challenges presented to them in the college setting and the services they needed:

Two focus groups were conducted during the second semester of the students' first year and during fall semester of their sophomore year. Individual interviews were conducted during the second semester of the students' first year. Focus group discussions and individual interviews were audio-taped and transcribed for analysis. (Hadley, 2007, p. 11, para. 5)

During the semi-structured interviews, students responded to Chickering's second vector—managing emotions—in individual interview sessions. The

students discussed their communication with their professors regarding their assignments (Hadley, 2007).

Students interviewed shared that they found it essential to use academic support services in transitioning from high school to a higher education academic setting. All the students reported feeling blocked in progress by college writing and sought support for assignments by requesting extra time for tests, writing assistance, and assistance from note-takers. As a group, the students were critical of the level of accommodations available and felt stymied to meet academic goals with such limited services. Most tried getting support on several occasions, specifically from the university writing center and expressed dissatisfaction because it was staffed by upperclassmen, rather than learning disabilities professionals with the expertise necessary to assist them. All the students noted they used the extra time accommodation for testing on a regular basis and emphasized its importance with a few finding extra time specifically helpful during written exams or in-class writing assignments.

Hadley (2007) noted that with more students with LDs enrolled into postsecondary programs it will become increasingly important to meet their academic support service needs by assessing current programs routinely. The creation and implementation of support services designed by drawing from students' feedback as to what works to effectively gauge services to support student retention and completion of degree programs is required. For college administrators and parents to best support students with disabilities, they must help in preparing students to self-advocate by assisting them with increased understanding of existing college support service offerings and their individual disability requirements. The importance of postsecondary

institutions and programs to provide diagnostic testing, academic advising, subject area tutoring, and counseling with programs should be staffed by LD professionals, advisors and tutors (p. 12).

Hadley's (2007) mixed method study is important in verifying the need for effective academic support services for students with learning disabilities at the college level. Past research noted little research within higher education concerning students with disabilities (Shriner, 2000).

The following anchor studies guided the case study research, assisting with creation of the three research questions which involved focused interviews and collection of archival data. Prior research has shown the importance and correlation between academic support services for students with disabilities and college academic outcomes.

Sanford et al. (2011), conducted a quantitative longitudinal study conducted at the University of Oregon. They found increased enrollment for students with disabilities mirrored the national average. During the five years studied, students with disabilities enrollment increased by approximately 20%, reflecting national trends. During the study there were 763 graduate and undergraduate students with disabilities, representing approximately 4% of the student population. Although these rates fell below the national average they were consistent with participation in selective 4-year universities. Of the students with disabilities, 63% were diagnosed with a learning disability or ADD and another 15% with a psychological disorder. Policies regarding assessment of students with disabilities have outpaced practices and, perhaps, legal interpretations of their suitability when attached to student participation and performance. Students with learning disabilities in higher education have lower completion rates and tend to shy

away from 4-year programs. The majority of students with disabilities enrolled in higher education programs are more likely to attend 2-year programs and community colleges (37%) than 4-year colleges (15%). Overall postsecondary enrollment varied depending on disability type with students with LD status at 60.9% for any postsecondary attendance. Students with LD percentages attending 2-year programs were at 41% compared to 15.5% of students with LD attending 4-year colleges. Within 6-year period of the study, 38% of young adults with disabilities had graduated or completed their program in comparison to 51.2% of peers in the mainstream population. Study findings demonstrated the need to modify accommodations receiving the lowest scores in improving student outcomes.

The Reinschmiedt et al. (2013) study population consisted of 455 students registered with disability support services at a Midwestern university. A total of 116 students completed the survey, for a response rate of 25%. A quantitative method was implemented to measure student satisfaction focusing on the relationship between subjective well-being and onset of disability for college students with disabilities, and satisfaction. Increased understanding of student satisfaction levels would assist in colleges gauging effectiveness of accommodations offered.

Reinschmiedt et al. (2013) incorporated the following;

The survey implemented was the Disability Related Services Needs and Satisfaction questionnaire designed to measure the need for and satisfaction relating to support services. Data analysis was quantitative and included nonparametric inferential and descriptive statistics (p. 5)

Findings revealed participant well-being and the ability of students to graduate from high school was impacted by the time the disability was diagnosed, and student satisfaction of academic services provided. The diagnosis occurring before or after the age of five (early or late onset) was the litmus guide. Researchers found students who had early onset of a disability were more adept with self-advocacy as compared to students with congenital issues who were more adept in living with the disability. Findings led to three recommendations.

First, to increase effectiveness of accommodations, college administrators should modify services receiving the lowest scores gathered. Second, findings demonstrated that online web-based surveys may not be the most impactful. Printed surveys offered from an actual person improved participant results. In addition, physical assistance to assist participants with reading or writing responses could be provided to participants with impairments. Third, the final recommendation related to future studies measuring students' satisfaction with accommodations (Reinschmiedt et al., 2013).

Such studies could go beyond the scope of this investigation and explore the reasons why students reported varying satisfaction scores. By incorporating a qualitative approach, students could be able to express why they were more or less satisfied with certain accommodations. For example, future studies can incorporate questions that contribute to understanding the role that functioning and accessibility plays with students more or less satisfied with accommodations. These future studies may produce more comprehensive results that could give policy makers

and disability support personnel directions to implementing more effective services. (Reinschmiedt et al., 2013, p. 8)

Reinschmiedt, et. al. (2013) tied directly to the focus of this case study implemented via a mixed method to inform the field pertaining to students' perceptions of services not readily gaged from a quantitative approach found with the majority of studies to date concerning students with learning disabilities academic support services in postsecondary programs and student satisfaction.

The rationale for the O'Neill et al. (2012) research was built on studies showing that with the increased enrollment of students with disabilities, their academic support needs must be vetted more via collecting student perceptions of services to effectively impact academic success. They surveyed students via college archival data choosing participants based on those who had registered for accommodations at the college disability office. With a purposeful sample of 1,289 from a combination of three colleges they developed a questionnaire to collect demographics, disability, age, gender, etc., to assess the effectiveness of support services on graduation rates.

Quantitative study results found that 74.2% of students with disabilities who had received academic support services graduated with variances in percentages due to type of disability. Students with physical disabilities averaged the highest at 77% and those with cognitive disabilities at the second highest with 73.8%. Students between 23 and 30 years of age graduated at 5.4 times more than those between 15 and 22 years of age.

Limitations of the study included: (a) impact of a student having a second disability impacting outcomes was beyond study limits, (b) a lack of comparison group of students not registered for support services, and (c) the inability to collect qualitative data

from students and additionally no method of identifying the effect of interactions with professors, support services personnel, family, and others in their daily activities.

O'Neill et al (2012) found classroom assistance and note taking increased retention and completion. Therefore, future studies should increase research on academic support services impacting graduation rates of students with disabilities and use findings to create strategies to improve campus academic support services, curriculum, campus accessibility and disability services (O'Neill et al., 2013).

The study's purpose pertained to gaining increased understanding concerning support services with effectiveness gaged via the perception of the student experience (Smith, Flowers, & Larkin, 2009). With assessment of incentives and professional development of faculty to increase levels of effectiveness of student centered programs at the local level (Tinto & Pusser, 2006). The researcher for this study hoped findings would assist with clarity to best assist this growing segment towards increased degree completion percentages and inform understanding to possible implementation of cohesive data sharing infrastructure in collaboration towards interconnected assessments (U.S. DOE, 2012).

The study focused on academic support services provided for self-identifying students with learning disabilities (ADD, ADHD, and dyslexia), within a small private college. Further evaluation is required to clarify modifications, pertaining to state and federal policies, to increase effectiveness of individual educational institutions' services. The goal is to increase standards and cohesion at the local, state, and national level towards increased program completion rates in relation to mainstream student percentages. Despite the new emphasis on developing statewide goals for postsecondary

education, accountability reporting still tends to be primarily at the system or institutional level. Only a few states, most notably Kentucky and Washington, have explicit statewide measures of progress towards goals (Erisman & Gao, 2006).

Data retrieved from semi-structured interviews was to be coded in an attempt to find themes within the shared phenomena of the participants (Smith et al., 2009).

Chapter Summary

Students with learning disabilities are a fast-growing segment within higher education and are found in every socioeconomic group, many have limited finances available to put toward additional fees for college academic support programs outside of regular tuition rates. This chapter detailed the history of academic support services nationally and for all levels of education, with emphasis placed on the need of increased studies focusing on students with learning disabilities within higher education.

Historically studies demonstrate that the majority of school or institutional evaluations to gauge impact of support services for students with disabilities are found within primary and secondary educational institutions (Shriner, 2000).

Findings noted the need for more qualitative studies focused on college students with learning disabilities since the majority of research has been completed with quantitative methods. Prior researchers found the need for increased knowledge on student perception of academic support services from students with learning disabilities in college settings. There is a need to inform the field and assist with increased effectiveness of evaluation and implementation of academic support services that students find helpful in influencing retention and successful completion of academic programs.

Chapter 3 includes detailed information concerning the mixed-method case study implemented based on literature review findings. Study location, population, method, data collection, and assessment are explained to clarify research procedures.

Chapter 3: Research Design Methodology

The purpose of this chapter is to describe the study location, study population and methodology chosen to gain increased understanding of student perception concerning academic support services to inform the field (Creswell, 2009). The specific study site program is referred to as the SLD Program or program within the study in order to safeguard the protected pool of students' identities involved within this case study. SLD Program refers to the campus-based academic support services program implemented to academically support retention and degree completion rates for enrolled students with learning disabilities. Research design was a mixed-method approach case study based on anchor study findings and recommendations which directed the study research questions, detailed in Chapter 2. Chapter 3 includes the following case study methodology design sections: general perspective, research context, research participants, instruments, data analysis, and a summary of the methodology.

General Perspective

The Comprehensive Assessment and Evaluation of Students with Learning Disabilities by the National Joint Committee on Learning Disabilities (NJCLD, 2007) recommended that future studies focus on student perceptions regarding learning disability program support services and best practices concerning assessment procedures linked to student retention and outcomes. The majority of research to date has applied quantitative approaches, researchers (Reinschmiedt et al., 2013; O'Neill et al., 2012) recommended increased qualitative approaches to better understand college students'

perceptions of the quality of support services for students with learning disabilities provided at colleges and universities. Therefore, the implemented mixed-method case study approach incorporated interpretative phenomenological analysis (IPA) semi-structured interviews and assessment of archival data evaluating a program's effectiveness.

From the readings, it was ascertained the case study methodology should involve some type of program evaluation looking at themes found to improve support services offerings and effectiveness based on student perception. The relevant theory was critical theory (theory informed) using interpretative phenomenological analysis (IPA) concerning self-identify students with learning disabilities in higher education.

The case study approach was incorporated in order to complete a more comprehensive evaluation of the success of a program implemented to academically support students with learning disabilities. Previous studies (O'Neill et al., 2012; Hadley, 2007) found and noted within recommendations and limitations, the ability to gain feedback from program personnel or faculty working directly with students may have provided increased understanding as to academic support services effectiveness. Meeting student academic support services needs leads to higher retention and degree program completion in comparison to campus-wide undergraduate student population completion rates.

Since case studies may be exploratory this approach fits the goals of this study since the researcher specifically wanted students enrolled within the SLD Program and program personnel's perception pertaining to the effectiveness of a program. The study was designed to obtain in-depth understanding of services and accommodations deemed

useful by students the program was created for and from those responsible for implementation and provision of services provided.

The case study approach (Yin, 1994) is one of several methods which may be used within a social science study, including: surveys, histories, and analysis of archival information. Naturally, as found with any method, each has its benefits and limitations. Yin (2014) shared that the relevance of research situations for each of the possible choices have traditionally been listed in descending order of importance, with the case study approach last. Historical order places methods as follows: experiment, survey, archival analysis, history, and case study. Yin (1994) indicated that case studies have been found appropriate where research involved a contemporary issue facing a problem to be solved involving qualitative data collection. The researcher, in choosing an approach, should consider the research questions to be applied, researcher environmental control of the behavioral events, and the overall focus type – is the issue to be studied current in time frame or based on historical experiences. Yin (1994) found the following causes for concern pertaining to use of case study design within researchers. First, that the researcher may enable biased views while collecting data which influences the findings and conclusion of the study. The second concern is the belief that the case study approach offers too little for scientific generalization, meaning that findings from a case study are unable to find evidence applicable to defining solutions to issues of the same type within a larger frame. A third argument is that overall, case studies take too long to complete, ending with huge, incomprehensible papers. Yin (2014) defined what the case study method is in two parts as it evolved over the four previous editions of his book. Starting with the scope (Yin, 2014) stated:

“A case study is an empirical inquiry that

- Investigates a contemporary phenomenon (the “case”) in depth and within its real-world context, especially when
- The boundaries between phenomenon and context may not be clearly evident” (p. 16).

Yin (2014) part one separates the case study approach from the other research methods previously discussed. The experiment approach is designed to remove the experience from its environment, focusing only on the issue as presented by the researcher with a few specific variables, with the environment where the experience happens totally ignored, controlled by the experimental laboratory location. A history approach does incorporate the issue concerning experience and environment but is normally found within a study approach involving non-contemporary trials. Last, the survey approach has difficulty curtailing the number of questions within the survey, thus increasing the number of questions to be analyzed, making the survey approach limited in its ability to research the experience within context.

Limitations of the case study method have been identified by Soy (1997):

Critics of the case study method believe that the study of a small number of cases can offer no grounds for establishing reliability or generality of findings. Others feel that the intense exposure to study of the case biases the findings. Some dismiss case study research as useful only as an exploratory tool. Yet researchers continue to use the case study research method with success in carefully planned and crafted studies of real-life situations, issues, and problems. (p. 1)

The case study incorporated semi-structured interview questions following an IPA within the qualitative portion of this mixed-method study to inform the field. From the five qualitative approaches available (e.g. Creswell, 2013) (i.e., narrative research, phenomenological research, grounded theory research, ethnographic research, and case study research), the researcher applied an IPA method to increase understanding of students' perceptions of program services. As noted by Murray and Chamberlain (1999):

The aim of interpretative phenomenological analysis (IPA) is to explore in detail the participant's view of the topic under investigation. Thus, the approach is phenomenological in that it is concerned with an individual's personal perception or account of an object or event as opposed to an attempt to produce an objective statement of the object or event itself. At the same time, IPA also recognizes that the research exercise is a dynamic process. (p.218)

The IPA method is an appropriate design for exploring college student perceptions of disability services for four reasons. First, applying an IPA approach would provide a richer source of ideas in interpreting the lived experiences of students who used disability services. An IPA approach would allow for a deeper exploration and understanding of how the academic progress and overall life experiences of college student participants were impacted by their use of disability program services and classroom accommodations (e.g., Murray & Chamberlain, 1999).

Second, the IPA method assisted with gaining in-depth knowledge of students' perceptions to inform on what works, as noted by actual users of support services offered. Given previous research an IPA study was appropriate since the method involved

interviewing participants to gain insight into student perception of academic support services provided from a formal campus program created specifically for enrolled students with learning disabilities.

Third, the IPA method is also ideal for developing themes which may inform policy (Fade, 2004). Fourth, the IPA method is an ideal approach for advocating or providing a voice for marginalized groups such as students with learning disabilities. From an individual standpoint data shows students' who earn a bachelors' degree will earn \$1 million more over a lifetime than workers with just a high school diploma, and the gap is growing (Tinto, 2004). This research hoped to advocate for more appropriate student-centered and effective accommodations and support services for college students with learning disabilities.

A weakness within IPA studies is found in the importance of choosing participants matching in experience and familiarity of the phenomena being studied. Choosing the participant pool of candidates is important in guaranteeing those selected have a stream of reflection from a singular phenomenon (issue) to allow for a common understanding as participants reflecting upon their experiences pertaining to the subject being studied (Creswell, 2013). To avoid this dilemma, a method may choose focus groups instead of individual interviews. However, while focus groups are excellent in gathering data, especially in areas considered taboo or in new domains, sometimes data has been gathered seeking answers within a specific area of phenomena which may be best uncovered using individual interviews without possibility of chaotic audio chatter from a group discussion (Kvale & Brinkmann, 2009).

The study was designed to explore the perceptions of students with LDs who successfully utilized classroom accommodations and other disability support services within the SLD Program implemented to support this specific campus demographic in obtaining their college degrees. Specifically, the study was designed to explore college students' perception of disability-related classroom accommodations and other support services provided within an academic support program created for students with LDs at one private college (hereafter referred to as the "SLD Program"). The researcher, based on review of previous literature, created three research questions guided by said review and wanted to incorporate an approach which would allow for inclusion of a variety of data collection and review within one evaluation.

The case study lent itself beautifully to this researcher's three-pronged approach. The three-pronged focus included: semi-structured IPA interviews including an enrolled SLD Program student, interviews with SLD Program personnel, and review of the SLD Program and campus-wide National Center for Educational Statistics (NCES) undergraduate student archival data to compare demographics and retention rates to inform the field. Case studies (Yin, 1994) within research, have been implemented in numerous evaluations from policy and public administrative research to management studies and social work. As noted by Yin (1994), the case study approach must meet the needs of the particular study to be carried out, taking into consideration the research questions, time period (current or historical phenomena), and sources of evidence.

The first two research questions within this case are *what* type questions, however the questions are based on the perception of the person being interviewed, not on quantifiable data. The third and last research question within the case study was focused

on review of archival numerical data. However, since the case study approach may also be applied within a quantitative survey type approach, the case study was an appropriate method choice since a variety of sources of data collection were applied towards findings to inform the field.

The study was guided by the following research questions:

1. What are the reflections of SLD Program students on their direct experiences with program academic support services provided during their college years? (e.g., Reinschmiedt et al., 2013)
2. What are the perceptions of SLD Program personnel concerning academic support services provided for students with learning disabilities? (e.g., O'Neill et al., 2012)
3. How do the retention rates of the SLD Program students compare to non-SLD Program students based on archival institutional data? (e.g., Sanford et al., 2011)

Research Context

The study was conducted on the campus of a small private liberal arts college in New York State within 30-minute proximity to NYC and accredited by the Middle States Commission on Higher Education (MSCHE). Concerning this case study, the selected campus was willing to assess student need pertaining to academic supports and align with the researcher seeking to evaluate a program in order to add to administrative knowledge identifying more effective means of evaluating student accommodations and services within a specific program created to academically support students with learning disabilities.

Leading up to the case study the college had 1,037 students enrolled including associate, undergraduate, graduate, and adult education programs, with 944 enrolled as undergraduates. Degree undergraduate program offerings include: biology, business, teacher education, English, health studies, liberal studies, nursing, radiologic technologies, social sciences, and social work. Graduate degree programs include: business leadership, accounting, special education, and arts management. Additionally, the College offers Adult Education degree programs: Bachelor of Arts (BA) in behavioral sciences, Bachelor of Science (BS) in business administration, Bachelor of Science (BS) in health care administration, Bachelor of Science (BS) in health studies, and Associate of Arts (AAS) in Liberal Studies. The campus also consisted of an SLD Program (for students with learning disabilities) designed and implemented to provide academic support services for enrolled students identifying as having learning disabilities.

According to campus institutional research the SLD Program, under evaluation within the mixed-method case study, was implemented in July 1993 to attract high school students diagnosed with learning disabilities whom administrators felt would benefit from a structured program to support specific needs for academic success and degree completion. Enrollment into the SLD Program begins prior to the first college year. The SLD Program annual fee of \$6,000 is in addition to annual academic program cost and/or housing. Enrolled SLD Program students may be eligible for financial aid. Annual SLD Program enrollment is limited to 18 new students each year to maintain familiarity between students and staff. SLD Program participating students are fully immersed in campus life and activities.

According to the SLD Program, students receive the following services:

1. Individualized learning strategies,
2. Weekly, one-hour group sessions to improve development of individualized learning strategies; and a
3. Minimum of two additional study sessions per week with program staff to support current course requirements. (SLD Program Institutional Research, 2015)

SLD Program accommodations include textbooks on tape, test-taking modifications, and assistive technology. Directed by a licensed school psychologist who was instrumental in creating and implementing the SLD Program 24 years ago, the SLD Program is geared towards improving students with learning disabilities individual learning strategies and academic success within a warm and supportive setting, to enable student growth in self-advocacy, with tools to become more independent during college and beyond (SLD Program Institutional Research, 2015).

Research Participants

The pool of SLD Program students each identified as a student with learning disabilities and were therefore considered a special population concerning research protocol. Care was taken to protect their identity and personal information within the study while gaining participants, collecting data, and with dissemination of findings.

To remove the possibility of study bias, initial contact introducing the study to the pool of candidates came from outside the SLD Program personnel. The SLD Program Director emailed the list of student contacts to the formally chosen campus Alumni Office Director, chosen with support for this study by campus administration. In keeping

with Institutional Research Board (IRB) guidelines pertaining to protection of identity and personal information of special population study participants, the researcher was not included within the exchange of emailed pool contact information in order to protect the special populations' privacy. Additionally, in order to protect the special population pool identities and personal information the researcher was not allowed to initially contact possible participants.

SLD Program students choosing to participate as interviewees would provide their positive and negative experiences related to use of learning disability academic support services while enrolled in college. From our study pool we had one student participant. The study pool was delimited based on the following pre-established criteria:

1. Having received at least 2 consecutive years of academic SLD Program support.
2. Received academic support from SLD Program between fall 2012 and fall 2015.

Communication of the study plan and reasoning with participants was carried out via email (Appendix A). Each student interested in participating, after receiving initial study overview, contacted the researcher directly, at which time the researcher forwarded the study introductory letter (Appendix B) and consent form (Appendix C). The study introductory letter (Appendix B) provided reasoning for the study, possible study benefits and risks, researcher contact information, and doctoral program personnel contact information. The consent form (Appendix C) contained demographic information to assist with study evaluation of program. In addition, the interview questions were included within the consent form (Appendix C) to familiarize student participants with

interview content prior to the interview. The student participant was informed via introductory letter and within the consent form, they could stop and discontinue involvement in the project at any time throughout the duration of the interview. An individual student interview took place on the study site, allowing for a facility that was comfortable for the interviewing process.

Time commitment for the student participant: including completion of consent form (Appendix C) answering demographic questions and study interview completion took no more than 1.5 hours. Completion of consent form (Appendix C) approximately 10 minutes and the study interview session approximately 1 hour to answer questions. It was also anticipated SLD program students choosing to participate lived and/or worked within 1-hour, round trip, to the campus. The total time commitment was approximately two hours for the student participant.

Instruments Used in Data Collection

In seeking in-depth and rich interviews from the participants, semi-structured questions were used, so they could be redirected based on participants' responses to each question, at any time, during the session. The researcher took time and effort to provide a private interviewing space for confidentiality and to provide a comfortable interaction to enable an in-depth telling of experiences (Creswell, 2013). Data collection instruments included: face-to-face interviews with student and program personnel using semi-structured questions (Appendix D and E) and archival data from the SLD Program and campus NCES data focused on undergraduate student retention rates within the following school years: 2008-2014. The first instrument detailed below includes participant

demographic and semi-structured questions formatted for face-to-face interviews, followed by archival data collected for assessment.

Demographic questionnaire (DQ). The DQ is a 5-item survey designed to gather enrolled student participants' background across five areas - age, college major/degrees, career choice, and number of semesters/years to complete college degree.

The interview protocol consisted of 27 questions adapted from Schander (2001) (Appendix C) for student participants to answer. The semi-structured interview protocol included four sections: (a) Understanding Disability, (b) Family Support, (c) Support Services, and (d) Perception/Quality of Life. The protocol was designed to ask the participants questions about their understanding of their learning disability status, helpfulness of program supports in attaining college degree, and perception of quality of life with completion of degree earning program. The areas of focus were included in the consent form (Appendix B) to first familiarize participants with planned discussion topics prior to the interview.

The semi-structured questions adapted from (Schander, 2001) (Appendix C) to guide interviews were divided into two areas: general participant questions and questions specifically pertaining to answering the three study research questions. Prior to interviewing participants, the researcher summarized the four key areas of the interview, so the student participant was aware of what to expect during recording of actual interview. Participant general history questions (11) area included: participant understanding of their learning disability, family overview, and reasons for attending college.

What is your specific learning disability? Do you have other disabilities (physical, mental health, learning)? When did you first become aware of a learning disability? Describe yourself in terms of strengths and weaknesses? What kind of support, remedial education, tutoring did you use prior to college? Family/friends overview: Are you aware of others in your family with a learning disability? Concerning your learning disability has family been helpful? Are your friends/significant others aware of your disability? If not, why? Reasons for attending college: Why did you go to college? Who else in family completed or is in college?

The interview questions (10) were adapted from Schander, (2001), in Appendix C, pertaining to research question 1 (RQ1) located within the student interview dialog within this chapter and Appendix D.

The interview schedule served as a flexible guide, while assisting with examples of best phrased questions and how to move from general issues to more focused ones. The sequence of questions served as a guide in gathering responses and probing for deeper understanding. During the interview, the researcher monitored participant behavior, especially when a participant became uncomfortable or upset with a particular area of focus. Being aware of participant behavior is an important researcher tool since you may need to redirect questions due to the level of participant discomfort. Additionally, the awareness of the researcher is important in guiding the line of questioning within the student participant and program personnel interviews to inform strategy and as a reminder of ethical responsibility towards participants (Smith et al., 2009). The semi-structured in-depth interviews of the SLD Program enrolled student participant and program personnel were recorded via a Handy HI digital recorder with a

removable USB chip containing the recorded audio data. Observational field notes, acquired during interviews also yielded rich background data located after each participant's interview.

In addition to the student participant and program personnel interviews with the director and a staff member, the researcher reviewed SLD Program and campus-wide NCES archival data to compare demographics and retention rates to compare the rate of degree completion between SLD Program students and mainstream undergraduate students. The study sought to gain quantitative correlational data pertaining to retention rates of SLD Program students in comparison to students with learning disabilities on campus not enrolled in the SLD Program. Archival data reviewed included all campus undergraduate students' outcomes focused on the years delimited within the study. The researcher reviewed demographic data for students within the SLD Program received from the program director. In addition to archival data as reported by the college to the NCES via the integrated postsecondary education data system (IPEDS). IPEDS collects data annually pertaining to college campus demographics and degree programs of undergraduate and graduate student populations including full-time and part-time totals. NCES then makes findings available to colleges through the IPEDS Data Center and also as aggregated data in various Department of Education reports. Annually, approximately 3 months after data collection is completed NCES/IPEDS updates data in the College Navigator database and sends each college a Data Feedback Report (DFR) to the institution's CEO/President (IPEDS, 2018).

Collected data has been archived by the researcher and will be kept for 3 years and then destroyed. Data collection and assessment was guided by the research questions

in locating themes. Chosen methodology enabled the researcher the opening to investigate factors that participants believe contributed to academic success and overall quality of life of enrolled students within the SLD Program to inform the field (Smith et al., 2009).

Data Analysis

Findings from the semi-structured interviews and field notes were assessed according to formulas recommended for IPA. The IPA procedure included (a) organizing the data, (b) reading and listening to data, (c) describing, classifying, and (d) visualization of data (charts, graphs) (Creswell, 2013). SLD Program and campus-wide NCES/IPEDS undergraduate student data was reviewed, evaluated, organized, compared, and displayed within tables to visualize case study findings.

Findings are represented in both narrative and application of charts and graphs to best emphasize similarities and differences in relation to reviewed anchor study findings which mainly focused on quantitative data as found in empirical archival data without human participants, to give in-depth perception concerning issues pertaining to academic support services for college students with learning disabilities. Since anyone reading the completed study was not involved in the data collection process it was important the full narrative of data collection and analysis be written in a comprehensive presentation systematic and persuasive to anyone reading the completed work for the first time (Smith et al., 2009).

Summary of the Methodology

The mixed-method case study approach incorporating IPA interview methodology, data collection, and analysis of activities were monitored and documented

for transparency and for participant confidentiality. The study began with obtaining the master list of the applicant pool for selection of study participants ($N = 9$). The student pool was initially contacted to participate in the study by the campus Alumni Office to safeguard students' identities as a protected class. Communication of the study plan and rationale with participants was carried out via email (Appendix A). Student respondents were notified and sent a consent letter (Appendix B) with first respondents choosing to participate in the study being numbered for identification for confidentiality during the duration of the study, by the researcher. A participating student interview was held on the campus site of the study, chosen to ensure a comfortable and quiet facility. The researcher planned for individual interviews not to exceed 1.5 hours to capture rich in-depth reflection. The participant was scheduled for an interview with date and confirmed via email. The consent form (Appendix C) was signed and collected prior to interviews and emailed back to the researcher. When the student participant arrived for the interview the four interview subject areas of the interview (which were written down) were given to the participant to review for clarity of study scope before starting the interview. Semi-structured interviews were used to guide participant interview focus.

Upon completion of interviews data was reviewed (audio, field notes). The researcher transcribed interview audio for visual presentation within the case study. The case study incorporated a student interview and SLD Program personnel; Director and staff member, to triangulate findings. Some anchor studies reviewed for this study discussed limitations concerning inability to gain feedback from college personnel (O'Neill et al., 2012) to inform their findings. In addition to interviews of SLD Program student and personnel, campus quantitative data was reviewed to assess retention rates of

student groups following the same delimited timeframes used for the study, as reported to NCES/IPEDS. Findings were interpreted, and data presented using narrative, charts, and tables within Chapter 4 of the case study.

Chapter 4: Results

Support services for higher education students who identify as having learning disabilities have become a college focus, seeking to attract diverse student groups. Higher education institutions offer a variety of services, depending upon the particular state, college, and status; private or public. Colleges seek to increase and or improve support service offerings to retain undergraduate populations with learning disabilities to maintain enrollment rates which have decreased across the board from private to public campuses (Couzens et al., 2015).

However, even as many college campuses seek to form and frame services in addition to programs supporting academic success for students with learning disabilities, (sometimes termed hidden disabilities), there remain barriers to achieving academic goals, especially in large universities. There continue to be many questions pertaining to the importance and effectiveness of support services. Concerns focus on the importance of assessments and related costs for assisting students with learning disabilities, to better support their disability related academic needs. Additionally, some students find the assessments needed to better service them invasive (Couzens et al., 2015). Although on campuses there are variations in the number of students identifying disabilities and seeking academic support, the SLD Program evaluated for the case study was specifically created to support incoming freshman identified and identifying as learning disabled, prior to college enrollment.

The case study was conducted in a small private liberal arts college within the New York tristate area, guided by three research questions initially posed in Chapter 1.

Research Questions

The study was guided by the following research questions:

1. What are the reflections of SLD Program students on their direct experiences with program academic support services provided during their college years? (e.g., Reinschmiedt et al., 2013)
2. What are the perceptions of SLD Program personnel concerning academic support services provided for students with learning disabilities? (e.g., O'Neill et al., 2012)
3. How do the retention rates of the SLD Program students compare to non-SLD Program students? (e.g., Sanford et al., 2011)

Analysis and Findings

Results represent the findings of a mixed-method case study, incorporating IPA methodology and quantitative archival data assessment to triangulate findings.

Methodology was chosen to increase the scope of data collection pertaining to students with learning disabilities and their perception of support services. SLD Program personnel interviews pertaining to thoughts of the effectiveness of program and services offered, and review of SLD Program and campus-wide NCES/IPEDS undergraduate student archival data to compare demographics and retention rates were included. This study sought an in-depth understanding of what students in college who identified as learning disabled find effective, pertaining to academic support services within a program evaluation case study.

Data collection was driven by the study research questions, which were formed from review of previous research. Findings from in-depth reflection from a currently enrolled SLD Program student who identified as a student with learning disabilities enrolled within a campus-based program specifically designed to support their academic success and completion of degree program are discussed. Perceptions of SLD Program personnel on overall program effectiveness and service offerings are provided, along with review of archival data pertaining to program enrolled students' retention and completion rates in comparison to campus-wide undergraduate outcomes via archival NCES/IPEDS data to inform the field.

Within the enrolled SLD Program student group, during fall semester 2016, five female and four male students were initially contacted, fitting the delimits set by the researcher for a pool total of $N = 9$. From this group total of nine, one female student and zero male students responded, to be interviewed for the study, a response rate of 11.11%.

Analysis and findings are presented as follows: student interview, SLD Program director interview, SLD Program staff member interview, SLD Program archival data review, and campus NCES/IPEDS data review pertaining to student demographics and retention rates.

Student interview. Hadley (2007) tied Chickering's (1969) vectors to semi-structured interviews focused on the following within student participant interviews: developing academic competency, managing emotions, and developing self-advocacy skills. Following IPA methodology within this case study, the interview followed a semi-structured selection of questions adapted from Schander (2001) seeking: findings concerning student understanding of their disability, perception of SLD Program support

services and tools, and reflections pertaining to support/guidance received from the SLD Program staff in helping them complete their degree program.

The participating enrolled SLD Program female student (participant's study identifier: QSF122) lived off campus, within walking distance and entered the program at the start of her freshman year. She had received 3 ½ years of program academic support services at the time of the case study interview. The face-to-face interview was completed at the study site campus library within a private study room. Interview participants consisted of the student and the researcher. The timeframe for completing the recorded interview totaled less than 14 minutes.

Qualitative interview data of the enrolled SLD Program student was evaluated and coded using a holistic approach. The interview audio was reviewed several times, transcribed, then added to tables organized by question and theme for easier reading. Data collection pertained to research question 1 with semi-structured interviewing questions were used as a guide to denote themes.

Tables 4.1 through 4.5 represent the participant's responses to interview questions divided into four major parts: Table 4.1 and Table 4.2 indicate general participant questions, Table 4.3 to Table 4.5 provide questions pertaining directly to research question 1: *What are the reflections of SLD Program students on their direct experiences with program academic support services provided during their college years?*

Within Table 4.1, the student participant shared background information detailing her specific disorder. Recalling issues experienced while in the fourth grade, these caused learning difficulties for her. After discussions with her mother pertaining to class work difficulties, the participating student was taken for testing concerning possible learning

disabilities, by her mother to a facility within Westchester County. Testing revealed auditory processing disorder (APD) and an additional disability: memory loss, which slowed her learning process. Exact causes for APD are still unknown, findings suggest possible connections to any of the following: premature birth, low birth weight, head trauma, chronic ear infections, and lead poisoning. People with APD hear jumbled and disordered sounds, affecting the brain’s ability to accurately process sounds of speech, impeding the ability to communicate (Understood.org, 2018).

Table 4.1

Participant’s Learning Disability

Participant: QSF122/Interview Questions	Participant Responses
1. What is your specific learning disability?	“auditory processing disorder and memory loss.”
2. Do you have other disabilities (physical, mental health, learning)?	“Language deficiency, started to talk at age 5.”
3. When did you first become aware of a learning disability?	Fourth grade (public school), could not repeat assigned passages in class, could not tell what words were on the page. Math was complicated, could not remember alphabet. Told parents about my difficulties in school and they had me tested at Blythdale Children’s Hospital.

Table 4.2 demonstrates the student participant’s perception of her strengths and weaknesses pertaining to academic performance from secondary school through last year of college, at the time of her interview for this case study. The participant also shared information pertaining to support services received during this timeframe in addition to

family history of disabilities, family support of her disability, friends' knowledge of her disability, and reasons for going to college.

Table 4.2

Participant's Perception of Disability

Participant: QSF122/Interview Questions	Participant Responses
1. Describe yourself in terms of strengths and weaknesses.	Weakness: Let my LD get in way of strengths; memory loss has held me back and made me afraid of myself. Strength: Very interpersonal (strong social skills), excel in psychology-based classes.
2. What kind of support, remedial education, tutoring did you use prior to college?	In middle school and high school was in Special Ed, had an IEP: Extra time for tests and assignments.
3. Are you aware of others in your family with a learning disability?	No one else in family has LD(s)
4. Concerning your disability has family been helpful?	Grandparents have been especially helpful, my Dad not very understanding of issues, coming from third world country, not very educated in understanding, could not really give needed support.
5. Are your friends/significant others aware of your disability?	Yes
6. Why did you go to college?	To further education, not only to get a job, I wanted to be knowledgeable in a specific area. Also, to defy chances of someone saying, you have an LD, you cannot do it. Now, I am graduating.
7. Who else in family completed or is in college?	Mom attended same college and has earned master's and doctorate degrees.

Table 4.3 pertains to research question 1 with the student reflecting upon actual classes, classroom accommodations, and assistive software provided by the SLD Program to support academic achievement. Student responses also describe a course which caused academic difficulty in particular, due to her disability, and actions taken by her, when these difficulties hindered course completion. Responses showed the student found extra time to be the most helpful class accommodation. Due to having auditory processing disorder course materials read to her were the least helpful.

Table 4.3

Participant's Perception of Accommodations

Interview Questions	Participant Responses
1. Do you recall any classes where you had academic challenges due to your LD? (identify problem classes)	Math was a nightmare, everything would be scrambled. I failed it two times.
2. What did you do when you had an academic difficulty with a class? (coping)	Did not give up right away, I identified the problem and asked for help.
3. Which classroom accommodations did you find most helpful? Least helpful?	Extra time and took every test in the SLD Program (very calming environment and gave me extra time).
4. Which assistive software/hardware accommodations did you find most helpful? Least helpful?	Least helpful: Reading the exam or having exam read to me does not make a difference.
	4. Participant did not give response

Within Table 4.4 the student recalled how the SLD Program and staff supported her academic success in addition to what services she recommended be added to support student academic achievement. The student participant reached out to program personnel

such as guidance counselors and mentors and recommended that additional SLD Program staff be hired with Special Education background to tutor program enrolled students.

Table 4.4

Perception of Program Personnel

Interview Questions	Participant QSF122 Responses
1. What role (if any) did SLD Program staff play in your academics while in college?	Like guidance counselors and mentors
2. What additional academic program services would you recommend added for current/future students with LD(s)?	Special Education teachers should be added to program staff, teachers who specialize in dealing with special education students, should be added to program. Everyone who helps students are trained to deal with us, but specially trained in special education should be added. There aren't any presently.
Response to the question above led to following questions:	
What is the staffs' background?	SLD Program director and program supervisor have backgrounds in Special Education but more should be added.
Who works with you in program?	Program director knows how to approach my problems (not psychological) so that I can learn.

Table 4.5, concerning self-advocacy and financial investment, demonstrates the student's perception concerning becoming more observant, analytical, and growing in interpersonal skills. The student found the financial cost of the SLD Program "absolutely" worth it and would recommend the program to future students.

Table 4.5

Self-Advocacy and Investment

Part D/Interview Questions	Part D/Participant Answers
1. As a result of the SLD Program, what individual learning strategies have you learned and applied?	Became more analytical and more observant
2. As a result of the SLD Program, what learned self-advocacy tools are you applying to become more proactive?	Interpersonal skills because we learn in different settings, not only in the classroom, in the field. The program gives more confidence in that my disability may slow me down but can't hold me back. I am leaving the program with confidence to do anything.
3. Given your financial investment in the SLD Program, was this a valuable service or experience?	Absolutely.
4. Would you recommend the SLD Program to future students?	Yes, outcomes, you get a lot out of it, students must apply themselves (work for it), they're not giving it away, but it is good for students like myself who need guidance. You leave college with confidence and a good head on your shoulders.

After the prepared interview questions were completed, the researcher had a follow-up question pertaining to the participant's coping ability. Researcher question: How have your coping skills changed since high school? Participant response: "I have matured a lot, learned how to control emotions around any difficulties I may be having. This college matured me, made me blossom" (student interview response: QSF122).

Now that we are done with the interview, is there anything you would like to add or discuss?

Not really, but I find your study interesting, in that people with learning disabilities are not recognized as much. Your study can give us confidence, we can do what we set our mind to, perhaps take more time, but we can do it. Sometimes treated like babies, not here, like elementary school I was in Special Education, but I wasn't a baby, I understood what they said I just needed more time. Many times, it's not even my disability, its' I didn't catch that. (student interview response: QSF122)

The researcher gained increased understanding as to the participant's thoughts and reflections concerning her individual struggle with disabilities in addition to sharing thoughts of how the SLD Program had supported her academic journey thus far. Findings also shed light on the intangible ways in which the SLD Program assists students in gaining confidence using tutoring skills to confidently complete academic course work in addition to learning how to advocate for themselves as they learn more about which tools and supports work best individually. The student participant graduated May 2017, with a bachelor's degree in social sciences.

SLD Program personnel interviews. The SLD Program had one full-time person at time of program personnel interviews. The interviews were held consecutively; participants were not present for each other's session with the researcher. Interview questions, totaled seven for program director and six for program staff member (Appendix E) adapted from Schander (2001) (Appendix C). Both interviews were completed at the SLD Program office on June 2, 2017.

SLD Program Director interview. The director was interviewed first, within a recorded interview time of 24:31 minutes. This was followed by an informal unrecorded

conversation of approximately 5 minutes where the director recalled gaining full-time college employee status within the past few years. Interview questions and responses from the program director are provided in Tables 4.6 through Table 4.8.

Research question 2 asked: *What are the perceptions of SLD Program personnel concerning academic support services provided for students with learning disabilities?*

As indicated in Table 4.6, the SLD Program director focused on his professional background pertaining to working with Special Education students. The director's total years of professional experience at the time of interview for this case study was more than 30 years. The SLD Program director was instrumental in the creation and implementation of the program 24 years ago. The director saw himself as a go between for faculty, parents, students, and the public, to facilitate the understanding of the needs of students within the program. He advocated for the students.

Table 4.7 concerns SLD Program funding and the future of the program; approximately 70% of program students require ongoing scheduling for test modifications (test-mods), hiring of more staff could manage scheduling. At least 40% of students coming to college are going to have or meet need for services pertaining to autism spectrum diagnosis. With increased funds the director would train staff to meet this need. In 5 to 10 years, the director would like the program to maintain small intimacy in number of students enrolled and physical size. More staff is needed but pay levels are low.

Table 4.6

Directors' Professional Background and Duties

Interview Question	Response
<p>1. What is your background pertaining to working with Special Education students?</p>	<p>I started as a teacher with bachelor's in teaching, then studied music in Boston, worked at Professional Children's School and became interested in school psychology and went back to get degree in Psychology.</p> <p>First job was in Newark, NJ, at Floyd Patterson School for maladjusted adolescents and worked with visually impaired. After that I pursued Doctorate while working at Pilgrim Psychiatric Center with very disturbed adults and young adults. Then Bronx Psychiatric where we used creative arts to help patients, with patients we created a number of plays and musicals. Followed by suburban school district as counselor for LD students/emotionally disturbed starting in 1986. In New Jersey with child study team as School Psychologist. Ages 5-12, assessing their learning needs. Kept job for 30 years, still have that job along with SLD Program Director position.</p> <p>In 1993, I was asked by the college to create program for LD, ADD, and any students with special needs. Have stayed with SLD Program since creation and inception. I have quite a few years of working with people across a wide span of disabilities and emotional variances. I consulted at a nursing home worked with senior citizens, so experience is from pre-school to 110 years of age.</p>
<p>2. How long have you worked as SLD Program Director?</p>	<p>From program inception to present.</p>
<p>3. What are your duties as director pertaining to students?</p>	<p>I have to keep all content, go between faculty, parents, students, and the public, I am middle management. I have to understand needs of the students and their expectations, advocate for them (At this point the director became full of emotion, his voice trembled). So, they get what the need. (Pause) Faculty here has been very supportive, very good. (Pause) They trust me. You have to have an element of trust. Sometimes colleges can't do this program because there is not enough of a trust or understanding. We have to give and take, learn to be flexible too, respect each other, I have that here, we do.</p>

Table 4.7

Funding and the Future

Interview questions	Responses
<p>1. If funds were unlimited, what would you add to SLD Program, such as: physical facilities, accommodations, staff?</p>	<p>1. All of us are part-time, believe it or not. We have seven people, all part-time. So, I would have college add one full-time person. We manage program and test modifications for all students. Approximately 70% of program students need ongoing schedule for test mods, such as extended time, test read. We know the kids, once they leave us as people, we still know them, we understand them. More staff so that they could manage test mods separately from us. We don't have a Kurtz-Wild program or Reid-Gold, programs that change text to speech, for anyone who has trouble reading.</p>
<p>Interviewers follow-up question: So, based on that, do you think most SLD Programs don't have training they would need to support these students?</p>	<p>The space is set up like a home, kitchen table, couch, so atmosphere dislike home. But more staff for scheduling, coverage. Here's the problem, every college, the next wave of students coming in will have Asperger's, on autistic spectrum. Each person on the autistic spectrum is so different and in college the idea is to have them pass academically but there is such a skill deficit that requires much more trained staff. Sometimes they need a shadow, we are not able to provide that. We cannot meet the needs of autism spectrum students. We could for some but for many we can't be, because you need staff trained to work with them in their social-skill deficit, get them integrated and that is the next wave, at least 40% of kids coming to college are going to have or meet Autism Spectrum diagnosis, I guess. That's just the way it is.</p> <p>They have specialized programs that you pay for that, that can meet those needs. If I was going to invest money I would have them trained to meet needs, it is difficult.</p>
<p>2. Where do you see the SLD Program in five to ten years?</p>	<p>I purposefully keep program small, I do not think we should grow beyond a certain student percentage, it's nice to maintain. I think it will still be here but it's nice to limit number of students, we meet needs but expanding beyond staffing or what students need, my staff has been very devoted. I have staff that started with me, staff here 10 years, staff have changed but most are committed to the work. We do not get paid a lot. I would hope in five to ten years there's at least one or two full-time staff with training needed to meet the needs of changing student population.</p>

As noted in Table 4.8, the SLD Program director's responses to program SWOT (strengths, weaknesses, opportunities, and threats) analysis questions found communication to be the key to program and student success; whether between faculty and program personnel, or between program and individual student's academic performance. The SLD Program director said, "We are able to get many people through college and to get them to think about what they are going to do afterwards." Due to SLD Program weakness; inability to be open for longer hours of tutoring due to lack of staff coverage. The program was open two evenings per week, and never open on weekends, at time of program personnel interviews for this case study. The program was deficient in tutoring staff with strengths in science related majors: physics, chemistry, biology. The director had hired a specialist for students with autism and wished he had more. When discussing program opportunities, the director stated, "People have to understand students need supports, they (college) trust us to do a good job, integrated yet independent, which is good." Concerning program threats, the program continuously made sure testing modifications were handled appropriately. Professors trusted them with exams; the program continuously made sure the program students understood the importance of ethical behavior within the program to maintain integrity.

Table 4.9 pertains to follow-up questions and responses within the SLD Program directors interview.

Table 4.8

Implementation and SWOT

Interview Questions	Responses
<p>1. If you could change any decision pertaining to SLD Program implementation, based on where program is now, what would it be?</p>	<p>Here's the secret to a program like this, you have to have communication between staff, professors, and students. We only know if something is wrong if student or professor tell us. We are left not really knowing unless we reach out to professors. The problem is we need ongoing consistent information to assist. We don't like to hear too late in a semester that a student never handed in assignments, it's too late to help him. So, we would implement ongoing communication, the problem with that is the student have right to privacy but at the same time are in a program knowing they need to reach out. To know issues and problems beforehand before they become problematic. I am happy with space and general set up of things.</p>
<p>2. What are the SLD Program strengths, weaknesses, opportunities, threats?</p>	<p>Strengths, we are able to get many people through college and to get them to think about what they are going to do afterwards. Incredible success record of people who want to work with us. Students get degrees, but does it serve them in the future becoming independent, move forward in their life? We hope so. Very good job at seeing students graduate, successful even if they leave us (transfer) that's ok because they may have different needs: beautician, computers, something the school doesn't give. College keeps transforming, we have nursing program, radiology. We also meet needs of kids with ADD, LD within specialized programs with their test mods, we also service them. We understand when they need encouragement. Good success record.</p> <p>Weakness are, we are open 9-3 pm Monday-Friday, two evenings a week until approximately 9 pm. But ideally, we would be open more evenings, staffing is an issue. Lack needed hours for students to come. No one is here on the weekend. Our staff know Humanities (course work), But we don't know much science, we don't know Physics, Chemistry, Biology. Lack staff academic specialist in science fields. We learn with the students as we help assist them. We can assist with general liberal arts. I hired a specialist for Autistic kids, wish we had more. Opportunities: People have to understand students need supports. They (college) trust us to do a good job, integrated yet independent, which is good. Threats: Making sure testing mods are handled appropriately and ethically, for example, we are trusted with course exams we must make sure that the professors trust us to keep test questions safe and the program students also understand the importance of ethical behavior within this program to maintain integrity.</p> <p>I asked for printer or computer, they will just buy it for us. We do not have much outreach to community. We could probably do more about educating people about these types of students. We are just holding our own, trying to make sure they get their needs met on a daily, weekly basis.</p>

Table 4. 9

Implementation and SWOT Follow-up Questions

Follow-up Interview Questions	Responses
Follow-up question 1: What about educating the faculty?	Yes, we are asked to do that every so often, we make presentations, update them on technology/accommodations, example; Pen that records your writing and when you tap it, it relays segment of lecture. A few program students use it. We keep faculty presentations general, never specific, to protect students' privacy. We still have kids who are strictly LD and then there are some who have more overlays, emotional anxiety, it's never just one: lack of confidence, different things combined with student needs.
Follow-up question 2: What about depression?	Yes, we keep counseling separate from the program. It's free on campus, if they choose to share with us, but we don't make it mandatory that they do. Students may come as much as they like. Some come four hours a day. They study and relax here, they talk to one another. We always keep finger on the pulse.
Follow-up question/#3: SLD Program students with overlapping diagnosis; depression, bi-polar, do you find more this prevalent, among certain students?	Well, we see it and work with it, it's not more or less increased. But the complexity, people know more than they used to. You understand when someone has a certain label. They usually have an IEP or 504 from high school and we try to honor whatever that is. Many times, a label may mention LD but in actuality it's much more problematic. We understand that primary diagnosis, many just have other issues of some kind.

SLD Program staff member interview. The interview with the SLD Program staff member totaled 22:13 minutes, Tables 4.10 to 4.12. Guided by research question 2: *What are the perceptions of SLD Program personnel concerning academic support services provided for students with learning disabilities?*

Table 4.10 pertains to the professional background and program duties of the SLD Program staff member interviewed for this case study. The staff member had 13 years of special education teaching and also worked as a school psychologist at time of the interview. They worked part-time within the SLD Program and had been with the program since its inception 24 years ago, at time of the interview for this study. They saw their role within the program to students as a counselor and tutor.

Table 4.10

Professional Experience and Duties

Interview Questions	Responses
Question 1: What is your background working with students with Special Education needs?	Special Education teacher for 13 years. So I have extensive experience, before Special Education I worked at treatment center for very disturbed kids who could not attend school. Wide variety of experience including school psychologist. I feel that experience is very important in working with college age/high school students.
Question 2: How long have you worked within SLD Program?	Twenty-four years, Part-time staff.
Question 3: How would you describe your duties within SLD Program with students?	My role here is as a counselor and tutor. That's the job description. Kid's need to feel comfortable with us in order to keep coming back, because we don't seek them out, say you have to come down, when they do come down and they are comfortable they do much better. So, they have a lot to say emotionally and that needs to be said. We are sought of doing two things at one time. Some have a lot of issues. But we find the ones who come build relationships and feel at home here, do graduate and do succeed.

Table 4.11 pertain to benefits of the program, retention rates, and staff perception concerning program SWOT analysis. Program staff member thought that building relationships between students and staff was key to retention rates and found the size of the program a strength and also a weakness concerning students attending, or not attending tutoring. Staff member saw opportunities when they thought about how to service needs of students on the autism spectrum which are quite different from current majority of students enrolled in program. The staff member did not see any threats to the program, at time of this interview.

Table 4.12 demonstrates the staff members responses pertaining to the future of the SLD Program. The staff member thought the program will exist as long as the college accepts students with individualized education programs (IEP) from secondary school (Stanberry, 2018). Professors learn to see the value of the program over time and that the assistive technology is helpful in student success. Through the program students learn how to socialize and self-advocate.

Table 4.11

Retention and SWOT

Interview questions	Responses
<p>Question 1: What would be most beneficial for students to stay in SLD Program, for retention?</p>	<p>Building relationships with program staff is key and knowing that with someone to talk to, with academic pressures and stress they will help you get through to accomplish goals. Having someone you like (staff) with program is important. I have students and other staff have students who prefer being tutored by me or someone else because they made a connection.</p>
<p>Interviewer follow-up question: Would you say those benefits enable students to graduate?</p>	<p>Yes, the ability to make relationships absolutely helps with program completion, succeed and graduate. There are a handful of kids who know what evenings we are open, a lot like to come in the evening, they sit, have dinner, talk and then get tutored. We have some who come down here at 7:00 pm, even though we close at 8:00 pm, to touch base, it's nice.</p> <p>I think the strengths of program is that it is not too big, and we really do get to know every student very well if that student comes. That's also its weakness, in a sense, because if they don't come they are not successful. That doesn't happen too often, but it does happen sometimes. Sometimes what happens is kids who have had enough "resource room", tired of it, they know what it's like over the whole school career and they just want to be left alone. They feel they don't need it anymore, so they size the program up as "I don't want this anymore" and they don't come. Those kids don't do as well academically. It does happen, sometimes when they do come down we can call them and say why don't you just stop by to say hello and then encourage them to come. Sometimes that happens later in the semester, when they realize they are over their head but sometimes they just resist and when that happens the results aren't as good. So, they end semester with 3 failed courses, two D's and F, it happens but not too often. Opportunities: In the last year we have been getting a different type of student, on the spectrum with LD classification and I feel those kids need a different type of structure to the program. If we continue to get students with that classification, we are going to have to think about how we are going to service this population which is quite different from students we have. I think it's not a weakness, but an advantage of the program works. In other years 7, 8 years ago we had a full-time. In other years 7, 8 years ago we had a full-time person during the day. A person who had finished school then moved on and got a different job. The people who work here are very devoted with relaying to kids and helping them. Disadvantages: Only part-time staff and doesn't pay well. So, you're not going to get a lot of people rushing to do it. But the ones that do are dedicated to the kids, academically. Most of the people who work here are retired or work another job in addition. It works well but I think about kids who need consistency, if we had more kids on the spectrum needing to touch base with the same person (staff), needing help with social skills. If we had more kids, it would be a different kind of program. We see the schools are referring kids on the spectrum to us. So, the question is, what to do about that. it down, something they had from they were little, the comprehension just isn't there. I see that often which effects their writing. They have so much trouble, the writing is the biggest problem. It's not just three paragraphs but more abstract ideas, it's very tough for them.</p> <p>Response: We don't have too many kids all coming down together needing help, and they have to wait. When they come we are able to service them. There aren't that many at one time. That's what I mean. It would require having more staff, more rooms, it would be a whole different thing, we are just the right size now. I feel if it got bigger we would have to change how we do things.</p> <p>I don't see any threats. I don't really know how to answer that.</p>

Table 4.12

SLD Staff Member - Program Future

Interview questions	Responses
<p>Question 1: Where do you see the program in five to ten years?</p>	<p>I think that as long as the college accepts students who have an IEP there will be this program. Guidance Counselors hear about the SLD Program and see the kids are successful, they go back and say they like it and then they send more kids. Now we are seeing students with a different type of issue. I don't know what's going to happen in the future, in terms of what the population will be and how it will be serviced. But I do feel as long as it has been here, it has been a tremendous help to the college. The professors are constantly, you know, they take their tests down here, they drop in sometimes or send an email. It helps take some of the responsibility for the student, they know they are with us also, so if they want certain things done, student missing assignments, we can deal with it. Sometimes a professor says in the beginning, "Well, it's just a quiz, take it here". After two times of this the student comes down here and says, "I just can't take the quiz, I need questions read". So, we call the professor, sometimes the professor will let them retake quizzes/tests down here to make it more comfortable for the student. So, I do think as long as the climate in the college is good for it, it is a good program. It saves a lot of time in terms of, if student needs something "I can't understand this", Maybe you need a note taker, Pulse band, we are sort of the ones who take care of those modifications for them.</p>
<p>Interviewer follow-up question: What is a Pulse band?</p>	<p>We try to maximize their success in the classroom because this is a very small school. Professors know they don't like (unclear audio). We are very clear about that. Because writing is so difficult for them. We tell them, come in and have us review your work before handing it in. Sometimes they just need help with the mechanics. So, I feel we do a service for the kids, that they are happy with us. It's just amazing to me, we just had some kids graduate this year and I remember when they started. It went so quick, they really grow up, change and become mature. As the years go by, as they are in the program they might not come as much but they are taking charge more of their own responsibilities, which is what we want.</p>
<p>Interviewer follow-up question: So, they are learning to self-advocate?</p>	<p>Yes, it is so good, I have seen some good changes with many of our students. That's what makes it rewarding for us too. Many come back to visit, or text or email, it's nice.</p>
<p>Interviewer question: Is there anything you would like to add?</p>	<p>It's funny, when I first started working here, I usually work with elementary students. I was wondering how it would be working with college students. The longer I have been here I feel there is not a big difference in what their needs are. Their anxiety, comfort level, I enjoy them, they are nice kids. They appreciate when you help them, take their anxiety away. At first, they only focused on getting what they need, "I need this done", not noticing other people in the room, they don't socialize. By the end of the second year they say hi and bye, it becomes a social thing. Many are social, but some aren't, and they need that. They feel, "This is my group", I know these people. It is a nice relief from just going to class, not being 100% sure if they are on the right track, do they understand what is going on. Some professors do not use overheads, a lot of kids need that visual and it is hard for them. Then they have an assignment, they need notes explained, reading done out loud with them, explained it's worth it for them, it does help and then they are Seniors. It's a good thing. I think Guidance Counselors get feedback from kids. We have this many kids from this area and now we have three more, then four more. Certain high schools, definitely see that.</p>

Findings revealed similarity of thought between the director and the staff member pertaining to the number of students enrolled within program to maximize student outcomes, the need for more full-time staff to assist with manage scheduling of testing modifications, and the need to assist with covering program hours to increase tutoring availability. At the time of program staff interviews the program was open an average of two evenings a week and never on weekends. Both parties mentioned the need for staff trained to meet the needs of incoming student groups with increased percentages of students on the autism spectrum. Program personnel both mention use of the pulse pen by some of the enrolled program students to support their academic success. Pulse pens are available by a variety of different manufacturers and usually are sold in 2GB capacity, compatible with Mac and Windows systems (Livescribe, 2018). The Pulse pen is assistive technology that enables the user to take notes via audio during the writing process, link audio recording to written notes, replay, and safely download to appropriate software (Frankenberger, 2017).

The SLD Program personnel both mentioned the increase of enrolled students with autism spectrum disorder (ASD) and the inability of the program to fully meet the academic support needs of this growing population. Persons with ASD, a brain disorder, exhibit the following characteristics: repetitive patterns of behavior and difficulty in social situations. These symptoms start in early childhood and impact daily functions within a range of symptoms, skills, and intensity termed spectrum, denoting levels of functionality varying with each individual person having ASD (National Institute of Neurological Disorders and Stroke, 2018). Mentioned by the program staff member, it is common for students with ASD to have a shadow, supporting the campus interactions

and academic success. The term shadow stems from the professional certified applied behavior analysis (ABA) therapist's function with an ASD client. The ABA therapist is with the client usually from 15 to 40 hours a week, supporting overall social interactions and/or academic success within a classroom setting (Monahan & Bryer, 2004).

As noted within program personnel interviews, many students with learning disabilities struggle with writing from note taking to completion of written reports. In addition, many students with learning disabilities and/or ADHD may also have executive functioning disorder, impacting the ability to organize and plan which hinders academic success. Executive functioning disorder hinders self-regulation of the following: attention, learning, social skills, organizational skills, and time management. Symptoms of executive functioning disorder usually exhibit by the age of two becoming fully developed by the age of 30. Experts are unsure as to exact causes, however research has demonstrated passing of the disorder from a parent to the child. Additionally, a study demonstrated a possible connection of executive functioning disorder to other disorders, illness, or trauma to the prefrontal cortex with increased difficulties with executive functions (Rodden, 2018).

Archival data. Archival data reviewed included demographic data of SLD Program student data and campus wide undergraduate student data reported annually to NCES/IPEDS.

Archival data was reviewed seeking increased understanding as to retention comparisons between SLD Program students and mainstream undergraduate student groups. Archival data evaluation sought to gain correlational data pertaining to retention rates of SLD Program students in comparison to mainstream students and students with

learning disabilities on campus not enrolled in the SLD Program. However, data pertaining to possible LD students on campus but not enrolled within the SLD Program was not captured by the college.

Tables 4.13 to 4.16 and Figures 4.1 through 4.6 present archival data reviewed, pertaining to SLD Program students in comparison to mainstream undergraduate student populations reviewed from NCES/IPEDS data. Archival data review was guided by research question 3: *Does campus archival data reveal differences in retention pertaining to SLD Program students in comparison to campus mainstream students?*

Tables 4.13 and 4.14 present SLD Program student and campus largest enrolled group student characteristics (gender, ethnicity). Table 4.13, demonstrates that between the 2009-2014 school years, campus-wide, undergraduate totals from NCES/IPEDS data indicated the majority were female at 63% in 2009, increasing to 68% in 2013 and 2014. The SLD Program mirrored this with enrolled female students increasing to a high of 71% during the 2013-14 school year. In the following school year 2014 program female enrollment fell to an unexplained 30%.

Although Hispanic students held a strong campus-wide presence between 2009 and 2012 within the SLD Program, Hispanic student enrollment levels remained at 0%. Then Hispanic student enrollment within the program climbed to 14% then 20% respectively during the 2013 and 2014 school years.

Table 4.13

Student Characteristics 2009-2014

Fall Undergraduate Student Characteristics 2009-2015	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
All Campus Female Students	63%	64%	65%	67	68%	68%
SLD Female Students	50%	57%	67%	67	71%	30%
ALL Campus Male Students	37%	36%	35%	33	32%	32%
SLD Male Students	50%	43%	33%	33	29%	70%
All Campus Black Students	18%	16%	16%	19	22%	20%
SLD Black Students	14%	17%	11%	0	14%	10
All Campus Hispanic Students	14%	16%	22%	21	22%	21%
SLD Hispanic Students	0%	0%	0%	0	14%	20%
All Campus White Students	51%	46%	38%	38	36%	34%
SLD White Students	86%	83%	89%	100	71%	70%

Figure 4.1 demonstrates from campus NCES/IPEDS archival data that White students made up the majority of the total study body between 2009 and 2014. This group totaled 51% of the undergraduate population during the 2009 school year and hovered at 38% during 2011 and 2012.

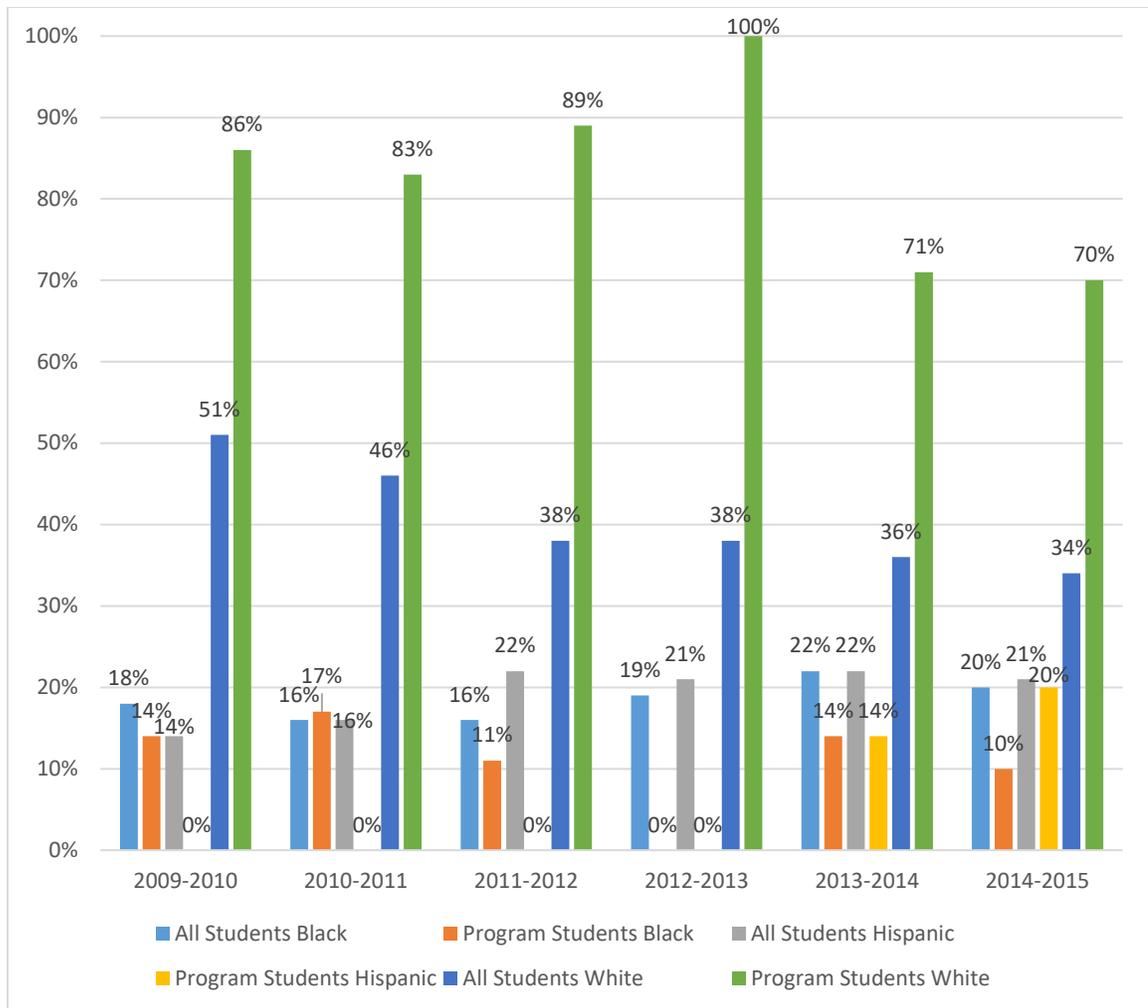


Figure 4.1. Student Characteristics: Ethnicity.

Table 4.14 demonstrates all undergraduate student ethnicity percentages from campus NCES/IPEDS data between 2012 and 2015 school years. Findings for Black and Hispanic undergraduate student totals were relatively close during this timeframe and both groups maintained totals of 22% during the 2013 school year. Asian student enrollment, not presented in Figure 4.1, maintained a 3% total between the 2012-2014 school years and then increased to 4% during the 2015 school year.

Table 4.14

Campus Undergraduate Ethnicity Totals 2012- 2015

Ethnicity	2012-13	2013-14	2014-15	2015-16
American Indian or Alaska Native	0%	0%	0%	0%
Asian	3%	3%	3%	4%
Black or African American	19%	22%	20%	16%
Hispanic/Latino	22%	22%	21%	22%
Native Hawaiian or Pacific Islander	0%	0%	0%	0%
White	37%	36%	34%	32%
Two or more Races	2%	2%	2%	2%
Race and ethnicity unknown	2%	1%	8%	11%

The following data pertains to enrollment and retention comparisons, presented in Figures 4.2 to 4.6 and Table 4.15. Figure 4.2 represents male and female undergraduate enrollment figures between 2009-2014. SLD Program female student enrollment figures surpassed male student program enrollment totals between 2009 and 2013, then dropped from 71% to 30% during the 2014 school year.

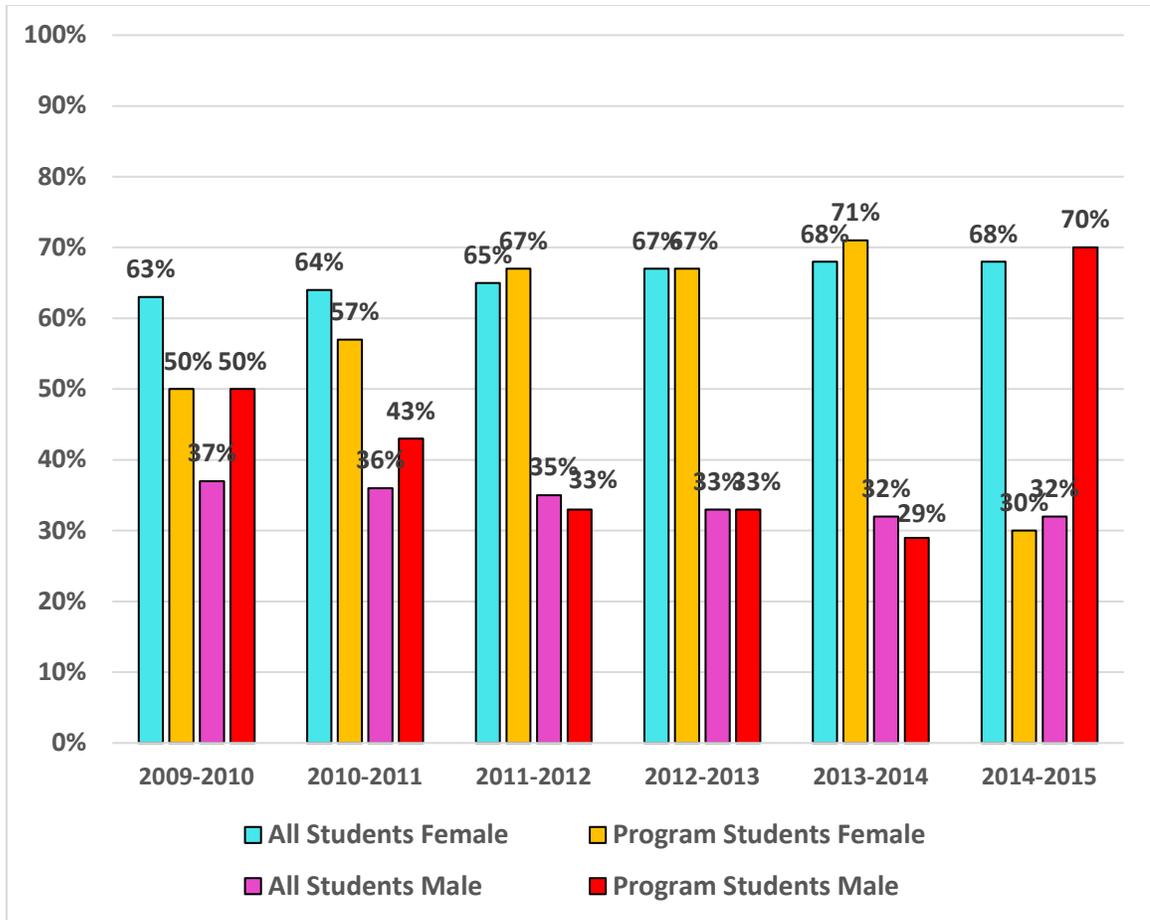


Figure 4.2. Comparisons of Male/Female Student Enrollment 2009-2014.

Figure 4.3 demonstrates SLD Program enrollment percentages of Black students between 2009 and 2014 school years. During the 2010 school year, Black students enrolled within the program totaled 17% and decreased to 0% enrolled during the 2012 school year.

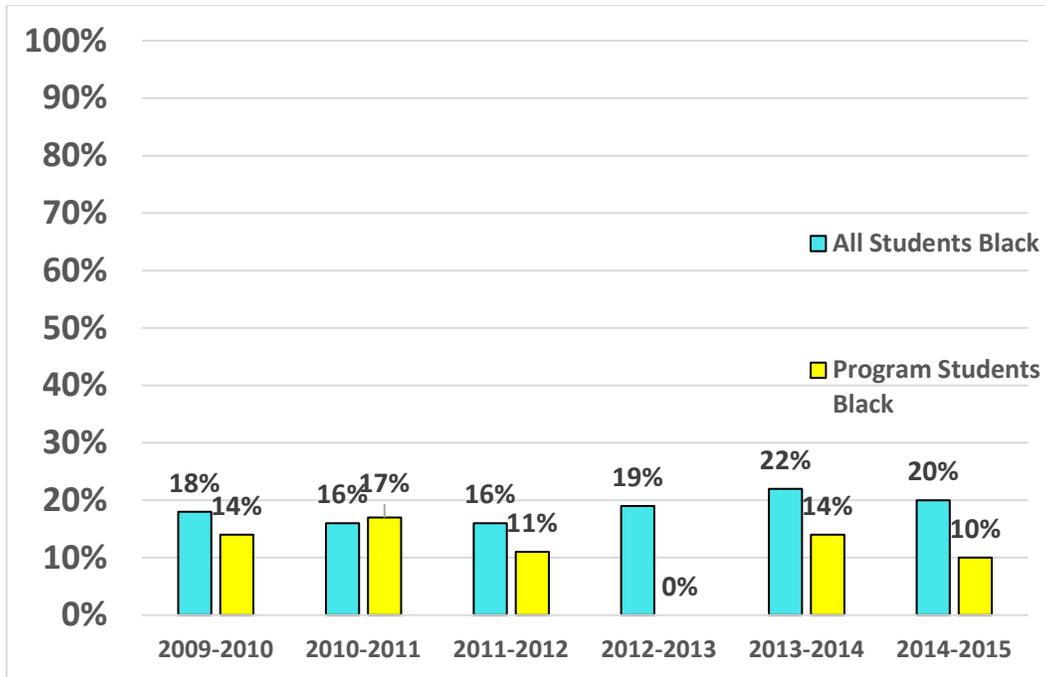


Figure 4.3. Campus and Program Enrollment/Black Students: 2009-2014.

Figure 4.4 presents Hispanic students' total campus percentages in comparison to their SLD Program percentages between the 2009 and 2014 school years. Between the 2009 and 2012 school years Hispanic students' total undergraduate percentages fluctuated between 14-22%. During this period within the SLD Program their enrollment remained at zero until the 2013 school year when it climbed from zero to 14%.

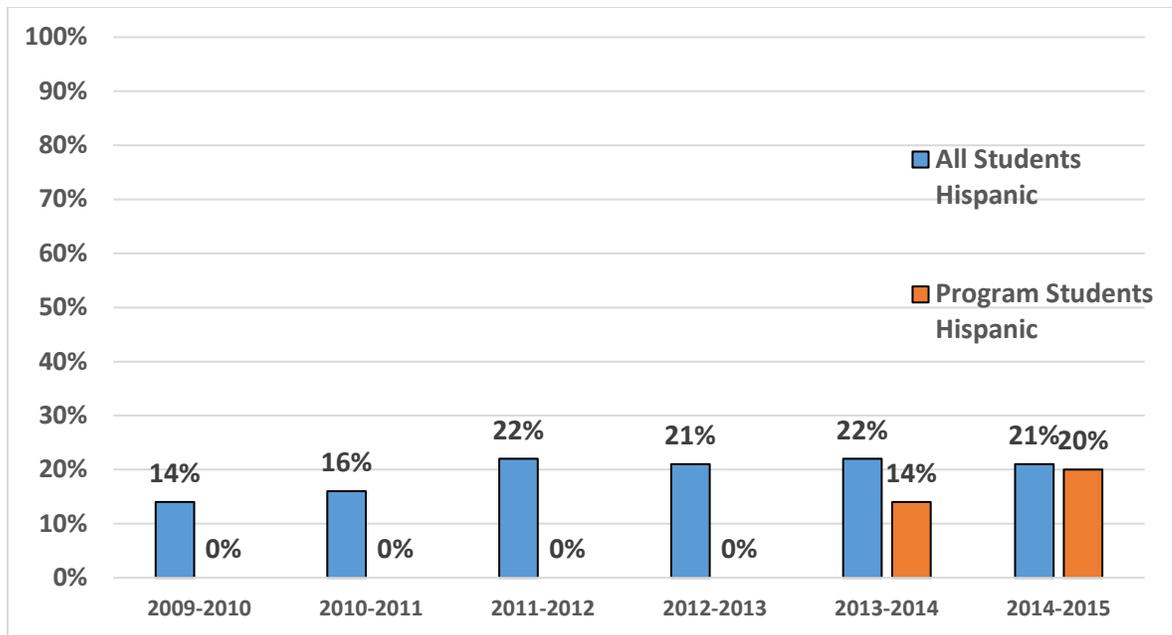


Figure 4.4. Campus and Program Enrollment/Hispanic Students 2009-2014.

Figure 4.5 compares all campus undergraduate White student totals with enrollment within the SLD Program between the 2009 and 2014 school years. Campus total enrollment figures for White students, were as high as 51% during the 2009 school year and decreased to 34% during the 2014 school year. Within the SLD Program, during these school years, White student enrollment levels surpassed campus percentages with total enrollment figures for White students higher than 80% from 2009-2011 schools and then increasing to 100% during the 2012 school year.

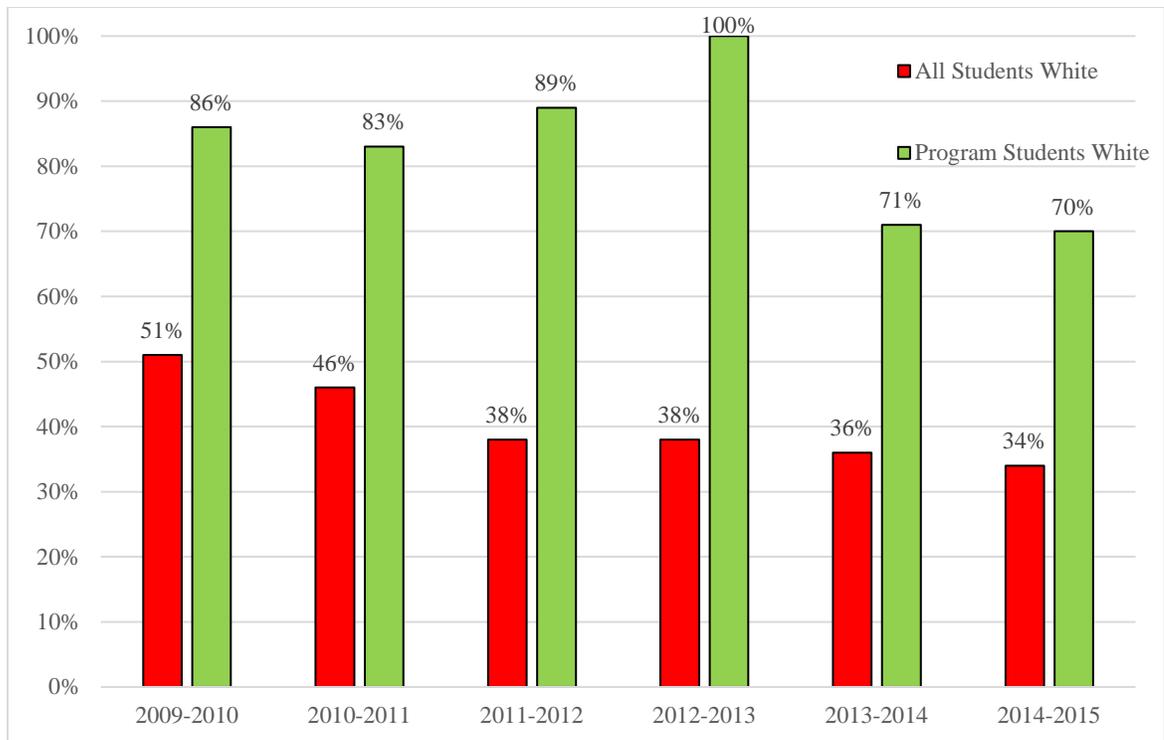


Figure 4.5. Campus and Program Enrollment/White Students 2009-2014.

SLD Program data of enrolled undergraduate students who completed degrees on campus between 2011 and 2016. Program students began college at 18 or 19 years of age, except those who transferred in.

A total of 33% of SLD Program students enrolled between fall 2009-fall 2013, received eight semesters of academic support services and graduated with a Bachelor of Art or Bachelor of Science degree. From SLD Program students enrolled between fall 2009-fall 2012, a total of 75% graduated with either a Bachelor of Arts or Bachelor of Science degree. Of currently enrolled students who started the program in 2013, or since then, 75% have received at least three semesters of program academic support services.

The program study participant, received eight semesters of program academic support services and completed a Bachelor of Science degree within 4 years.

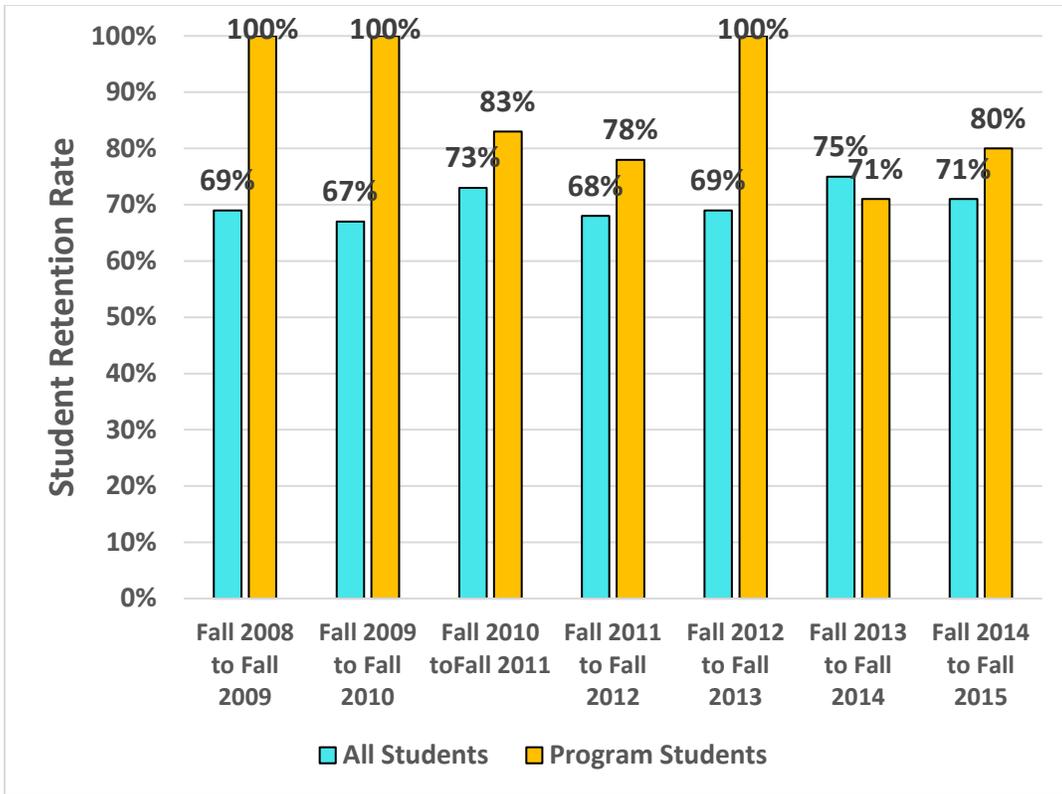


Figure 4.6. Campus and Program Retention/Fall 2008-Fall 2015.

Retention rates, Table 4.15, between 2008-2014 with the exception of 2014-2015, SLD Program retention rates were higher than the campus wide totals. The SLD Program maintained 100% retention in 2008, 2009, and 2012.

Table 4.15

Retention Comparisons 2008-2014

<i>Fall Undergraduate</i>	<i>2008-9</i>	<i>2009-10</i>	<i>2010-11</i>	<i>2011-12</i>	<i>2012-13</i>	<i>2013-14</i>	<i>2014-15</i>
<i>Retention/2009-15</i>							
<i>All Students</i>	<i>69%</i>	<i>67%</i>	<i>73%</i>	<i>68%</i>	<i>69%</i>	<i>75%</i>	<i>71%</i>
<i>SLD Students</i>	<i>100%</i>	<i>100%</i>	<i>83%</i>	<i>78%</i>	<i>100%</i>	<i>71%</i>	<i>80%</i>
<i>All Students Female</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
<i>SLD Students Female</i>	<i>100%</i>	<i>100%</i>	<i>100%</i>	<i>67%</i>	<i>100%</i>	<i>80%</i>	<i>67%</i>
<i>All Students Male</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
<i>SLD Students Male</i>	<i>100%</i>	<i>100%</i>	<i>50%</i>	<i>100%</i>	<i>100%</i>	<i>50%</i>	<i>86%</i>
<i>All Students Black</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
<i>SLD Students Black</i>	<i>0%</i>	<i>100%</i>	<i>100%</i>	<i>100%</i>	<i>0%</i>	<i>100%</i>	<i>100%</i>
<i>All Students Hispanic</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
<i>SLD Students Hispanic</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>0%</i>	<i>100%</i>	<i>100%</i>
<i>All Students White</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>
<i>SLD Students White</i>	<i>100%</i>	<i>100%</i>	<i>80%</i>	<i>75%</i>	<i>100%</i>	<i>60%</i>	<i>71%</i>

Table 4.16 shows information for SLD Program students who transferred before completing their degree between fall 2010 and fall 2016. In 2012, as indicated in Table 4.16, eight students entered SLD Program, five earned a Bachelor of Science Degree and one an Associates of Arts in Science (AAS) degree. Two students left after 1 year of college to pursue other career goals. In 2013, six students joined. Five earned a bachelor's degree (one of them was with the SLD Program only two semesters). One student left after a year to pursue other career goals. In 2014, six students joined. One student graduated, and another transferred to another college. The remaining four continued at the college. In 2015, eight students joined. Seven continued at the college.

After 1 year, one student left to attend community college (SLD Program, received via email, April 2017).

Table 4.16

SLD Program Transfers

Transferred Students	Year student entered SLD Program	# Semesters received SLD Program Services	Reason for transfer/leaving
White Male	Fall 2010	2 semesters	Study Computer Science
White Female	Fall 2011	2 semesters	Beautician school
White Male	Fall 2013	2 semesters	Moved out of country
White Female	Fall 2013	2 semesters	For Art degree major
White Female	Fall 2014	2 semesters	Medical leave
White Male	Fall 2014	2 semesters	Attend Community College

All campus undergraduate transfer totals between 2012-2015 from NCES/IPEDS archival data in comparison to SLD Program undergraduate transfer percentages were as follows: during the 2012 school year, 29% transferred; during the 2013 school year, 31%; during the 2014 school year 19%; and during the 2015 school year, 34%.

Summary of Results

One enrolled SLD Program student (Study identifying code: QSF122) was interviewed, concerning thoughts and reflection, on the effectiveness of the program pertaining to her academic progress. It would have been informative to have been able to interview at least one or two more students to note any variances in the experiences and

perception concerning overall impact of the program on their academic progress and views concerning their outlook going forward.

SLD Program personnel study participants were in agreement concerning the need to hire more staff for tutoring and to manage scheduling of student weekly support services. Personnel both shared the need for program staff training to meet the needs of the growing population of enrolled students within the SLD Program on the autism spectrum. Study participant program personnel were also in agreement pertaining to increasing program salaries to attract possible new hires.

Participating program personnel mentioned the use of the pulse pen assistive technology by some students which records audio and takes away some of the anxiety associated by some students with note taking during course lectures (Frankenberger, 2017). With findings, it is not clear whether or not additional technological supportive devices are not provided because of financial expense to the program, or because students are not requesting them. Findings reveal SLD Program strengths revolve around two key components: tutoring, and teaching students how to self-advocate. Tutoring is crucial to students completing course work and course assessments in a timely manner in order to pass classes and maintain an academic grade point average. This increases retention and promotes degree completion more on par with mainstream student outcomes. Self-advocacy is important for obtaining future academic goals and pertaining to pursuit of graduate level degrees and career success. The student participant for this study planned on pursuing a graduate degree at the time of the interview.

Data revealed that within a number of school years reviewed, the SLD Program had higher retention rates in comparison to mainstream student group percentages.

Within this study, archival data revealed female students surpassed male student enrollment mirrored within the SLD Program and the campus mainstream percentages. SLD Program interviews revealed the importance of the program concerning students' overall growth in confidence and self-advocacy. Findings also enabled the researcher to infer future needs of the SLD Program based on personnel interview responses. Based on responses from the program director, funding to train program staff or recruit personnel, trained with skillsets required to effectively support students on the autism spectrum may be a new issue in the near future.

Chapter 5 presents the implications, limitations, and recommendations for future studies.

Chapter 5: Discussion

Introduction

Colleges now have to contend with lower undergraduate enrollments and therefore are in need of using all available tools to attract and retain undergraduate populations. Institutions in higher education find themselves focusing on attracting students from smaller and smaller candidate pools. Therefore, campus and program offerings must keep up with technological advancements and student needs. In order to better service these groups, now more than ever, academic support programs will need to evaluate offerings and services to maintain attractiveness to students selecting colleges, and to retain them once they arrive. One of the fastest growing populations are students with learning disabilities, their ranks on college campuses are the largest within the students with disabilities group.

In recognizing the need to provide academic supports for this growing segment, along with the importance of continual assessment of academic support offerings, a program for students with learning disabilities was evaluated, seeking deeper understanding of academic support services and staff involvement assisting students to complete degree programs. Reflection was sought from students enrolled within the SLD Program to gain direct accounts and feedback of the program strengths and weaknesses to inform the field. Archival data pertaining to program and campus wide retention rates was also reviewed. Knowledge gained may be used to better create, implement, or

upgrade existing campus programs and academic support services to best meet the needs of the population served.

Noted in Chapter 1, the qualitative case study methodology involved program evaluation looking at themes found to improve support services offerings and effectiveness based on student perception. The relevant theory is critical theory (theory informed) within a mixed-method case study using IPA concerning self-identifying students with learning disabilities in higher education. The study incorporated SLD Program personnel interviews with review of archival program data and campus-wide NCES/IPEDS undergraduate student population demographics and retention rates to compare outcomes. This case study informs the field pertaining to administrators in higher education settings who may be interested in improving upon or implementing student-centered academic support services for students with learning disabilities and other growing groups of students with disabilities that are increasing in population on college campuses.

Implications of Findings

To increase knowledge in order to inform the field, the mixed-method case study incorporated perception from a student, program personnel, and reviewed archival program and campus-wide NCES/IPEDS undergraduate students' data to compare demographics and retention rates. In order to delve into this case study, the researcher created research questions originally presented within Chapter 1, guided by previous research which anchored this study. Detailed within Chapter 2, Hadley (2007) and Reinschmiedt et al. (2013), demonstrated in their findings the need for future studies to increase research pertaining to the importance of student perception of services and

accommodations to inform the field and use findings to guide program evaluation, creation, and implementation.

The purpose of RQ1 (*What are the reflections of SLD Program students on their direct experiences with program academic support services provided during their college years?*) was to (a) build on the work of Reinschmiedt et al. (2013), and (b) gain an in-depth understanding of the SLD Program effectiveness from the viewpoint of students with learning disabilities. The student interviewed for this program review, described program staff as similar to guidance counselors and mentors. These results clearly demonstrated the importance of SLD Program personnel as important for groups of students seeking academic support who feel at times, inadequate and or frustrated by their LD(s) in progressing academically. The results revealed the SLD Program assisted students effectively in learning how to improve their individual learning strategies within a warm and supportive setting, supporting student growth in self-advocacy by providing mentoring tools to becoming more independent during college and beyond (SLD Program Institutional Research, 2015).

The exploration of RQ2: *What are the perceptions of SLD Program personnel concerning academic support services provided for students with learning disabilities?* supported the work of O'Neill and colleagues (2012). The current director of the SLD Program evaluated within this case study, was instrumental in the creation and implementation of the program and involved as program director during the program's entire history, providing academic support services to students with learning disabilities. Findings revealed the following program personnel perceptions. According to the SLD Program director, "We are able to get many people through college and to get them to

think about what they are going to do afterwards.” The Program staff member thought building relationships between students and staff key to retention rates. Program personnel said the professors learn to see the value of the program over time and that the assistive technology is helpful in student success and through the SLD Program students learn how to socialize and self-advocate.

Research question 3 explored: *Does campus archival data reveal differences in retention pertaining to SLD Program students in comparison to campus mainstream students?* Yes, the SLD Program retention rates reflected increased student success in comparison to campus undergraduate mainstream student retention rates. This is consistent with the work published by a 6-year longitudinal study (Sanford et al., 2011). Campus-wide NCES/IPEDS undergraduate student data assessed in comparison to SLD Program student archival data, found that for some students, enrollment into campus-based programs designed and implemented to meet their specific academic needs are effective in assisting students with learning disabilities through degree completion.

Hence, based on this qualitative case study, there appears to be a need for more federal and state funding to support the creation and implementation of more of these programs on college campuses. At the very least, it is time for increased individual colleges to implement scheduled ongoing program evaluations to assess which support tools and services are ineffective in order to channel monies from ineffective offerings to effective services that students find helpful towards degree completion. Providing increased knowledge pertaining to program review towards revamping of academic support services, may attract larger numbers of incoming freshmen with learning disabilities who are seeking a college that will support their needs.

Program evaluated. The SLD Program evaluated for this study was created and implemented for students with learning disabilities 24 years ago in order to support their academic success at the college level. The program director was instrumental in creation and implementation and is currently serving in that role. The program keeps annual new enrollment levels low to maintain effective quality of support services for students within a setting with limited tutoring staff. Due to low program staff levels, the program had limited evening hours and was not open during weekends. Based on study findings the SLD Program appears to academically support needs of enrolled students with learning disabilities. Study findings did not reveal whether any possible candidates found the program cost prohibitive, costs which are above housing and degree program expenses. The student participant found the SLD Program very helpful in meeting academic needs and graduated with a Bachelor of Science degree within a 4-year period. Study review of archival data revealed the SLD Program retention rates surpassed the mainstream campus annual school year percentages within the timeframe evaluated.

Limitations

The researcher found a number of limitations in completing this study, beginning with initial timing concerning collection of qualitative data. The study limitations are presented in the following order: timing (holidays), study participants (student and SLD Program personnel), program and campus NCES/IPEDS archival data.

Winter holidays. The researcher had difficulty collecting data during the December holiday. The winter semester break and holiday season may have adversely impacted response rates from the study pool of enrolled SLD Program students.

Student participants. Only currently enrolled SLD Program students with learning disabilities were invited to participate. The enrolled participating student delimit was that they previously received a minimum of two consecutive years of SLD Program support, to be considered as an interview participant, and received program services between 2012 academic school year and 2015 academic school year. From these delimits the pool of SLD Program candidates was $N = 9$, with one female student agreeing to participate, for a response rate of 11.11%.

Having one student's perception of program services and accommodations could lead to a study bias. Lastly, as found within research reviewed for this case study, O'Neill et al. (2012), the inability to include a peer student with learning disabilities, who did not receive SLD Program services, hindered the ability to compare demographics and retention rates.

Program and campus NCEs archival data. The researcher sought archival data pertaining to campus mainstream student population retention rates to increase findings. Final archival data collection pertaining to SLD Program student demographics were received by the researcher in August 2017.

Recommendations

There are a number of recommendations based on this case study. At the time of this study the SLD Program had a majority of students with learning disabilities not on the autism spectrum. Program students enrolled who were not on the autism spectrum, for the most part, seemed to have their learning disability academic support services met with their gaining tools to increase understanding of their specific learning requirements and how to advocate for themselves. Findings to inform the field gained more insight into a

student's perception of services received within an academic support program implemented to assist students with learning disabilities progress towards degree completion.

The student interviewed for this study felt the program was absolutely worth it, concerning program annual cost in fees. The student interviewed completed her degree program within a 4-year period. Enough students with autism spectrum disorder were enrolled within the SLD Program to anticipate increased enrollment going forward. College students with learning disabilities on the autism spectrum enrollment levels will increase nationally, as noted by the program director during the study interview.

The SLD Program should review annual budgets to better assess the program's ability to increase staff hourly pay rate and salary ranges to attract new staff. Is it possible to hire more full-time staff? At the time of the study only the program director held full-time status. In order to assist with off-setting the cost of hiring more staff, the SLD Program should assess current annual enrollment guidelines. Perhaps the program could increase annual freshman enrollment levels by 20%, which at the time of this study would equate to three or four more freshman students annually. Increased program freshman enrollment levels could assist with defraying costs of hiring more staff for tutoring or to manage program scheduling of students' ongoing academic support services.

The SLD Program may consider the following, based on program personnel responses to interview questions:

1. Increase tutoring staff and program supervisory staff to manage scheduling of weekly program academic support services which is very time consuming.

2. Hire more tutoring staff with strengths within sciences. Program staff were able to tutor students with Humanities course work, but limited in knowledge pertaining to physics, chemistry, biology, science and math-based courses. Program personnel interviewed said they learn as they go, pertaining to tutoring students within these disciplines.
3. Current and future staff should be trained to meet the needs of the increasing enrollment of students within the program on the autism spectrum of disabilities if the program plans to increase enrollment for students on the autism spectrum.
4. Increase the number of hours the program is open for tutoring; at the time of this study the center was open between 9-3 p.m. Monday-Friday, two evenings per week until approximately 9 p.m., and never open during weekends, due to limited staffing.
5. Pertaining to a small percentage of students reluctant in accepting program tutoring services who then had poor academic outcomes, is it possible to create an application or text type update, to remind students enrolled within the program to attend tutoring sessions during crucial time periods of the school year (i.e., before midterms and prior to final exam periods)?

Findings gained insight into the need for future studies to obtain increased knowledge identifying the most effective services impacting student retention, completion, and career readiness at the postsecondary level. Initially discussed within Chapter 1, findings demonstrated the need for programs to increase frequency of assessments in an effort to keep pace with the changing needs of this growing population.

To best assess the program's future direction, a larger SLD Program study evaluating similarities and variances in support service offerings would inform future decisions concerning specific students served and academic support offerings. This future study should include a larger SLD Program pool of candidates with increased data collection including the following: review of other SLD Programs within the tristate area; facilities physical size, annual program student enrollment, student to tutor ratio, and program hours. Other topics should be explored as well. What are programs doing pertaining to staff professional development; is it on going, how often? Do existing programs improve professional development by seeking to hire staff with the most current professional development certifications in hand? What do these professional development skills look like to assist with student retention rates? Are there current college programs within the tristate area meeting the needs of students with learning disabilities? Are they meeting the needs of students with learning disabilities and autism spectrum disorder? If so, what do they offer pertaining to tutoring, shadowing, assistive technology, and ongoing collaboration with faculty in supporting student retention rates?

Future studies should seek to expand the number of students interviewed to gain increased feedback to widen the scope and depth of this group's perception pertaining to strengths and weaknesses of the program evaluated. Studies conducted to evaluate academic support programs with annual enrollment figures below 20 students should consider implementing a broader range of evaluation years to increase the participant pool of candidates. Student participation percentages and richer findings may have increased if the program evaluation period and candidate pool were enlarged to as many

as 10 years. A future longitudinal study, consisting of both alumni and currently enrolled students would greatly add to ongoing dialog concerning this area of focus.

Conclusion

Implementation of this case study was driven by the researcher's desire to increase knowledge of how programs implemented to support students with learning disabilities impact their retention and academic success. To inform the field the researcher sought to gain insight directly from student perception and via a specific SLD Program's personnel involved in guiding program supports offered within the campus of the study site. The goal was to improve understanding from students with learning disabilities who received a minimum two years of SLD Program academic support services. This study found from student perception that many of the benefits of the program, which they would recommend to incoming freshman, are intangible and due in part to the mentor type of support given by program personnel who help them blossom.

The goal of the three-pronged program study case was to further inform the field so that students across programs and campuses may receive the most effective services impacting student retention, completion, and career readiness at the postsecondary level. The three areas of focus within this mixed method study included: a student interview, program personnel interviews, and review of archival data. The study may assist in bridging the gap of informational data needed to effectively evaluate and implement academic support services suited to the needs of students with learning disabilities.

Interviewed program personnel were in agreement pertaining to the importance of the program and strongly aligned in thought pertaining to the need of this program on campus as long as the college maintains enrollment of students with learning disabilities.

This is supported by the recommendations of O'Neill et al. (2012). Findings showed the program maintained high retention rates during the period reviewed for this study. Within three different years, under review for this case study, the SLD Program had 100% retention rates in comparison to undergraduate mainstream student retention rates identified in campus-wide NCES/IPEDS archival data.

The findings provide answers concerning the initial research questions posed within this study pertaining to student perception of program services, program personnel reflection on support offerings, the impact on population served, and review of archival data. The findings reveal high program undergraduate student retention rates in comparison to mainstream undergraduate retention rates from NCES/IPEDS records for the years under review within this case study.

Where does this new data take us? Findings from this study show the benefit for students enrolled within this type of program along with benefits to the college with increased retention rates and student academic success. What is next? Will programs such as the SLD Program evaluated for this study need to totally revamp facilities, program size, annual enrollment rates, and staff training in order to prepare for the next wave of students with learning disabilities on the autism spectrum? How will any improvements deemed necessary be financed? Will enrolling students face increased SLD Program annual fees? Will the program undertake ongoing grant writing to numerous agencies and privately funded institutions to offset financial expenditures to meet the needs of this next wave? Or will the program limit enrollment to specific students with learning disabilities for whom they believe the program best supports academically?

Answers to these questions, and others, are for these programs and future studies to delve into in seeking possible solutions pertaining to ever evolving issues to be faced in creation, implementation, and adjustment of academic support service offerings. The goal is to retain students and continue to gain ground on degree program completion rates for this unique, motivated, population of students.

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Appendix A

Study Introductory Letter

Introductory Letter of Study Purpose to Alumni and Current Student Pool

Dear Alumni and Currently Enrolled Student:

Thank you, for contacting me to participate in my study concerning alumni and student reflections of academic support services within a college program.

As you know, from initial contact via the college Alumni Office, my name is Cynthia Palmer and I am a doctoral student in the Executive Leadership program in the Ralph C. Wilson Jr. School of Education at St. John Fisher College (SJFC). Towards completion of the degree requirements I am conducting a research study on college alumni with learning disabilities' perception of classroom accommodations and program services. My study is seeking to gain feedback concerning alumni and currently enrolled student experiences and helpfulness of program services as a student with an identified learning disability.

Your views and experiences will aid in informing the field by increasing postsecondary understanding of services provided to assist students with learning disabilities in college complete degree programs. As college alumni or student who identified as a student with a learning disability, your reflection directly adds to the body of knowledge regarding support services provided to support academic achievements in college.

You were initially contacted, to be interviewed, because you are specific alumni and current student who received Connections Program support services between fall 2012 and spring 2015 with a minimum of two consecutive years of support received or are currently enrolled having already received two years of program services. The interview will take place on the Concordia College campus. Total time commitment, including completing consent form and travel to and from the interview location on campus should approximate 2.5 hours per participant. As a thank you, each participant will receive a \$25.00 gift card, towards travel expenses and time participating.

All interviews will be carried out privately one-on one between the participant and the researcher at scheduled dates and times based on your availability. You will need to complete and Informed Consent Form, included here and return it to me to be added as a participant. Completed Informed Consent Forms, returned to me (researcher), by first six alumni will be scheduled for interviewing and contacted. Consent forms received after initial six will be kept on file as possible alternates to be interviewed and contacted as to status.

Your participation and the information shared with the researcher during the process will be treated with the utmost confidentiality. In addition, should you change your mind, you may decide at any point during the interview process to withdraw from the study without penalty or consequence.

[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Please note, the consent form has a more detailed summary of the purpose and scope of the proposed study.

Participants may contact me, Cynthia Palmer-researcher, with questions pertaining to the study: Email: [REDACTED] Phone: [REDACTED] Thank you in advance for your participating in this study.

Sincerely,

Cynthia Y. Palmer-Researcher

Doctoral Candidate-Ralph C. Wilson, Jr. School of Education, St. John Fisher College

Interviews will be recorded via two hand recorders and transcribed. Observation notes will also be taken during the interview to add increased depth of understanding participant perception of issues discussed during interview.

Please note, participants may choose not to answer any question(s) during the interview.

Participants: Pre-selected as part of the alumni pool based on the criteria of being a self-identifying student with learning disabilities having received academic support services from a campus program implemented to support academic achievement of enrolled students with learning disabilities. In addition, you received program services between fall 2012-spring 2015 for a minimum of two consecutive years.

Confidentiality: All participants' identity will be kept confidential. All interviews will be coded as to protect the identities of all research participants. All observation notes will be coded. Consent forms, which contain personal information, will be kept separate and personal information will be removed from any coded materials. Only the researcher will be able to link the research materials to an informed consent form. All audio transcripts, observation notes, and interview materials will be stored in locked file box within the researcher's residence. There will be no personally identifiable information disseminated in any publications.

Risk: There is minimal risk, since interview topics are generally academic based, however if participants find recalling academic journey causes anxiety, feelings of inadequacy, etc., you may speak with your personal physician or contact the [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Compensation: Participants will each receive a \$25.00 gift card towards transportation to/from the interview site, and for time participating, as a thank you.

Your rights: As a research participant, you have the right to:

- Have the purpose of the study, and the expected risks and benefits fully explained to you before you choose to participate.
- Withdraw from participation at any time without penalty.
- Refuse to answer a particular question without penalty.
- Be informed of appropriate alternative procedures or courses of treatment, if any that may be advantageous to you.
- Be informed of the results of the study.

Questions about your Rights as Research Participants: If you have any concerns or questions about your rights as a research participant or wish to report a research-related injury, please contact the following:

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Dr. Byron Hargrove-SJFC Dissertation Committee Chair for Cynthia Palmer-Researcher,

Dr. Hargrove's contacts: Email: bkh@berkeleycollege.edu Phone: 973-642-3888 ext.
1440

Eileen Lynd-Balta

Institutional Review Board Office
St. John Fisher College, 3690 East Avenue, Rochester, NY 14618
Email: elynd-balta@sjfc.edu Phone: (585) 385-7368

**Please complete and sign information below and email back to me, to be added as
participant for my study. Thank you.**

Please specify your ethnicity

(Participants may choose not to answer ethnicity, below)

White

Hispanic or Latino

Black or African American

Native American or American Indian

Asian / Pacific Islander

Other _____

Please specify your age at start of first receiving Connections program services?

Age: _____

Please specify sex response with check or x:

Male _____ **Female** _____ **Choose not to answer** _____

**Number of semesters/years received academic support services from
Connections**

(LD) program _____

Degree Major/at XXXXXXXXXX

Statement of Age and Consent: Your signature indicates that:

You are at least 18 years of age;

The research study has been explained to you;

Your questions have been fully answered;

You freely and voluntarily choose to participate in this research project.

Name of participant (please
print): _____

Signature of
participant: _____ Date: _____

Appendix C

Study Interview Questions

Interview questions gathered and edited down for the case study interview questions are from (Schander, 2001).

The following list was used to compile the semi-structured interview questions for the IPA study participant interviews.

Understanding of Learning Disability

What is your specific learning disability?

Do you have other disabilities (physical, mental health, learning)?

How do you see yourself as student?

Tell me about when you first become aware of a learning disability?

Tell me what elementary/high school/college was like.

Tell me who you think you are-in terms of strengths and weaknesses.

Have you ever been in special education classes during your academic career?

Family

Are you aware of others in your family who are LD?

How important has your family been to your college success?

Describe how your family relates to your LD.

A. How have they been not helpful?

B. How have they been helpful?

Attending College

Why did you go to college?

How important is a college education in your family?

Who in your immediate family have completed college?

Tell me about your freshman year at college.

A. What classes were easy? Why?

B. Which classes were difficult? Why?

Classes

How did you choose classes?

Describe a class where you felt comfortable.

a. Requirements b. Teacher c. Other students

What's your strategy for "managing" classes?

Tell me about "wrong" classes.

Have you ever substituted a class due to perceived difficulty? Which one(s)?

What is your process for writing papers?

How do you manage the reading that is required?

Support

What kind of support, remedial education, tutoring did you use prior to college?

What kind of "outside" support has been most useful to you?

What accommodations have you used through high school?

What accommodations have you used in college?

Have you taken any remedial classes in college?

How has the program assisted with your academic success?

What kind of support provided by the program did you find to be *not* useful?

What program support have you used and found helpful here?

What kind of support are you aware of here at ____ University?

What do you do when you have difficulty with a class?

Are you aware of your "rights" as an LD student? What are they?

Think of three people who have been most helpful to you in getting you through college.

Why have you selected these people? How were they most helpful?

Can you explain how technology helped you as a student?

Dealing with Stress

How stressful was undergraduate college for you?

What caused the most school-related stress?

How did you cope with the stress of school?

What did you do for fun while an undergraduate student?

Relationships

Are your friends/significant others aware of your learning disability?

Do you have friends with learning disabilities?

Has your learning disability affected either negatively or positively your relationship with friends?

What are helpful peers like?

What is your life like socially?

Self-Perception

How do you think other people "see" you?

In what situations do you feel confident?

In what situations do you feel less competent?

Achieving

To what extent are good grades important to you?

What is your reaction when you receive a good grade?

How do you feel when you're given a poor grade?

Are you currently enrolled in a graduate program? If yes, which one? Why?

How do you think completed a degree has changed your life?

What do you predict for your future?

Appendix D

Student RQ #1 Interview Questions

What are the reflections of SLD Program students on their direct experiences with academic support services and accommodations provided during their college years?

- Do you recall any classes where you had academic challenges due to your learning disability? (Identify problem classes)
- What did you do when you had an academic difficulty with a class? (coping)
- Which classroom accommodations did you find most helpful? Least helpful?
- Which assistive software/hardware accommodations did you find most helpful? Least helpful?
- What role (if any) did SLD program staff play in your academics while you were in college?

- What additional academic program services would you recommend added for current students with learning disabilities?
- As a result of the SLD Program, what individual learning strategies have you learned and applied?
- As a result of the SLD Program, what learned self-advocacy tools are you applying to become more proactive?
- Given your financial investment in the SDL program, is this a valuable service or experience?

Would you recommend the SDL Program to future students?

Appendix E

SLD Program Personnel Interview Questions

Questions for the SLD Program Director:

1. What is your background pertaining to working with Special Education students?
2. How long have you worked as SLD Program Director?
3. What are your duties as director pertaining to students?
4. If funds were unlimited what would you add to the SLD Program, such as:
physical facilities, accommodations, staff?
5. Where do you see the SLD Program in five to ten years?
6. If you could change any decision pertaining to SLD Program implementations,
based on where to program is now, what would it be?
7. What are the SLD Program strengths, weaknesses, opportunities, threats (SWOT
analysis)?

Questions for the SLD Program Staff member:

1. What is your background working with students with Special Education needs?
2. How long have you worked within the SLD Program?
3. How would you describe your duties within the SLD Program with students?
4. What would be most beneficial for students to stay in SLD Program, for retention?
5. What are the SLD Program strengths, weaknesses, opportunities, threats (SWOT analysis)?
6. Where do you see the program in five to ten years?