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SUPPORTING STUDENTS WITH DISABILITIES IN TRANSITION: A CASE STUDY OF A COLLEGE MENTORING PROGRAM

BY

V. SUE ATKINSON

BA, Tufts University MsEd, Binghamton University

DISSERTATION

Submitted in partial fulfillment of the requirements for the degree of Doctor of Education in Educational Theory and Practice in the Graduate School Binghamton University State University of New York 2014

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Accepted in partial fulfillment of the requirements for the degree of Doctor of Education in Educational Theory and Practice in the Graduate School Binghamton University State University of New York 2014

June 9, 2014

Candace A. Mulcahy, Chair and Faculty Adviser Graduate School of Education, Binghamton University

Beverly Rainforth, Member Graduate School of Education, Binghamton University

M. Sue Crowley, Member Graduate School of Education, Binghamton University

Kevin N. Wright, Outside Examiner College of Community and Public Affairs, Binghamton University

Abstract

This case study explored the experiences of participants in a university-based mentoring program in which graduate students in special education mentored undergraduate college students with disabilities (mentees). The program provided support in self-management skills for mentees and learning experience for mentors. Interviews, observations, document review, and a survey were used to collect data.

Mentees' disability diagnoses, high school experiences, personal and educational histories, and support needs varied, as did transition challenges and degree of college-level agency and self-advocacy. Undergraduates, citing mentor support, reported that the program was helpful in addressing self-management needs. Findings suggest that mentees' self-identified needs (for structure, help with organizational skills, assistance with time management, and procrastination/avoidance) were addressed through scheduled study sessions (supervised by mentors), 1:1 work, and small group, targeted workshops on self-management skills.

Mentors, certified as high school content teachers and seeking certification in teaching students with disabilities at the secondary level, reported increased knowledge and understanding of support needs of students with disabilities transitioning to postsecondary education. These participants, through experience, recognized differences between high school and college expectations in order to identify possible transition "best practices," including (1) teaching self-management, academic, and social skills with an eye toward transferability, (2) incorporating transition skills throughout the secondary curriculum, (3) providing explicit instruction in self-advocacy, and (4) beginning transition work early. Mentors identified obstacles to the implementation of transition instruction: (1) lack of communication between special and general education teachers, (2) competing priorities for teachers' time, (3) time with/access to students with disabilities in inclusive programs, and (4) current teaching practices that impeded the development of academic autonomy. Study findings have implications for teacher education in the area of transition.

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Chapter One: Introduction

Young people today face many challenges as they move from childhood through adolescence to adulthood. While every generation has faced obstacles growing up, today's youth seem uniquely buffeted in their coming-of-age quest in the face of high unemployment, a changing national and world economy, and increased demands for higher levels of education (Wehman, 2013). Youth unemployment, which rose during the recent recession, remains high, ranging from 14-29% (US Department of Labor, 2012), and the rate of employment of young adults age 18-24 is at the lowest level since 1948, the year that government data were first collected (Taylor et al., 2012). Youth underemployment rates are also unprecedentedly high, possibly as high as 50% (Henig, 2012; Taylor et al., 2012).

Milestones in the transition to adulthood have traditionally included completing school, leaving home, becoming financially independent, marrying, and having a child. Declining numbers of young people are reaching these milestones while in their twenties (Arnett, 2000; Rumbaut, 2004). In 1960, 77% of youth in their 20s had accomplished all five of these things; but according to the US Census Bureau, by 2000, less than 50% of women and 33% of men had done so (Jekielek, & Brown, 2005). A popular *New York Times Magazine* cover article (Henig, 2010) recently asked, "Why are so many people in their 20s taking so long to grow up?" Even when considering revised milestones to adulthood that are less dependent on marriage and childbearing, such as accepting responsibility for oneself, making independent decisions, and becoming financially

independent (Arnett, 2004), today's young adults are more likely to be dependent on parents for longer periods of time. Thirty-four percent of young adults aged 25 to 29 report moving back to their parents' home, largely for financial reasons. Parents' expectations of their young adult children have also changed; in 1993, 80% of parents surveyed said that their children should be financially independent by age 22; by 2011, this dropped to 67% (Taylor et al., 2012).

A century ago, changing social conditions such as a decline in child labor and the demand for high school education led psychologists such as Hall (1904) to identify adolescence as a new stage of human development bridging childhood and adulthood. Similarly, the current "changing timetable for adulthood" suggests a new developmental stage spanning the years from age 18 to 29, distinct from both adolescence and full adulthood, named by some psychologists "emerging adulthood" (Arnett, 2004). This new stage recognizes that young people are acquiring more years of education, maintaining longer residence in their parents' home, and taking more time before finding career employment.

The environment in which young people today are coming of age provides the backdrop for studying the transition of young adults with disabilities from high school to adult life. The challenges they face, including completion of schooling, moving from the parental household, and finding career employment, take place in this milieu of changing expectations and norms for society as a whole, including increased demands for higher levels of education (Wehman, 2013).

Students with Disabilities Go to College

As the American economy has become increasingly knowledge-based, demands for higher levels of education have led more students to attend college or other postsecondary education programs. College enrollment increased from 51% to 68% percent between 1975 and 2011 (NCES, 2013). College enrollment is linked to higher lifetime earnings (US Census Bureau, 2012), and higher education is increasingly seen as a pathway to better employment, higher income, and better quality of life (Wilson, Getzel, & Brown, 2000).

Just as college enrollment has increased for typical students, more students with disabilities are attending college as well. From 1990 to 2005, the rate of postsecondary attendance increased from 26% to 46% for youth with disabilities who were within four years of leaving high school. This included an increase from 14% to 32% for community college attendance; an increase from 10% to 23% for attendance at a vocational, business, or technical school; and an increase from 5% to 14% for enrollment in four-year colleges and universities (Newman, Wagner, Cameto, Knokey, & Shaver, 2010). Students with disabilities currently make up approximately 9% of the postsecondary student population, compared to 3% in 1978 (National Council on Disability, 2003), though rates vary greatly among postsecondary institutions (US Department of Education, 2006). Postsecondary education includes four year colleges and universities, community colleges and other two year colleges, and non-degree and certificate programs such as vocational, business or technical schools (Newman, Wagner, Cameto, & Knokey, 2009¹).

¹ Much of the statistical information in this chapter is drawn from the second National Longitudinal Transition Study, funded by the National Center for Special Education Research, US Department of

Many of the same predictors of college attendance for the general student population held true for students with disabilities as well, including factors such as parents' income, parents' level of education, and high-quality high school program and preparation (Murray & Wren, 2003; Newman at al., 2009). However, the rate of postsecondary enrollment varies greatly across disability categories. It ranges from a low of 27% for students with intellectual disabilities to a high of 78% for students with visual impairments. Rates of postsecondary enrollment for students with high incidence disabilities range from 34% for students with emotional and behavioral disorders to 55% for students with speech and language impairments and other health impairments. The largest group of postsecondary students with disabilities is students with learning disabilities who enroll at a rate of 47% (Newman et al., 2009).

Despite the trend toward increased enrollment, overall, students with disabilities attend postsecondary education at a significantly lower rate than students without disabilities (Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006). This gap is especially large for enrollment in four year colleges, a gap that is noteworthy because individuals with disabilities who are four-year college graduates are employed and have incomes commensurate with the general population of college graduates (Madaus, Banerjee, & Hamblet, 2010; NCES, 1999).

According to the National Longitudinal Transition Study (Newman et al., 2009), 45% of students with disabilities attended some postsecondary education program within four years of leaving high school, in contrast to 53% of typical students. Although they enrolled in four-year colleges at a significantly lower rate, students with disabilities

Education. The study began in 2000 and surveyed 11,270 13-16 year olds (at the start of the study) who were receiving special education under the Individuals with Disabilities Education Act (IDEA) in grade 7 or above during the 2000-2001 school year.

attended two-year colleges at rates similar to typical students. Students with disabilities surveyed on attendance of postsecondary programs within the four years prior to the survey reported 32% attending or having attended community college or other two-year colleges, 23% attended vocational, business, or technical schools, and 14% reported attending four year colleges and universities (Newman et al., 2009).

Enrollment in postsecondary education, of course, is only the first step. Students with disabilities must stay in school and succeed academically in order to graduate. Rates of retention in and graduation from college are concerns that apply to many groups of students, not only students with disabilities (Newman et al., 2009). Postsecondary graduation rates for young adults in the general population range from 52% to 56%(NCHEMS, 2009; Newman et al., 2009). In contrast, 41% of students with disabilities reported that they had graduated from their postsecondary program (Newman et al., 2009; Kuh et al., 2006). Graduation or completion rates differed by type of postsecondary institution. Fifty-seven percent of enrolled students with disabilities reported completing their program at a vocational, business, or technical school, compared to 66% for the general population; 41% of enrolled students with disabilities graduated from their community college program, comparing favorably to 22% of the general population; and 34% of enrolled students with disabilities reported graduating from a four year college, compared to 51% of the general college population (Newman et al., 2009). These gaps raise concern about attrition of students with disabilities, especially in four-year college and university programs. The National Postsecondary Education Cooperative refers to the cumulative result of lower high school graduation rate, lower postsecondary

enrollment, and lower retention and graduation rates from postsecondary programs as "leakage in the education pipeline" (Kuh et al., 2006, p.1).

Over the course of several decades, Bean (1980) and Tinto (1975; 1993; 2012) studied factors that mediate students' persistence in higher education. Factors such as successful academic and social integration combined to allow students to meet their postsecondary education goals. Academic integration is defined as "factors that influence students' ability to become a part of a scholastic college environment," evidenced by grade point average (GPA), students' satisfaction with faculty, and participation in study groups and academic advising (Arnold, 1999, p. 5). Social integration is defined as "factors that contribute to students' ability to develop relationships with other students and student groups outside of an academic setting," for example, having lunch with other students, participating in school clubs, or attending sporting events (Arnold, 1999, p. 5). Taken together, academic and social integration contribute to persistence in postsecondary education that leads to attainment of a degree, certificate, program completion, or other goal set by the student, also known as "college success" (McPherson & Shapiro, 2009).

While all students moving from high school to college encounter challenges as they adjust socially and intellectually to the college setting, students with disabilities face additional adjustments. Some of the differences between high school and college environments encountered by most students include less student-teacher contact, larger classes, more long-range course projects, less frequent evaluations, and more unstructured time (Janiga & Costenbader, 2002). In addition to challenges faced by the general student population, students with disabilities encounter a new and different service delivery system in which they may receive services and accommodations as they did in high school, but under different guidelines and through a system that was accessed largely through their own initiative.

In order to receive accommodations and other supports in college, the student with a disability must have the self-awareness to realize and understand that an accommodation or support is needed, self-advocacy skills to ask for accommodations or other supports (Getzel, 2008), and the self-management skills to do so in a timely manner. Students may not be sufficiently aware of college demands, and may not have sufficient awareness of their own disability needs (Madaus et al., 2010). Students leaving high school may be unable to explain their disability and unable to articulate their disability-related classroom needs. They may lack understanding about how the accommodations they have been accustomed to receiving affect their learning (Getzel, 2008). In fact, they may not be prepared to disclose their disability at all.

Less than one third of students disclosed their disability once they entered college (Newman et al., 2009). According to the NLTS-2, 63% of students with disabilities reported that upon leaving high school, they no longer believed that they had a disability. Another 9% believed that they did have a disability, but chose not to disclose this to their postsecondary program. The remaining 28% informed their school that they had a disability, either prior to enrolling (24%) or after they had enrolled (4%).

Some students with disabilities desire a "new beginning" (Getzel, 2008, p. 208). These students look at college as a fresh start in which they can distance themselves from the special education label they had had in high school (Cook, Hennessey, Cook, & Rumrill, 2007; Janiga & Costenbader, 2002; Marshak, VanWieren, Ferrell, Swiss, & Dugan, 2010). Stereotyped views of learning disabilities, equating learning disability with low ability, may discourage disclosure (May & Stone, 2010). Finally, students with disabilities and college disability services staff do not always agree on needed services and accommodations (Marshak et al, 2010). Dutta, Schiro-Geist, and Kundu (2009) surveyed disability coordinators and students with disabilities at four universities and found a "significant disconnect" between student expectations and university services (p. 14).

Students' views of their own disability also affect their willingness to utilize supports. Hartman-Hall and Haaga (2002) asked college students with learning disabilities to respond to vignettes about students requesting help from professors, as well as radio advertisements about academic support services on campus. They found that a significant factor in students indicating a willingness to seek help was students' own view of their learning disability. Students who viewed their learning disability as "global, stigmatizing, and nonmodifiable" (p. 268) were less likely to indicate a willingness to seek help than students who viewed their disability as "circumscribed, modifiable, and nonstigmatizing" (p. 266). None of the other variables studied, which included selfesteem, severity of learning disability, and previous experiences seeking help, were significantly correlated with willingness to seek help as indicated in a hypothetical scenario.

Problem Statement and Research Questions

Like many students coming of age in a challenging economic and social environment, students with disabilities seek higher education in order to help them obtain independence, fulfilling employment, higher income, and a richer life. The majority of students with disabilities who graduate from high school are interested in further education (Cameto, Levine, & Wagner, 2004). Professionals in special education, college student services, and rehabilitation fields need better understandings of the experiences of students with disabilities as they enroll and progress through college, and they need tools to support that process. The purpose of this study is to examine one approach to address the needs of students with disabilities entering and progressing through college. This case study of a university-based program designed to provide mentoring and support in the development of self-management and self-advocacy skills describes and explores the evolution of the program and the experiences of the program participants. The mentors in this program were graduate students, already certified as high school content teachers, seeking a Master's degree and certification in special education.

This study seeks to address the following questions:

- How does this mentoring program address the college support needs of undergraduate students?
- 2. What opportunities does the mentoring experience provide that support future special educators' preparation for transition planning?
- 3. How can the mentors' experiences and changing ideas inform teacher educators relative to the preparation of secondary special education teachers?

Overview

Chapter Two provides a review of the research literature pertaining to services provided by special educators to students with disabilities in high school to support their journey toward adult life, focusing on the students' transition to postsecondary education. This chapter also reviews legislative mandates for transition planning and services as well as current issues and challenges in providing those services. It provides a review of successes and challenges for students with disabilities in college and other postsecondary programs, examining areas such as support needs and the obstacles to students receiving supports, including both individual student preparation and systemic barriers. Chapter Two concludes with a review of college mentoring programs designed to support students with disabilities.

Chapter Three provides the results of the first of two pilot studies conducted during the inaugural semesters of the mentoring program. This pilot study was utilized to refine the services and structure of the mentoring program in subsequent semesters, as well as to refine the research methods of this study as a whole.

Chapter Four adds the results of a second pilot study that provided information used to further refine both program design and research methods.

Chapter Five outlines the methodology and structure of this study. This case study takes an in-depth look a mentoring and study support program involving future special education teachers and undergraduate students with disabilities-- its structure, purpose, and the experiences of the participants, both the undergraduate students with disabilities and the graduate student mentors. This case study primarily uses qualitative methods to study the experiences of the participants, including interviews, the researcher's observations, and examination of documents related to the program. The case study also utilizes descriptive statistics and the results of a survey given to students in the project aimed at feedback for program improvement. In this chapter, I also describe the selection of participants, setting, data collection methods, and data analysis methods.

Chapters Six and Seven present data and findings along with connections to extant research and theory. Chapter Eight provides conclusions and implications drawn from findings.

Glossary

The following terms are used frequently throughout this study. The definitions that follow were gleaned from the literature and reflect the researcher's understandings of these terms.

- Academic autonomy -- the capacity of students to deal with ambiguity and to monitor and control their own behaviors in ways that allow them to attain their educational goals (Costello and English, 2001, p. 24).
- *College (student) success*—persistence in postsecondary education that leads to acquisition of desired knowledge, skills, and competencies and attainment of a degree, certificate, program completion, or other educational objectives set by the student (Kuh et al, 2006).
- *Educational attainment*—the highest degree or grade level attained by a student (NCES, 2010, p. A-2)
- Mentoring a dynamic, reciprocal, long-term, formal or informal relationship that focuses on personal and/or professional development (Foster Heckman, Brown, & Roberts, 2007, p. 2).
- *Persistence* a student's postsecondary education continuation behavior that leads to graduation (Arnold, 1999).

- *Personal agency* the subjective awareness that one is initiating, executing, and controlling one's own volitional actions in the world (Bandura, 2001).
- Postsecondary education-- four year colleges and universities, community colleges and other two year colleges, and non-degree and certificate programs such as vocational, business or technical schools (NCES, 2014; Newman et al., 2009). *Higher education* is used synonymously.
- *Retention* –a measure (usually a percentage) showing how many students re-enrolled at an institution that they attended the previous year prior to completion of a program or degree (Arnold, 1999).
- *Self-determination* -- acting as the primary causal agent in one's life and making choices and decisions regarding one's quality of life free from undue influence or interference (Wehmeyer, 1992, p. 305).
- *Self-management skills* -- time management, organizational skills, goal-setting, and study skills (Getzel, 2008).
- *Transition services* -- a coordinated set of activities for a child with a disability that are results-oriented, focused on improving academic and functional achievement to facilitate movement from school to post-school activities, including postsecondary education, vocational education, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation, based on the individual child's needs, taking into account the child's strengths, preferences, and interests (IDEA, 2004).
- *Youth, young person, young adult*—These terms are used interchangeably in this report. The US Bureau of Labor Statistics (2012) defines youths as individuals age 16-

24; all United Nations agencies define youth as 15 to 24 years (UNESCO, n.d.). Developmental psychologist Erik Erikson defined adolescence as ages 13-19 and young adulthood as ages 20-24 (Erikson, 1975).

Chapter Two: Review of Literature on Transition to Postsecondary Education

As the economy and society demand higher levels of education for all students, more students with disabilities are graduating from high school and pursuing postsecondary education. Some concerns related to these students' pursuit of higher education are retention in and completion of postsecondary education programs, the low level of use of supports at the college level, and the ability of students with disabilities to self-advocate and work proactively to address their disability needs. In this chapter, I review further challenges in the form of differing legal frameworks for the provision of services to students with disabilities in the K-12 system and in postsecondary education. I also elaborate on the mandate for transition planning and programming to prepare students with disabilities to transition from secondary to postsecondary education and beyond, as well as barriers to the implementation of evidence based practices in this area. Following that, I review the support needs of students with disabilities as well as college programs in which students with disabilities have found success. Finally, I review mentoring programs designed to provide support for college students with disabilities.

The Transition from Secondary to Postsecondary Education

Legal and Regulatory Framework

In addition to the challenges faced by all new college students, students with disabilities preparing to move from high school to a postsecondary setting face additional unfamiliar demands (Getzel, 2008; Madaus, 2005) requiring different responses on the

part of these students than those that were expected of them in high school (Hadley, 2006). These changing expectations reflect the laws, with differing mandates and definitions of disability, that govern the provision of services in secondary and postsecondary programs (Sparks & Lovett, 2009).

Services for students with disabilities in secondary school are guided primarily by the mandates of the Individuals with Disabilities Education Act (IDEA), most recently reauthorized in 2004, and Section 504, subpart D of the Rehabilitation Act of 1973. IDEA places responsibility for identifying and providing services for students with disabilities on the school system and school personnel, defining a "child with a disability" as a child

(i) with intellectual disability, hearing impairments (including deafness), speech or language impairments, visual impairments (including blindness), emotional disturbance, orthopedic impairments, autism, traumatic brain injury, other health impairments, or specific learning disabilities; and

(ii) who, by reason thereof, needs special education and related services.

(IDEA, 2004)

Section 504 is a civil rights statute that prohibits discrimination on the basis of disability. This law defines disability as "a physical or mental impairment that substantially limits one or more major life activities, such as (but not limited to) self-care, breathing, walking, seeing, performing schoolwork, speaking, and learning" (Rehabilitation Act of 1973) and requires that school districts provide accommodations to ensure equal access to school programs for students who have a disability. Subpart *D* of Section 504 governs preschool and K-12 programs.

Upon entering college, services for students with disabilities are guided primarily by the Americans with Disabilities Act (ADA) and the Rehabilitation Act of 1973, Section 504, subpart E. ADA defines disability as "a physical or mental impairment that substantially limits one or more of the major life activities of such individual; a record of such an impairment; or being regarded as having such an impairment" (ADA, 1990). Section 504 subpart E prohibits discrimination in college admissions and provides equal access to campus programs and facilities. All postsecondary institutions are required to provide access and reasonable accommodations in the form of "appropriate academic adjustments as necessary" in order that they "not discriminate on the basis of disability" (Office of Civil Rights, 2007, p. 2); however, programs differ in their interpretation of the law, as well as in their service offerings (NCES, 1999; Stodden, Jones, & Chang, 2002). Further, colleges are not required to provide accommodations that would fundamentally alter course or program content, nor those that would cause undue financial or administrative burden. There is a great deal of variability among postsecondary institutions in the interpretation of these requirements and the methods of providing the required accommodations and supports (Harris & Robertson, 2001).

Thus, services that had been mandated under the Individuals with Disabilities Education Act (IDEA, 2004), such as identification of students with disabilities by school personnel, assessment and classification, preparation of Individualized Education Plans (IEPs), special program placement and services, and curriculum modifications and testing accommodations, may no longer be available, and the services that are available are accessed only by the student's own initiative. The responsibility for a student's support and success shifts from the school system to the individual student (Hadley, 2006). Students accustomed to the support of an interdisciplinary team in high school and unused to advocating for services are now expected to self-identify as a student having a disability, provide documentation of their disability, self-advocate with professors, and seek out and engage with services to meet their needs (Hadley, 2006; Stodden et al., 2002). In addition, the supports and accommodations that students receive in college may be provided in different forms than those offered in high school (Getzel, 2008). Table 2.1 summarizes the differing legal mandates and the provision of services in secondary and postsecondary programs.

Table 2.1

	K-12	Postsecondary
Laws governing services	IDEA, Section 504 subpart D	ADA Section 504 subpart E
Oversight	IDEA: US Department of Education 504: Office of Civil Rights	ADA: Dept. of Justice 504: Office of Civil Rights
Primary responsibility for identification and arranging services	LEA/ school district	Student
Family involvement	IDEA mandates school to involve parents	Student is legal adult with privacy rights
Financial considerations	Free, appropriate public education must be provided. Cost may not determine access to services.	Colleges may not charge higher tuition for students with disabilities, but extra services may be fee-based. Accommodations that cause financial or administrative burden need not be provided.
Academic modifications	Course content may be modified according to IEP	Course content not changed or waived if required for program
Assessment/ documentation of disability	Provided by school, school has responsibility to identify students with disabilities	Testing is arranged privately by student, cost born by student
Primary advocate	Parent	Student

Federal Disability Laws and Services for K-12 and Postsecondary Education

(IDEA, 2004; Madaus & Shaw, 2004; Rehabilitation Act, 1973)

Bridging the Gap: Transition Planning

Following the passage of the Education of All Handicapped Children Act in 1975, students with disabilities began to attend public schools in greater numbers, and the first large cohort of these students began to age out of public school services in the 1980s. Concerns with employability and independent living emerged and resulted in the first legal mandate for transition services. Originally conceived as an "outcome-oriented process encompassing a broad array of services and experiences that lead to employment" (Will, 1984, p. 1), transition from school to adulthood soon became broader, encompassing all areas of adult life (Halpern, 1992). The 1990 amendments to the EHA, then renamed Individuals with Disabilities Education Act, outlined transition services, specifying consideration of students' interests, preferences, and needs. Specific transition components of the student's Individual Education Plan (IEP) were required beginning by age 16 or earlier if indicated. The 1997 IDEA amendments expanded transition requirements and required that the content of a student's education be focused on the student's post-school aspirations. Student involvement was mandated in planning coordinated activities that were part of the IEP and addressed the student's post-school goals (Kohler & Field, 2003).

The 2004 reauthorization of IDEA includes the following definitions and provisions related to transition:

Transition services means a coordinated set of activities for a child with a disability that: (1) Is designed to be within a results-oriented process, that is focused on improving the academic and functional achievement of the child with a disability to facilitate the child's movement from school to post-school activities, including postsecondary education, vocational education, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation; (2) Is based on the individual child's needs, taking into account the child's strengths, preferences, and interests; and

includes: (i) Instruction; (ii) Related services; (iii) Community experiences; (iv) The development of employment and other post-school adult living objectives; and (v) If appropriate, acquisition of daily living skills and provision of a functional vocational evaluation.

IDEA further states that:

(b) *Transition services*. Beginning not later than the first IEP to be in effect when the child turns 16, or younger if determined appropriate by the IEP Team, and updated annually, thereafter, the IEP must include: (1) Appropriate measurable postsecondary goals based upon age appropriate transition assessments related to training, education, employment, and, where appropriate, independent living skills; and (2) The transition services (including courses of study) needed to assist the child in reaching those goals. [§300.320(b)]

Therefore transition services as currently conceived and mandated involve development of a vision of adult outcomes focusing on employment, postsecondary education, residential settings, and community participation; identification of services and providers needed to attain these outcomes; and interagency planning (Shearin, Roessler, & Schriner, 1999). "Transition planning is a student-centered activity that requires a collaborative effort which should be shared by students, parents, secondary personnel, and postsecondary personnel working as a team" (Hadley, 2006, p. 16.). The increased emphasis on college attendance and completion for students with disabilities, as well as for the general population, has focused increased attention on transition planning and programming toward postsecondary education for these students.

Evidence-Based Transition Services

Several different organizational structures for conceptualizing effective transition practices have resulted from reviews of the transition literature (Alwell & Cobb, 2006; Kohler, 1996; Kohler & Field, 2003; Landmark, Ju, & Zhang, 2010; Test et al., 2009). The Taxonomy for Transition Programming developed by Kohler (1996) and refined by Kohler & Field (2003) is a widely accepted and utilized framework for planning, implementing and evaluating transition programs. This framework of secondary education practices associated with improving post-school outcomes for students with disabilities is based on studies of evidence-based secondary transition practices: Kohler's (1993) literature review; Kohler, DeStefano, Wermuth, Grayson, and McGinty's (1994) analysis of exemplary transition programs; and Rusch, Kohler, and Hughes' (1992) metaevaluation of model transition program outcomes and activities. These were incorporated into a concept map (Kohler, 1996) that organized the identified transition practices into five major categories:

- Student-focused planning practices use assessment information and facilitate students' self-determination to develop individual education programs based on students' visions, interests, and post-school goals. This necessitates developing students' self-awareness in order to help them identify their interests, preferences, and goals.
- 2) Student development practices emphasize life, employment, and occupational skill development through school-based and work-based learning experiences, giving students the opportunity to develop and apply self-determination skills, as well as other academic, social, and
occupational skills and behaviors. This includes identifying needed accommodations, as well as providing inclusive educational opportunities.

- 3) Interagency collaboration practices facilitate involvement of community businesses, organizations, and agencies in all aspects of transition-focused education, with clearly articulated roles, responsibilities, communication strategies, and other collaborative actions that enhance curriculum and program development.
- 4) Family involvement practices aim toward personal, rather than bureaucratic, relationships with family to encourage their meaningful involvement in transition activities and planning. Family-focused training and family empowerment activities increase the ability of family members to work effectively with educators and other service providers.
- **5) Program structure and attributes** are features that relate to efficient and effective delivery of transition-focused education and services, including philosophy, planning, policy, evaluation, and human resource development.

(Kohler, 1996; NSTTAC, 2007)

Using Kohler's (1996) Taxonomy for Transition as a framework and quality indicator, Test et al. (2009) found that the majority of evidence-based practices described in the literature were in the areas of student development and, to an extent, studentfocused planning. Other researchers and agencies have developed frameworks for effective transition planning, incorporating similar practices, but varied organizational structures. As part of the What Works Transition Research Synthesis Project, Alwell & Cobb (2006) reviewed 164 studies published over a 20-year period, looking for evidence of six intervention areas: transition planning, vocational and employment preparation, social skills, self-determination, life skills curriculum, and counseling. Organizations and consortia devoted to transition planning and services, such as the National Center on Secondary Education and Transition (NCSET) and the National Secondary Transition Technical Assistance Center (NSTTAC), have also developed frameworks for organizing and evaluating research in transition, seeking to identify and promote evidence-based practices. Table 2.2 shows the alignment of these frameworks with the Taxonomy for Transition. Appendix A provides a list of transition centers and programs.

Table 2.2

Transition Taxonomy	Atwell & Cobb	NASET National	Landmark, Ju, &
(Kohler, 1996;	(2006)	Standards & Quality	Zhang (2010)
Kohler & Field, 2003)		Indicators (2005)	-
Student-focused planning	Transition planning	Schooling	Inclusion
Student Development	Social skills	Youth development	Social skills training
Collaborative service delivery		Connecting activities	Community/ agency collaboration
	Vocational & employment preparation	Career development	Employment preparation / Work experience
Family involvement	Counseling	Family involvement	Parent/family involvement
Program structure	Life skills curriculum		Daily living training
	Self-determination		Self-determination training

Frameworks for Transition Practices

(Alwell & Cobb, 2006; Kohler, 1996; Kohler & Field, 2003; Landmark et al., 2010; NASET, 2005; NSTTAC, 2007)

Implementation Concerns

In spite of this array of transition practices, and the existence of guidelines for transition personnel preparation (DCDT, 2000a, 2000b), implementation of evidencebased transition planning and delivery of effective transition curriculum is lacking. A number of studies identified needs related to transition planning and practices relevant to students with disabilities transitioning to postsecondary education. Many of these studies raised concern that despite the knowledge base and organizational structures outlined above, best practices in transition planning frequently were not occurring (Grigal, Test, Beattie, & Wood, 1997; Kohler & Field, 2003). The need for more effective transition for college-bound students with disabilities was evident from the lack of (a) planning and programming for the development of self-determination and related skills (Agran, Snow, & Swaner, 1999; Alwell & Cobb, 2006; Cook et al., 2007; Janiga & Costenbader, 2002; Trainor, 2007), (b) postsecondary education goals in transition plans (Shearin et al., 1999), and (c) challenging college preparatory coursework and effective inclusive education opportunities (Alwell & Cobb, 2006; Sparks & Lovett, 2009; Stodden, Galloway, & Stodden, 2003).

Surveys of college disability services personnel and college faculty (Janiga and Costenbader, 2002; Cook et al., 2007) pointed to areas of need for students transitioning to postsecondary education programs, especially in the development of student self-determination and self-advocacy skills. Janiga and Costenbader (2002) surveyed 74 coordinators of college disability services in New York State. Respondents overall reported that they felt that transition planning was in need of improvement, with common areas of concern being the need for improved student preparation in the areas of self advocacy skills, independence, and understanding the differences between high school and college. Cook et al. (2007) reported similar findings from their survey of nine university faculty and disability support services staff, including concerns with self-advocacy skills that were identified as both critically needed and lacking.

The need for programming at the high school level in self determination was reported by Durlak, Rose, and Bursuck (1994), Hadley (2006), and Stodden et al. (2003). Stodden et al. called for teachers to link IEP goals to individualized transition goals, targeting success in postsecondary environments. Durlak et al. (1994) and Hadley (2006) found that teachers needed to directly teach self-determination skills in order to prepare students with disabilities to transition successfully. Teachers agreed that their students needed instruction in self-determination, but there was an implementation gap (Thoma, Baker, & Saddler, 2002; Webster, 2003). Special education teachers reported that while they understood the importance of self-determination, they were unclear on how to teach these important skills. Therefore, despite believing that self-determination was important, they did not include goals toward the development such skills in their students' IEPs (Agran et al., 1999; Collet-Klingenberg, 1998; Thoma & Sax, 2003).

Trainor's (2007) study of girls ages 16-18 with learning disabilities illustrated the effect of this lack of attention to the development of self-determination skills needed in postsecondary settings. She found that transition planning and instruction were not an important part of the school experience of these students, nor were they well informed about the process. Students reported having generally negative experiences at their IEP meetings, as well as not being prepared to participate meaningfully, concerns also raised by Johnson, Stodden, Emanuel, Luecking, and Mack (2002). Trainor (2007) found that the students had difficulty making meaningful connections between their transition goals and their current abilities and activities. They also had difficulty making distinctions between preferences and strengths, as well as difficulty articulating or understanding needs and weaknesses. While these students identified themselves as self-determining, they revealed that they lacked key components of self-determination skills. "The gradual nature of transition planning and instruction, learning from these experiences, and realigning long-term goals, were missing, yet research shows this is precisely what young women with learning disabilities need" (Trainor, 2007, p. 41).

Trainor (2008) described self-determination as a complex construct involving interaction between the individual and the environment, in which the individual possesses psychological and cognitive component skills, and the environment provides opportunities to practice these self-determination skills. Therefore, to develop selfdetermination, students with disabilities needed not only to acquire specific skills, but also to practice them in meaningful settings in which they truly could exert control (National Council on Disability, 2003; Wehmeyer, 2004). While the lower-stakes environment of high school would seem to provide this opportunity, in fact, high school students with disabilities had few opportunities for making choices, and students were sometimes sheltered from the consequences of their choices (Patwell & Herzog, 2000; Thoma, Baker, & Saddler, 2002).

In addition to concerns about lack of planning and programming in the area of self determination, there was concern about the lack of postsecondary education goals found in students' transition plans, especially in light of increasing numbers of students with disabilities attending postsecondary education programs. Shearin et al. (1999) reviewed 68 IEPs from two Arkansas high schools. They found that postsecondary education was not emphasized overall, and was not even addressed in 78% of the IEPs they reviewed, and furthermore, that these IEPs lacked the required explanations as to why the area had not been addressed. Given Cameto et al.'s (2004) finding that post-secondary education was reported as a transition goal by more than 80% of students with disabilities interviewed in the second National Longitudinal Transition Study, it appeared that special education teachers and IEP transition teams needed additional training in transition planning procedures (Grigal et al., 1997).

Finally, the status of transition planning for college-bound students with disabilities raised concern about the pre-service preparation of special education teachers who are charged with preparing transition plans and guiding transition programming. Concerns that emerged in the literature included the lack of effective instruction in transition planning in many teacher preparation programs (Kohler & Greene, 2004; Thoma, Baker, & Saddler, 2002; Thoma, Nathanson, Baker, and Tamura, 2002; Webster, 2003) and the need for pre-service exposure to evidence-based transition practices such as inclusive programming, social skills training, family involvement, self-determination training, and community and agency collaboration (Landmark et al., 2010). Secondary special education teachers themselves believed that they were poorly prepared in this area (Morningstar & Kleinhammer-Tramill, 2005).

Students with disabilities need high quality transition planning and programming geared toward post-secondary education. Special education teachers who will guide the transition process need training that addresses effective transition planning and transition curriculum and tools to implement those practices. Thoma, Nathanson et al. (2002) surveyed 230 special education teachers, asking where they had learned about self-determination for students with disabilities, a critical element in transition planning. While 32% of the respondents reported that they had learned about self-determination in graduate courses, and 16% in undergraduate courses, when asked about knowledge of implementation of self-determination instruction, none of the teachers surveyed reported learning about this in graduate or undergraduate courses. This sheds light on the implementation gap noted earlier.

Teachers also need better understanding of what their students will need as they move on to postsecondary settings. Many special education teachers are unaware of the expectations of postsecondary education and the skills students need to address those expectations (Janiga & Costenbader, 2002). While teachers report some in-service opportunities to learn about transition planning (Thoma, Nathanson et al., 2002, p. 245), the majority of teachers surveyed felt it was "extremely important" to have such instruction at the graduate level (74.4%) or undergraduate level (69.8%) that would contribute to effective transition practices. Figure 2.1 illustrates some of the challenges outlined above.



Figure 2.1. Challenges and needs of students with disabilities transitioning to postsecondary education

College Students with Disabilities: Succeeding with Supports

While effective transition experiences in high school are necessary to prepare students with disabilities for postsecondary education, they are not sufficient, as these students continue to need supports and services as they move into college settings. Although legal mandates focus on prohibiting discrimination, college success for many students with disabilities involves more than non-discriminatory access. Retention and graduation rates for students with disabilities remain a concern (National Council on Disability, 2003; Newman et al., 2009) and some students with disabilities need an array of services beyond what is strictly mandated under ADA in order to be successful, stay in college, and graduate (Getzel, 2008).

Two factors correlated with persistence of students with disabilities in college were engagement and strong connections to faculty and other students (Troiano, Liefeld, & Trachtenberg, 2010). Murray and Wren (2003) looked at a number of cognitive, academic, and attitudinal predictors of college success and found that of the factors they studied, only full-scale IQ and the absence of the trait of "delay/ avoidance" of studying correlated to college success (defined as GPA). Other researchers looking at additional factors found that student success correlated to use of supports (Troiano et al., 2010), students' willingness and ability to talk to their professors, social and negotiation skills, often referred to as self-efficacy (Fitchen & Goodrick, 1990), high aspirations and good academic preparation (Rojewski, 1999), a high level of self-management skills, and a high level of self-determination skills (Getzel, 2008). These traits and skills that correlate with college success are the same ones targeted by evidence-based transition planning,

including student development (Kohler, 1996), social skills, and self-determination training (Alwell & Cobb, 2006; Landmark et al., 2010).

The skill areas of self-management and self-determination recur in the literature on college success, just as with studies of high school transition planning needs, as critical elements of success for students with disabilities in postsecondary education programs. Self-management includes time management, organizational skills, goalsetting, and study skills, skills that college students with disabilities identify as important to their success (Finn, Getzel, & McManus, 2008; Getzel, 2008; Getzel & Thoma, 2008; Thoma & Getzel, 2005). Students with disabilities need self-management skills to develop academic autonomy, defined as "the capacity to deal with ambiguity and to monitor and control their own behaviors in ways that allow them to attain their educational goals" (Costello and English, 2001, p. 24). In addition to accommodations, college students with disabilities need support in college to develop these skills.

Self-determination skills were critical to the success of college students with disabilities (Halpern, 1992; Janiga & Costenbader, 2002; Stodden et al., 2003; Thoma & Getzel, 2005; Wehmeyer, 2004; Trainor, 2007). Self-determination includes personal and interpersonal skills, including acceptance of one's disability and knowledge of how that disability affects ones learning, knowing how to describe one's disability as well as any needed supports, and having determination to overcome obstacles (Getzel, 2008). Wehmeyer (1992) defined self-determination as "acting as the primary causal agent in one's life and making choices and decisions regarding one's quality of life free from undue influence or interference" (p. 305). Components of self-determination are choice-making skills, self esteem, positive perceptions of control and efficacy, and self-

knowledge and awareness. (Trainor, 2007; Wehmeyer, Agran, & Hughes, 2000). Another critically important component of self-determination is self-advocacy (Hadley, 2007).

Students echoed the importance of self-awareness, self-determination, and selfefficacy. College students with disabilities, when asked to identify specific selfdetermination skills they needed to succeed in college, named forming relationships with college personnel and classmates as very important (Finn et al., 2008; Getzel & Thoma, 2008). They advised fellow students to get to know their professors, disability office staff, and other students, and specifically recommended finding a peer in class to whom they might go for information and clarification of expectations. They also advised willingness to use campus-wide student supports such as a writing center or peer tutoring service. Participants in Webster's (2003) study of 22 college students with disabilities enrolled in a disability awareness course confirmed the importance of self-advocacy, commenting that it became easier with practice (p. 169).

However, needs extend beyond the individual student characteristics, skills, and supports crucially important to college success. Some researchers identified systemic factors that colleges might also address including increased awareness and knowledge on the part of faculty of the characteristics and needs of students with disabilities and the use of universal design concepts in planning curriculum (Getzel, 2008; Orr & Bachmann Hammig, 2009). Bolt, Decker, Lloyd, and Morlock's (2011) study of students' perceptions of accommodations noted that faculty awareness and receptivity influenced students' willingness to use accommodations. Hadley's (2006) study of students with learning disabilities' access to higher education highlighted the importance to students of

having their professors' support in addition to possessing individual self-determination skills. College students with disabilities surveyed by Webster (2003) similarly wished for increased faculty knowledge and awareness of disability, as well as a more accessible and universally designed campus. Universal design for learning, an educational approach to providing more flexible classroom materials, technology, and varied methods of conveying instructional content (Getzel, 2008; Rose, Harbour, Johnston, Daley, & Abarbenell, 2006) is needed to make instruction at the college level more accessible to a wide range of students, including students with disabilities. As colleges seek to address increasingly diverse learning needs among their students, the need for campus-wide approaches will grow (Getzel, 2008).

While the needs of college students with disabilities are many, there is a growing body of research indicating that with support, students with disabilities can close the retention and graduation gap. Mamiseishvili and Koch (2010) and the NLTS-2 (Newman et al., 2009) found that the provision of appropriate supports and accommodations in college and in other postsecondary programs led to greater persistence and higher graduation rates. Studies have shown that in some settings, with appropriate support, students with disabilities achieve and graduate at the same rate as students without disabilities (Alwell & Cobb, 2006; California Postseondary Education Commission, 2008; Harrington & Fogg, n.d.; Nguyen et al., 2004; Oguntoyinbo, 2012; Vogel & Adelman, 1990; Vogel & Adelman, 1992).

Harrington and Fogg (n.d.) studied college retention among 4,597 graduates of Career and Technical Education (CTE) high school programs in Massachusetts and found that while students with disabilities, who made up approximately one-fourth of the group, were less likely to enroll in college than CTE students who did not have a disability, the two groups had identical one-year retention rates in college. Other researchers have reported similar findings of comparable graduation rates in studies of a single college or university system.

Vogel and Adelman (1990) studied 110 students with learning disabilities and a comparison group of 153 randomly selected students at a single college and found similar graduation rates and academic failure rates for the two groups. The students with learning disabilities in this study self-identified and were "highly motivated to succeed in college" (p. 432). A follow-up study at the same college of 62 students (self-identified and receiving support services for learning disabilities) and 58 randomly selected students showed similar graduation rates for the two groups, but a much higher course failure rate for the students without identified learning disabilities, 51% compared to 18% (Vogel & Adelman, 1992).

Data from California State University campuses and California community colleges showed persistence and six-year graduation rates for students with disabilities that were comparable to the general student population. University of California data for recent years showed that the 2-3% of undergraduates who identified and received services for students with disabilities had cumulative GPAs that were nearly identical to the general undergraduate population (California Postsecondary Education Commission, 2008). California higher education systems feature disability services programs that date back to 1976 and include collaborative agreements with the state Department of Rehabilitation to help identify students in need of assistance and verify disability status. Nguyen et al. (2004) reported identical persistence and graduation rates for students with disabilities and typical students at Dawson College in Montreal, Canada. The University of Connecticut, with extensive support programs beyond what is mandated under ADA, reported a 92% retention rate for students with disabilities (Oguntoyinbo, 2012).

These findings underscore the need for appropriate student supports to be both provided and utilized. However, the success of students at these colleges also highlights the large variation both in the provision of services and in graduation rates among postsecondary institutions. Disability services coordinators at 74 New York State colleges reported a mean graduation rate of 74% for students with disabilities, but within that sample, graduation rates ranged from 10% to 100% (Janiga & Costenbader, 2002). Figure 2.2 adds college supports necessary for success to the picture of postsecondary needs of students with disabilities.



Figure 2.2. Challenges and needs of students with disabilities in postsecondary education.

Postsecondary institutions offer varying services to support students at risk,

including students with disabilities, with varying outcomes. Some of these programs and services include accommodations, academic tutoring, writing support, developmental coursework, specialized advising, and summer programs. One approach to the need for additional support for these students has been to create mentoring programs. These programs seek to provide supportive relationships that will guide students through the continuing transition from secondary to postsecondary education toward college success.

Mentoring Programs Support College Students with Disabilities

Mentorship as a way of providing assistance and support for individuals has a history dating back to ancient Greece. The term *mentor* comes from Homer's *Odyssey*, in which Odysseus asked his friend Mentor to guide and protect Odysseus's son while he was away fighting in the Trojan War (Guetzloe, 1997; Online Etymology Dictionary, n.d.). A *mentor* has been defined as "a wise and trusted teacher or counselor" (Webster's New Collegiate Dictionary, 1995), but in recent years, the definition has evolved as a synonym for a coach or tutor, and the verb form, which first appeared in 1888, is again in popular use (Merriam-Webster Online Dictionary, 2013). Foster Heckman et al. (2007) define mentoring as a "dynamic, reciprocal, long-term formal, or informal, relationship that focuses on personal and/or professional development" (p. 2).

Early mentoring programs in the United States included Friendly Visiting in the late 19th century, designed to provide middle-class roles models for the poor, and the Big Brother (now Big Brother/ Big Sister) Program targeting at-risk youth, which began in 1904 and continues today. Mentoring programs stress positive relationships and typically pair a mentor who is older or more experienced in some way with a person, often a youth, in need of guidance and support.

Formal mentoring programs in higher education date from 1911 with a program at University of Michigan (Crisp & Cruz, 2009), and mentorship programs for individuals with disabilities became popular in the 1970s (Foster Heckman et al., 2007). Today, mentoring programs are among a number of approaches aimed at supporting students with disabilities before and during the transition from high school to college, helping students with disabilities understand how support services and accommodations work at the postsecondary level (Getzel, 2008), and assisting them in utilizing supports and finding success in the college setting.

Although experimental studies of the efficacy of mentoring programs for students with disabilities are limited, the literature on mentoring programs for more broadly defined at-risk groups showed overall effectiveness. Studies of mentoring programs have shown positive behavior changes and increased academic achievement (DuBois, Holloway, Valentine, & Cooper, 2002; Foster, 2001). College mentoring programs have been effective in raising GPA and persistence of at-risk students in college (Crisp & Cruz, 2009; Valentine et al., 2009).

Brown, Takahashi, and Roberts (2010) reviewed the literature on mentoring individuals with disabilities in postsecondary programs in the United States and the United Kingdom and found very few peer-reviewed studies of evidence-based mentoring programs, although they searched numerous databases and contacted professional organizations for article recommendations. Their search netted only 10 articles that met their criteria of peer-reviewed articles published after 1990 that described evidence-based research on mentoring programs for students with disabilities and focused on transition or support and retention in postsecondary education settings.

Brown et al. (2010) identified five different types of mentoring programs: one-onone mentoring that included face-to-face meetings, phone calls, emails, social networking, and texting; group mentoring, in which one mentor worked with several mentees at one time; community-based mentoring; electronic mentoring, using listservs and on-line discussion groups; and peer mentoring, with mentors and mentees of equal status and similar situation. The mentoring programs studied frequently overlapped these categories. They also identified characteristics that recurred in effective mentoring programs: goal planning, the use of trained mentors, and the use of technology.

My review of mentoring literature also focused on students with disabilities in postsecondary settings. I searched the following databases: Education Full Text (Wilson), ERIC First Search, and Education Research Complete. Searches were limited to peer-reviewed materials published from 1990 to the present. I chose that date because 1990 was the year when ADA, the legislation that primarily guides services to students with disabilities on college campuses, became law. In addition, in the 1990s, students with disabilities began to attend college in increasing numbers as part of an evolution of educational services that began in the mid 1970s with increased access to K-12 education. In the 1980s, as students with disabilities came through the educational system, their needs and numbers drove the mandate for transition planning and services. These services expanded to include preparation for postsecondary education in the 1990s. Table 2.3 shows the search terms used and the results.

I reviewed all articles comprising program descriptions or studies in which students with disabilities enrolled in postsecondary programs were mentored, as well as articles on program in which teacher candidates provided mentoring.

Table 2.3

Search Terms and Results

Search term	Search term	Search term	Number of Hits: Education Research Complete	Number of Hits: Education Full-text	Number of Hits: ERIC
mentoring +	students with disabilities +	postsecondary	12	2	5
mentoring +	students with disabilities +	College	41	10	15
mentoring +	students with disabilities +	University	66	14	12
mentoring +	disability +	postsecondary	13	2	9
mentoring +	disability +	College	52	19	18

Limiters set for database search: 1) published 1990-2013; 2) peer-reviewed.

I terminated my search when only duplicate articles were found. I eliminated articles that studied neither programs for mentoring of postsecondary students with disabilities nor programs that involved teacher education students. I also excluded articles about populations and/or programs that differed from the focus of my research, such as those outside the United States, which are guided by different legal and regulatory frameworks. A number of articles contained only a brief mention of students with disabilities as one of several at-risk groups, or used the word "mentoring" in a very general sense. These articles were screened and included or eliminated based on content relevant to the current study.

This sorting process left 11 articles, which are reviewed. This literature comprised three descriptive articles on specific mentoring programs, three studies that employed some qualitative methods to convey participants' experiences (often a brief synopsis of participant comments), one mixed-methods study, and four quantitative studies. I have grouped these articles by content and target population into the following categories: (a) peer mentoring programs in postsecondary settings (five studies); (b) programs in which college students with disabilities were mentored other than by peers (three studies); and (c) programs that involved pre-service teachers as mentors (three studies). Table 2.4 summarizes these 11 articles.

Table 2.4

Summary of Articles--Literature Review of Mentoring Programs for Postsecondary Students with Disabilities and Pre-Service Teachers as Mentors

publication yearoryAdams & Hayes, 2011Peer tutoring/ mentoring program, disability focusedQualitativereports from tutorsUnder- graduatesUndergraduate students with disabilitiesaBartlett, 2004Peer tutoring program, not disability focusedDescriptive/ anecdotalUnder- graduatesUndergraduates (incl. students with disabilities)aFoster Heckman, Brown, & disabilities reciprocal Novak, 2007Faculty-students with disabilitiesQualitative toleCollege faculty/ tolege faculty/College faculty/ tolege faculty/bHarris, Ho, Markle, & Wessel, 2011Faculty mentor SWD vessel, 2011Quantitative reported (no data); qualitative comments from mentorsCollege faculty tudents with disabilitiesUndergraduate disabilitiesNovak, 2010Pre-service teachers service learningPre-service teachers mentors' reflectionsPre-service teachersHS CTE students disabilities2000Pre-service teachers mentor high school students with disabilitiesBrief description, no program evaluationMembers of student cEC tudent with disabilitiesCollege-bound disabilitiesRosenthal, & Shinebarger, 2010Peer mentoring program evaluationQuantitative students with disabilitiesUnder- disabilitiesUndergraduates disabilitiesRosenthal, & Shinebarger, 2010Peer mentoring program evaluationQuantitative students with disabilitiesUnder- disabilitiesUndergraduates disabilitiesRos	Author(s),	General description	Data collected	Mentors	Mentees	Categ
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a-peer mentoring programs in postsecondary settings

b-mentoring of college students with disabilities—mentors are not peers

c-pre-service teachers as mentors

College Mentoring Programs

Peer mentoring programs. These mentoring programs involved more advanced students, typically upperclassmen and women with or without disabilities, mentoring freshmen or women with disabilities. Bartlett (2004) described such a program that served struggling students including students with disabilities at Lehigh University. That program focused on individual goal planning with mentees that featured breaking down course requirements into manageable units and teaching skills such as notetaking and time management. Anecdotes of mentee progress and improved GPAs were provided.

Two studies in this category included quantitative program evaluation components (Rosenthal & Shinebarger, 2010; Zwart and Kallemeyn, 2001). Rosenthal and Shinebarger (2010) reported positive improvement in retention rates and GPA for students who participated in a peer mentoring program at Union College compared to students who chose not to participate. The mentee population of this program included but was not limited to students with disabilities. Their program evaluation included keeping records on some individual mentees, monitoring email between mentors and mentees, and monitoring grades of a subgroup of mentees who were on academic probation. Within this subgroup, 93% improved their grades, averaging a full letter grade improvement in GPA. Rosenthal and Shinebarger (2010) also provided narrative accounts of beneficial experiences of the mentors in their program. Zwart and Kallemeyn (2001) studied a peer coaching program for students with ADHD and learning disabilities at Calvin College and found improvement in attitude, motivation, and test preparation, and a decrease in anxiety in mentees, measured on a Self-Efficacy Scale and a Learning and Study Strategies Inventory.

Qualitative inquiry methods were used to study a program for students with severe physical disabilities living in an adapted dorm at the University of Illinois (Strumbo, Blegen, & Lindahl-Lewis, 2008) and to study a peer tutoring component designed to augment a faculty mentoring program at Ball State University in Indiana (Adams & Hayes, 2011). Their findings focused on the training and experiences of the mentors, finding positive experiences categorized from self-reports of the tutor/mentors. Mentors reported improvement in their communication skills, greater recognition of the need to utilize mentees' strengths, and greater knowledge of resources and specific disability information.

Mentoring by faculty or other professionals. Three articles included descriptions of programs in which postsecondary students with disabilities were mentored by university faculty or professionals in the student's field of career interest. Harris, Ho, Markle, & Wessel (2011) studied a program at Ball State University in which a faculty mentor was assigned to each entering student with a disability who registered with the disability services office on campus and desired such a mentor. Although no data were provided, they reported that compared to a control group of students who did not choose to have a faculty mentor, the students in the program had higher GPAs, had "markedly" higher retention rates (p. 28), and accessed campus services such as the writing center more frequently. Faculty mentors received training and gave positive narrative feedback on a survey of their experiences.

A faculty mentoring program at the University of Hawaii served a similar population but utilized a different definition of mentor and mentee (Foster Heckman et al., 2007). That program viewed each participant as both mentor and mentee, with the faculty members sharing expertise on academic and related topics and the students with disabilities sharing their expertise on disability-related matters. Qualitative surveys were utilized to assess the program. The 13 responses were analyzed with eight themes emerging: 1) reciprocity, 2) informality, 3) longevity, 4) socializing, 5) technology, 6) collaboration, 7) commitment, and 8) transference.

Rumrill, Gordon, Brown, and Boen (1994) described a summer program for high achieving (GPA 3.0 or higher) freshman with disabilities at the University of Arkansas. As one of several program components, students were mentored by a working professional in the students' career interest field. No program evaluation was reported.

Pre-service teachers as mentors. While the literature did not include any studies of programs in which students in teacher education programs mentored college students with disabilities, the literature did include several examples of pre-service teachers as mentors to other populations (Novak, 2010; Patwell and Herzog, 2000; Vannest et al., 2008). The goals shared by these programs included providing service and hands-on experience for pre-service teachers, along with more specific goals of improving the behavior of mentees (Vannest et al., 2008) and increasing disability and social justice awareness of the mentors (Novak, 2010). Vannest et al. (2008) reported mixed results from an in-person and on-line mentoring program that paired pre-service teachers with students with emotional and behavioral disorders in grades 4-8 in an alternative school setting. Using a single-subject reversal design and observing for nine target behaviors, they found positive behavior changes in six of the sixteen participating students, while the remaining students showed either no change or deteriorating behavior.

Novak (2010) reported on a program in which pre-service teachers served as mentors and job coaches to high school students with intellectual disabilities completing a work experience on a college campus. Based on the pre-service teachers' course assignments and reflective journals, Novak reported increased awareness of barriers faced by students with intellectual disabilities and increased commitment to address inequalities faced by individuals with disabilities.

Mentoring Program Structure and Features

Although the programs studied and reported on in these 11 articles differed in target populations, I identified recurring practices and design elements among the programs. Common themes and procedures around mentor recruitment, job descriptions, training and support for mentors, program structure in which the mentors and mentees interacted, and benefits accrued by the mentors are described.

Mentor recruitment. Programs commonly utilized as mentors students who were deemed successful. This was variously defined as students with high GPAs (Rosenthal & Shinebarger, 2010; Vannest et al., 2008), students with a specific disability who had persisted in college (Strumbo et al., 2008), or students who passed a test (Vannest et al., 2008). Some mentors were paid (Zwart & Kallemeyn, 2001), some mentored as a voluntary additional responsibility linked to their full-time job (Foster Heckman et al., 2007; Harris et al., 2011; Rumrill et al., 1994), and some mentors received course credit for their work (Vannest et al., 2008; Novak, 2010).

Mentors' job descriptions varied, but typically included providing information and resources (Rumrill et al., 1994; Strumbo et al., 2008) and teaching self-management skills such as study skills, notetaking, time management and avoidance of procrastination, effective reading, test taking skills, paper writing skills, and organizational skills (Bartlett, 2004; Strumbo et al., 2008; Zwart & Kallemeyn, 2001). Also mentioned were support for transitions, support for self-efficacy (Strumbo et al., 2008), and help for students in understanding their own learning styles (Bartlett, 2004). The distinction between the mentoring relationship and subject tutoring was stressed (Bartlett, 2004; Zwart & Kallemeyn, 2001).

Training and support for mentors. Most programs featured some training for mentors (Adams & Hays, 2011; Rosenthal & Shinebarger, 2010; Strumbo et al., Vannest et al., 2008; Zwart & Kallemeyn, 2001). The most frequently mentioned topic for training was communication skills (Adams & Hays, 2011; Rosenthal & Shinebarger, 2010; Strumbo et al., 2008; Zwart & Kallemeyn, 2001). Other training topics included assistive technology, information about specific disabilities, utilization of mentees' strengths, campus resources, and information about learning styles. Personnel from the campus disability services office were common resources for training and information. Training took the form of workshops (Rosenthal & Shinebarger, 2010; Strumbo et al., 2008; Zwart & Kallemeyn, 2001) or was part of a college course in which mentors were enrolled (Vannest et al., 2008; Novak, 2010).

Ongoing support for mentors was also provided in the form of weekly or biweekly meetings at which mentors could discuss their work and share their experiences, or in the form of consultation with a supervisor when desired (Rosenthal and Shinebarger, 2010; Strumbo et al., 2008; Zwart & Kallemeyn, 2001).

Program structure. Several programs featured an introductory planning meeting between mentor and mentee (Bartlett, 2004; Harris et al., 2011; Zwart & Kallemeyn,

2001) at which goals focused on mentee needs were established (Bartlett, 2004), or a contract was drawn up after student needs were defined using a checklist of items that included disability information, time management, notetaking, study skills, and organization (Zwart & Kallemeyn, 2001).

Program designs varied, but a common element was a mix of structured and unstructured time between mentor and mentee (Rumrill et al., 1994). This was variously provided by mandating minimum email contacts, contact hours, and number of contacts (Strumbo et al., 2008; Vannest et al., 2008) or more generally directing mentors to provide structure and social support toward expanding mentees' existing skills. Technology was a common feature, most often involving email contact between mentor and mentee (Foster Heckman et al., 2007; Harris et al., 2011; Vannest et al., 2008). Strumbo et al. (2008) recommended ensuring sufficient resources and doing advanced planning.

Benefits for mentors. Several researchers highlighted benefits not only to the mentees as service recipients, but to the mentors as well (Reddick, Griffin, Cherwitz, Cerda-Prazak, & Bunch, 2012; Foster Heckman et al., 2007; Adams & Hayes, 2011; Novak, 2010). One of these was learning transferable skills that mentors could take with them to other relationships (Foster Heckman et al., 2007; Novak, 2010). Novak noted that the mentoring experience could "transform attitudes and beliefs" that students would carry throughout their teaching careers (p. 122). Novak described the experience of preservice teacher mentors working with high school students with intellectual disabilities completing a work experience on campus.

University students recognize when people stare at their partners in the student union cafeteria, they notice when wheelchair–accessible doors do not open when the automatic-open button is pushed, and they notice when worksite supervisors go out of their way to make the high-school students feel included as valued members of the work team. (Novak, 2010, p. 122) New understandings accrued partially through the process of frequent (weekly) written reflections designed to assist students in linking theory and practice.

Based on my review of the literature, no programs have been investigated that utilized special education graduate students as mentors for college students with disabilities, as in this case study. The project that is the subject of this case study sought to address two areas of need that emerge from the literature. First, students with disabilities in postsecondary education need services that support their efforts in selfdetermination and self-management toward college success. The project responds to this need directly. Second, college-bound students with disabilities need better transition planning to support their eventual success in college. The project addresses this need indirectly, via the experiences of the mentors. Figure 2.3 represents the needs of students with disabilities in postsecondary education identified in the literature, showing the role of the mentoring program in addressing those needs.



Figure 2.3. Transition to postsecondary education showing areas of need targeted by mentoring program.

Need for Study

High school teachers are charged with coordinating and implementing transition

planning in many school systems (Morningstar & Clark, 2003; Morningstar &

Kleinhammer-Tramill, 2005). These teachers often have little recent exposure to or knowledge of the variety of postsecondary settings and the new challenges that their students will encounter (Janiga & Costenbader, 2002). In order to make the best decisions about effective transition planning for their increasingly college-bound population of special education students, teachers need knowledge of both the environment their students will face and the needs of students in that environment (Harris & Robertson, 2001; Janiga & Costenbader, 2002; Levinson & Ohler, 1998). As better transitions are sought across the K-16 (or P-16) continuum (Blalock et al., 2003), teacher preparation programs located in postsecondary institutions are uniquely situated to provide linkages between K-12 education and colleges and universities (Kirst & Venezia, 2001).

The current study is grounded in identified critical components of transition services and seeks to address the dearth of implementation of evidence-based transition practices in the provision transition services to students entering postsecondary education. Therefore, the purpose is to investigate a model for providing support to undergraduate students with disabilities that also creates a unique opportunity for graduate students to learn about transition, an integral and required component of the work of secondary special education teachers. The model is studied through investigating the responses of undergraduate students who receive services through the program, as well as studying the responses of the graduate students to their experiences in the program, with the larger goal of contributing to the knowledge base around transition of students with disabilities to postsecondary education, especially in the area of teacher preparation for transition planning to support those students.

Chapter Three: First Pilot Study

Stake (1997) recommended that a case study be structured according to what the researcher believes will lead to understanding of the case. To that end, and to refine my research questions and methods (Krathwohl & Smith, 2005), I conducted a pilot study over the course of the fall 2012 semester. The pilot study focused on the structure of the mentoring program and the experiences of the participants in the initial phase of the program.

Starting in September 2012, the Study Skills and Mentoring program was a new collaborative program in which graduate students in special education worked as mentors to undergraduates who were registered with the Disability Services Office (DSO). The overall aim of the program was to provide support for the undergraduates toward their success in college, and at the same time, to provide the graduate students with an educational experience in which they would gain knowledge of and experience with transition from high school to college for students with disabilities. Each undergraduate student was assigned a graduate student mentor. They attended supervised study sessions, received instruction in various study skills, and mentees and their mentors had ongoing email contact. My role was to serve as the coordinator of this project as part of my responsibilities as a Teaching Assistant in the School of Education (SOE).

The following account, drawn from field notes recorded at and following the first meeting of the program, introduces the program and some key issues that emerged during the fall semester. The mentors and I chat in our room in the student union as we wait for the undergraduate students to arrive for the first session. The combination meeting room and classroom feels cavernous while occupied by only the three of us. While it seems large for our group of nine (two mentors, six mentees, and me), I anticipate that the students will want to spread out, and the rows of tables and the chairs are easy to move about. We create a meeting space by arranging a triangle of the long, narrow tables. I experiment with the lights, trying to make the windowless room feel warmer.

I am a little nervous and feel disorganized. Kathy² and Tabitha, the mentors, seem fine. The students trickle in, carrying book bags, laptops, and coffee cups. The first two young men to arrive seem ill at ease and converse with us very awkwardly.

I recall the DSO staff saying that some of the students they recruited have Asperger syndrome, anxiety disorders, or mental health diagnoses. I had not asked for diagnostic information on the mentees, preferring to focus on their needs related to selfmanagement skills needed for college success. I realized, however, that I had assumed, given the nature and structure of the program, that most of the students would have educational needs related to learning disabilities and ADHD. I also recalled that students with mental health needs are a fast-growing group within the population of college students with disabilities (Sharpe, Bruinicks, Blacklock, Benson, & Johnson, 2004).

Anne, a young woman whose request to arrive late had forced an

impromptu attendance policy discussion, arrives on time after all, saying

² All participant names are pseudonyms.

she made other arrangements for her club meeting. Karen, however, comes in late from the same meeting, smiling, effusive, and unapologetic.

That discussion was the first of many, as we continued to weigh the importance of attendance and its role in promoting student success against the many other demands on students' time as well as issues such as the reality of our enforcement limits.

We all talk together about the program, sitting at the triangle of tables, and undergraduate students tell why they are there. They all describe their needs specifically and well. Their statements are similar to what I have read on their applications. They talk about challenges with disorganization and distractibility, their need to gain good study habits, to avoid procrastination, trouble studying when time is not specifically scheduled and "enforced," retrieval problems, and test anxiety. The two mentees who are brand new to this university seek "an anxiety free first semester," and "a good first semester away from home." They all mention a need and desire for "structure."

They are wonderfully articulate, but they almost sound as if they're parroting someone else's words about their needs. Nevertheless, they're way ahead of where I have come to expect students to be in this regard.

I began the ongoing process of reflection on this gap between my former high school students who were interested in attending postsecondary programs, and these college students. How can we (special education professionals) best support our students in getting where they need to be to be successful in a college setting? What do we need to do differently in high school? How did these students learn to be this articulate and self-advocating?

Everyone shares, then everyone works, most choosing to move from the group and spread out around the large room, apparently seeking space, quiet, or an electrical outlet for their laptop. As the students work quietly, I realize that I am not sure what my expectations and goals are for how much the mentors and mentees should be interacting during these sessions, and how to balance the quiet study space the undergraduates need and want with the active mentoring aspect of the program. Kathy does a wonderful job of going around and speaking one-on-one to all her mentees. I believe that she will be a tremendous asset to this program. Tabitha is more reserved--- more like me-- but she'll do a good job too, I think.

This is the first of many times that these dilemmas present themselves: the need to balance active assistance to students and a quiet study atmosphere, the proper role of the mentors.

Anne asks about the noise in the room. She says she can bring her earplugs and assures us that the noise won't bother her. I explained that we're in this room for the foreseeable future. I ask the others about the noise. They say, "Yes, it's noisy, and the bus comes right outside." They gesture to a hallway outside one of the doors. Once it's brought to my attention, I do notice how incredibly noisy it is, and it's not the kind of noise that's easy to ignore. This noise comes from other people having fun, other people doing things that aren't studying. I wonder how this makes these students feel. I wonder if we need another room.

Issues of appropriate space for this program have been an ongoing struggle and challenge. While I am continually reminded that this is a university-wide problem, the program's space needs are genuine and as yet unresolved.

Michael, a freshman majoring in mechanical engineering, has stayed near the table where the mentors and I are seated. He smiles a winning smile and engages us in a conversation about his work, which we can only admire. He shows us drawings and talks about his detailed plans for reverse engineering a piece of hardware. He asks to go out to the Starbucks in the lobby to get another cup of coffee. I check my initial response, which has to do with the wisdom of drinking that much coffee "so late" in the evening. I remember the last time I taught undergraduates, dismissing the class at 10 PM and realizing that for many of them, their evening was just beginning.

After the session, I share with the mentors how impressed I am by the fact that I also am finding the structure of sitting in a room for two hours helpful. The mentors concur. My goodness, is this what we all need in our lives to accomplish our tasks? Assigned study halls?

I look around the room after everyone leaves. Then, and later as I walk back to my office in the warm darkness of the late summer evening, I realize that I am smiling. Some of the things that I have missed about high school students, some of the rough edges and raw energy, are present in this group. (Field notes, September 11, 2012)

Description of the Mentoring Program

Mentoring and study sessions were held for two hours on two consecutive evenings beginning the second week of classes and continuing throughout the semester and through finals week. Consecutive evenings were chosen to accommodate undergraduate class schedules, as some classes met on Monday, Wednesday, and Friday, and some met on Tuesdays and Thursday. This way, we greatly reduced the possibility that a student would be completely closed out from participating because of their class schedule.

Once each week, the graduate students provided small group instruction in student self-management skills such as time management, organization, and study skills. These informal workshops lasted approximately 20 minutes including discussion. Mentors followed up by email with students, and students were asked to report back during the following workshop session on applications of the skills presented. I held seminars with the two graduate students for one hour each week immediately prior to the study session during which we discussed assigned readings and transition topics. A short time was also devoted each week to discussing ongoing project concerns.

Setting

The program and this pilot study took place at a medium-sized state university campus in the northeastern United States located in a small city and enrolling approximately 15,000 students. Of these, 25.5% are students of color. Approximately
3%, or 430, are students with disabilities who have identified themselves as such and registered with the campus disability services office.

Students in the Mentoring Program

Undergraduates. Six undergraduate students with disabilities participated in the mentoring program in the fall of 2012. These undergraduates had previously self-identified as a student with a disability and provided documentation of that disability to DSO. With my input, DSO staff developed an application (see Appendix B) and distributed it to students whom their staff felt would benefit from participation in the mentoring program, and then DSO staff selected six students from among the applicants to participate. Details about the undergraduate mentees are found in Table 3.1.

Table 3.1

Name	Age	Sex	Class year	Major	Disability status	Race/ethnicity
Carol	20	F	Sophomore	Biology and Geology	Asperger syndrome, Generalized anxiety disorder	White not Hispanic
Joe	20	Μ	Sophomore Transfer	Geography	Autism	White not Hispanic
Kevin	20	М	Junior	History	Asperger syndrome	White not Hispanic
Karen	21	F	Junior	Biology	Learning Disability	White not Hispanic
Anne	19	F	Freshman w sophomore standing	Undecided; considering Judaic studies	ADHD combined type; Generalized anxiety disorder	White not Hispanic
Michael	18	М	Freshman	Engineering	ADHD	White not Hispanic

Fall Semester 2012 Mentees

Graduate Students. Mentors were recruited by means of a flyer sent to an email listserv of students enrolled in masters' degree programs in the school of education (see Appendix C) seeking graduate students to work with undergraduate students with disabilities in a mentoring and support capacity. The two students who served as mentors during the initial semester of the project, and who participated in this pilot study, received independent study credit. Both were in their final semester of a program in special education that led to a master's degree and certification in adolescence special education. Kathy held a bachelor of science in biology and a master of arts in Adolescence Teaching in Biology for grades 7 through 12. She was certified to teach Biology and Earth Science (7-12) and General Science. Kathy did not have a disability diagnosis. During the time of this study, she was employed as a science teacher at a private school. Tabitha held a bachelor of science in mathematics and secondary education (grades 7-12) and initial certification in Mathematics (grades 7-12). During her semester as a mentor, she was also a student teacher in a middle school. During her undergraduate studies, Tabitha was identified as a student with a learning disability and received services related to her disability. She also received services related to her disability while enrolled in her graduate program. See Table 3.2 for more information on the mentors.

Table 3.2

Fall Semester	2012	Mentors
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Name	Age	Student status	Degree program	Disability status	Race/ethnicity
Kathy	29	Graduate student	MSEd Special Education Adolescence (7-12)	No disability	White, not Hispanic
Tabitha	23	Graduate student	MSEd Special Education Adolescence (7-12)	Enrolled with DSO; Learning Disability	White, Hispanic

Identification and Recruitment of Participants for the Pilot Study

Undergraduate students. The six mentees were given the choice of participating in this pilot study, but were told that participation in my research was not a requirement of receiving the services of the mentoring program. They were informed as plans for the study took shape, and they were told as a group that I would be asking them if they were willing to be interviewed. If they indicated that they were willing to participate, I then approached them individually to schedule interview appointments at their convenience. The program was well underway by this time, and relationships between mentors and mentees had been established. I worked to make clear to the undergraduates that their participation in my research was not a requirement of receiving services from the mentoring program. I was concerned that the undergraduates might feel obligated to participate in my research, especially because these students had been made aware by DSO staff that spots in our program were at a premium. I approached them carefully, tried to read their body language as well as their words, and to reiterate that their participation was truly optional.

At the interview appointments, the study was again described to them individually, and they were asked to provide informed written consent to their participation (see Appendix D for recruitment scripts). All participants were offered the option of reading the consent form independently or having it read to them.

While all six of the undergraduates indicated willingness to participate, only four of the undergraduates were interviewed. In one case, it had become so late in the semester that I declined to schedule the interview, because the student, while still indicating willingness to be interviewed, was clearly under time pressure from course projects and assignments. In the other case, the student stated willingness to participate, but broke appointments, made excuses, and made suggestions such as, "Why don't you just email me the questions?" This led me to believe that this student was not truly a willing participant, and I dropped my request.

Graduate students. As plans for this study took shape throughout the semester, the mentors were told that they would be asked, but not required, to participate in interviews and other informal measures. Both of the graduate students indicated willingness to participate. Prior to conducting interviews, the study was again described

to them individually, and they were asked to provide informed written consent to their participation (see Appendix E for recruitment script).

Pseudonyms were assigned to all participants. All interview transcripts and field notes utilized these pseudonyms. I kept a single copy of the real names and corresponding pseudonyms in a secure location. All recordings of interviews and notes were kept in a locked filing cabinet to which only I had access. Electronic documents related to this study were on a password-protected personal computer.

Data Gathering

Data for this pilot study were obtained through interviews, observations recorded in field notes (Emerson, Fretz, & Shaw, 1995), and document collection, common sources of data in qualitative and case study research (Bogdan & Biklen, 1982; Brantlinger, Jimenez, Klingner, Pugach, & Richardson, 2005; Gall, Gall, & Borg, 2005; Glesne, 2006; Lincoln & Guba, 1985; Maxwell, 2005; Stake, 2000). I also collected descriptive information on all of the participants including their age, class (freshman, sophomore, transfer, graduate student, etc.), major, disability status, race and ethnicity, gender, and degree program in which they were enrolled. At the end of the semester, the undergraduates completed a short survey to provide feedback on the program (Appendix F). I also maintained records of all participants' attendance and hours in the program (Appendix G).

Interviews. Hays (2004) maintained that interviews are "one of the richest sources of data in a case study" (p. 229). I conducted individual interviews with four of the undergraduate students and both of the graduate students. These semi-structured or guided interviews (Brantlinger et al., 2005; Glesne, 2006; Weiss, 1994) were both

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structured to focus on my research questions and flexible enough to allow for the participants concerns and voice. Appendix H provides a schedule of these interviews. I sought to determine the undergraduates' perceptions of the program in terms of the level and types of support they felt they needed and how effective they found the supports provided by the project. These students also were asked about their experiences before coming to the university, specifically about their preparation in high school to make the transition to college. See Appendix I for mentee interview guide.

Interviews with the graduate students focused on their prior experiences working with high school students transitioning to college and their knowledge of transition planning and programming for secondary special education students. They were also questioned about their experiences as mentors in the project and their interactions with their mentees, as well as how they thought that their involvement in the program might inform their ideas and future practice related to transition planning for students with disabilities. See Appendix J for mentor interview guide.

I conducted these individual interviews in our classroom or a nearby room in the student union before or after the study sessions, a convenient and familiar location that provided sufficient privacy. The participants were offered the option of being interviewed at other times during the week, but all opted for an interview time immediately preceding or following one of the study sessions. The interviews were conducted during October and November of 2012. In order to protect the rights of the participants and to increase the likelihood of obtaining meaningful research data, I worked to create and maintain a positive and unpressured atmosphere during the interviews. I explained how confidentiality would be maintained, and I endeavored to

frame questions in a way that would encourage participants to respond without concern for correct answers. Participants demonstrated their comfort level with me by appearing relaxed during interviews, offering me advice and technical support related to my recording devices, approaching me and asking to be interviewed after an initial mention to the group as a whole, and seeking my involvement in other aspects of their campus life such inviting me to a play performance and introducing me to their parents at a campus event.

Observations. As the coordinator of this project and the instructor of the graduate student mentors, I functioned as a participant observer at the study sessions. I attended all the mentoring sessions except one, 25 out of the 26 sessions held, and led three of the weekly study skills workshops. I recorded extensive field notes (Emerson et al., 1995) following each study session. I also made notes following each interview and each meeting related to the project, such as meetings with my faculty supervisor and with DSO personnel. In addition, I recorded field notes following seminars with the graduate students, looking to document their comments and participation and triangulate their reflections and interview responses.

Documents. Document collection is a common data gathering method in qualitative research (Brantlinger et al., 2005). Some of the documents that I collected were notes from meetings, emails, notes from phone calls, the undergraduate students' applications to be part of the program, and the mentoring logs maintained by each mentor throughout the semester documenting contacts with their mentees. The types of documents collected were consistent with those enumerated by Hays (2004) as commonly used by case study searchers. I had intended to examine transition-planning documents prepared by the graduate students, but found that they had no experience preparing such documents.

Data Analysis

Data analysis for this pilot study consisted of direct interpretation (Stake, 1995) of observation field notes and documents, along with compilation of survey results to inform both program and course development and research design. Interviews conducted during the fall were transcribed and reviewed, and some are cited in this document, but in-depth coding and analysis was not performed for this pilot study.

History and Early Development of the Mentoring Program

According to DSO staff, the genesis of the mentoring program was their observation that some of their students they serve were arriving at college without the independent homework completion and study skills necessary for college success. A graduate assistant working with that program thought it would be a good idea for these students, accustomed to high school resource room support, to have transitional support in college. The original idea was to provide a supported study hall that would give students a structured time for homework completion, a model based on programs elsewhere on campus for economically disadvantaged students and student athletes. DSO staff hoped that this scheduled and structured time would then encourage students to increase the amount of time spent on homework and help them develop a study routine that would continue on other days throughout the week and throughout their college years (A. Snyder, personal communication, April 8, 2013).

Discussion between DSO personnel and SOE faculty led to the conception of a collaborative program in which SOE students would provide mentoring/coaching support

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to undergraduates at risk of school failure. Graduate students in special education would work directly with these students on time management, self-regulation, selfdetermination, and related skills. The aim of the program was to address the needs of undergraduates involved with DSO who continued to struggle with the college experience (C. Mulcahy, personal communication, April 17, 2012).

My involvement with the program began when I accepted the position of coordinator of the program as part of my responsibilities as a Teaching Assistant in the SOE, where I am a doctoral candidate. My job during the fall 2012 semester was to coordinate with DSO, recruit graduate student mentors, supervise them, teach the independent study course in which they were enrolled, and make logistical arrangements, along with the DSO staff, for the project, as well as to develop a course for the spring 2013 semester around transition and the mentoring experience. As a late addition to SOE fall course offerings, the independent study enrolled only two graduate students in fall 2012. We determined that each mentor could work with three or four undergraduate students, DSO staff recruited six mentees, and the project began.

Experiences of Undergraduates in the Program

While many aspects of the program worked as anticipated and hoped for, many of the issues that emerged in the opening vignette persisted. These included attendance policy, space issues, unexpected support needs of some students, and the methods of delivery of program services.

Of the six undergraduate students involved in the Study Skills and Mentoring Program in the fall 2012 semester, five (83%) returned a confidential survey distributed at the end of the semester (Appendix F). While the total number of surveys was small, the responses have provided some guidance.

Program structure and schedule are helpful, meet expectations. The

undergraduate students were asked to use a 5-point scale (1=strongly agree, 5=strongly disagree) to rate their agreement with two statements:

- This program has been helpful to me this semester.
- This program has been what I expected when I applied.

The response to the first statement was very positive (see Table 3.3), and the response to the second statement also showed overall agreement.

Table 3.3

	Strongly Agree	Agree	Un- decided	Disagree	Strongly Disagree
This program has been helpful to me this semester.	3	2	0	0	0
This program has been what I expected when I applied.	1	3	1	0	0

Survey Response: Program Usefulness and Expectations (n=5)

Students were asked to give feedback on the scheduling of the study sessions. All five survey participants rated the study session length as "just right" rather than too long or too short. All participants rated meeting twice a week as "just right" rather than "not enough" or "too much."

Program location is problematic. The fall semester location in the student union, chosen by DSO personnel as a comfortable, known location for undergraduate students, proved to be central, accessible, convenient, comfortable for undergraduates, appreciated for its proximity to a coffee shop, and non-stigmatizing. However, it also was extremely noisy, as our room was surrounded by other rooms housing student activities and club meetings and on a corridor that led to a popular bus stop. In the endof-semester survey of undergraduate participants, three of the five students reported that the location was either "too noisy," "too public," or both. In response to the prompt, "Tell one thing you would like to change if you could," one student commented, "The location, there were too many passer-bys on some days."

Program policy decisions on attendance are complex. The application that mentees filled out to become part of the program clearly spelled out the expectation that "attendance at each Tuesday and Wednesday evening session is required unless you have a regularly scheduled class or are legitimately ill" (Appendix B). The first time we were asked to make an exception came even before the program had begun. Anne emailed her mentor, Tabitha.

...I had intended to go to a meeting for [a student organization] at 7:30 but that night is our mentoring program at 7:15. I'm sure the meeting won't last very long so I was wondering if I was able to attend the meeting and then go to the study hall directly after. I should only be about 30 minutes late. What do you think? (Email, September 6, 2012)

Tabitha referred this on to me. My response was that I would like Anne to think of this as the same as a class. On the other hand, I felt some empathy for her situation, as it appeared that Anne had already planned this before she received information on when our program would begin, and I also was somewhat swayed by my knowledge of her personal connection with the group and its cause. I was pleased as well that she had sought Tabitha's advice and permission. I suggested that Tabitha help her figure out the answer, asking questions such as

What would she do if it were a class that the meeting conflict with? Will this group continue to meet the same time as our sessions? Can Anne assure you that it is a one-time thing because of (perhaps) not knowing when the study sessions were? (Email, September 6, 2012)

The agreement that resulted from the conversation between Tabitha and Anne was that Anne would come late this once, but not again. In fact, Anne ultimately opted not to attend her meeting that night and to attend the entire study session.

While my initial intent had been to enforce attendance policies consistently with persuasion and reminders, and with the "carrot" of the program's benefits and the "stick" of removing students from the program for repeated absences, I found that attendance policy not sufficiently nuanced to address the undergraduate students' needs.

Extant research strongly supports the importance of social integration and involvement in campus activities as predictors of persistence in college, both for the general student population (Bean, 1980; Tinto, 1975, 1993. 2012) and for students with disabilities (Fitchen & Goodrick, 1990; Troiano et al., 2010). Several of our students had clear social needs related to disability diagnoses such as autism, Asperger syndrome, or anxiety disorders. We were perplexed when Joe, a socially awkward young man who was a new transfer to the university, approached me and then approached his mentor, Kathy, in October with a request to miss several sessions to work as the manager of the women's basketball team. This seemed to be an activity with clear advantages for Joe; in fact, we were excited for him that he would seek this challenge and create this opportunity for himself. He was conscientious in making his request, knew exactly which days he would be out, and suggested that he could contact Kathy to get information on an upcoming workshop that he realized he would miss. Furthermore, I was fairly sure that Joe was doing well academically so far that semester. I recommended to Kathy that we allow this, sharing my concern that otherwise we would risk isolating Joe from a beneficial experience in order to receive a disability-related service, a situation we all wanted to avoid.

Attendance policy decisions such as that one created a "slippery slope." The following month, Carol, another student with social interaction challenges, announced that she had secured a role in a play to be performed on campus. This was a student who clearly benefited from the structure of the program, which she already attended less than the two full sessions each week because of class schedule conflicts. I was aware from conversation with her and with DSO personnel that she did little schoolwork outside the study sessions, that she procrastinated and left assignments until shortly before they were due. I weighed all of this against my perception of her social needs and my strong belief that theater and acting experiences had much to offer students such as Carol. We worked out a compromise under which Carol would miss some rehearsals and half of one study session per week until the week of the show, when she would give priority to her production. She had a good experience with the show and eagerly invited me and Kathy, her mentor, to attend.

Student support needs are intensive. During the third week of the program, the mentors and I were taken by surprise by an incident with one of the mentees. Kathy described the session:

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...I could not have anticipated how the session would end! Around 8:15 or so, Carol became very vocal, asking, "Who is the science teacher?" I went right over to see if I could help her. She was working on her orgo [organic chemistry] homework, which involves using an online program. She was upset because the program was not accepting an answer she believed to be right. Luckily, Karen [another mentee] was familiar with the software, having taken the class the previous semester. She was able to help Carol, and it seemed like everything was fine.

However, a few minutes later, Carol began screaming and punching her computer keyboard. I went right over to her, careful to maintain a safe distance. I was trying to get Carol to get up and take a break. She was extremely stressed out over the computer program. Then she began to slam her head into the wall. I told her to take a deep breath and leave the room to take a walk and calm herself down. She did finally get up and leave the room. At this point, Sue and I tried to debrief and decide what our next step should be.

When Carol returned, she discovered that her computer would not start. This began the screaming and hysterical crying all over again. I got her to calm down a bit, and walked over to computer services with her. She did not want to walk with me, and stayed far behind, but she did follow me. Computer Services was closed, but I took this opportunity to talk to Carol about going for orgo help. She agreed to go to office hours and went to the library to finish her orgo homework. She said she would bring her computer over to computer services the next day.

I returned to the study room and Sue, Tabitha, and I debriefed. What an interesting evening! (Kathy, Mentoring log, September 19, 2012)

A series of phone calls and meetings with DSO personnel and with Carol, Kathy, and myself resulted in more support for Carol. At my faculty adviser's suggestion, I provided de-escalation training to the mentors as soon as possible, and added this training to the course on an ongoing basis. While it was my perception, as well as Kathy's, that this behavior "came out of nowhere," in fact, we did learn to notice early signs that Carol, or other students, were becoming agitated. The following account from Kathy's mentoring log reflects this change.

All was calm until Carol came in. She was visibly upset, and I approached her to ask if she wanted to talk. She did, so we went out into the hallway. She was upset about her orgo discussion. She feels that she understands the material, but the TA does not give the students enough time to complete assignments. She then gets penalized because she cannot complete the assignment. I advised her to go talk to the professor. When she was more calm, we reentered the room and she worked quietly.

(Kathy, Mentoring log, October 16, 2012)

Carol was again upset about her orgo discussion. I talked with her again about it. She had written an email to her professor, but she wanted me to read over. It was a respectful letter that presented her case very well. (Kathy, Mentoring log, October 23, 2012) The other part of our response, in addition to making referrals and learning to notice and offer appropriate support when a student was upset, was to learn about emergency services available on campus in the evening. I was chagrined to realize that our only option, which I had considered that night, was to call the university police. I recorded this in my field notes.

While Kathy attempts to intercede with Carol, I look for the counseling center number online. No surprise-- they aren't available at 8 o'clock at night, and their website suggests calling 911. I have visions of burly police officers hauling Carol off, and of course, I want to avoid that. But I am not sure what to do if our interventions are not successful. I consider asking the person staffing the student union, but discard that idea, as she appears to be a student employee. I am concerned about Carol's privacy and the implications of my actions on her future, but I am also concerned for her safety and for the integrity of the program. (October 19, 2012)

The next morning I talk with [DSO staff member]. She reiterates that the 911 call to campus security is really our only option in the evening. She reassures me that it is an appropriate option, and that she has sent the university police to check on students in the past, and that they have handled situations well. (Field notes, October 20, 2012)

I added a brief orientation to emergency services on campus to the mentors' training and provided them with written information to keep with them during the sessions.

Program components: Mentoring, workshops, and study sessions. *Sue: What made you decide that you want to do this program? Carol: Well, the thing was that I knew it would be good for me to have some time... Some time that's set-aside as study time, to add a bit of structure, to know that there's time during the week where I know I have to do homework, where I can't just put it off, for that amount of time, for that period of time.*

Sue: Do you think that your mentor has been helpful to you this semester? Carol: Well it was sort of helpful to talk to her when I had issues with my organic chemistry class, it was helpful talking to her with that. [Pause.] Like with the little workshop sessions, I don't find that part of the program as helpful. (Interview, November 7, 2012)

Students were asked to rank the usefulness of the three major components of the program—mentoring, study sessions, and workshops. (Although the term "mentoring" was used to describe the program as a whole, as well as the sessions, in this case, it referred to direct contact between mentor and mentee.) While I was not surprised that the study sessions were rated as being the most useful, I had expected that the workshops, which had not appeared to be popular, and had not elicited a great deal of participation, to be rated lower than they were. To my surprise, three of the five respondents rated the workshops as the second most useful and mentoring as the least useful. Table 3.4 provides more detailed results.

Table 3.4

	Ranked # 1	Ranked # 2	Ranked #3
Mentoring	0	2	3
Study sessions	5	0	0
Workshops	0	3	2

Survey Response: Ranking of Program Components (n=5)

Study sessions. In interviews and on an end of the semester survey, mentees indicated overall satisfaction with the program, unanimously stating that of the three major components of the program, study sessions, mentoring, and workshops, the structured study sessions were the most useful. When asked to, "Tell one way that the program has been helpful to you," all responses referred to the structured time and place in their week to do schoolwork. None specifically mentioned their mentor or the workshop content.

When asked to, "Tell one way that the program has been helpful to you," responses included the following:

Dedicated study time.

The program has been helpful due to the time it has given me for homework and studying.

It has given me a designated time to do homework.

Provides a structured setting to get a start on assignments.

I like that I have two times a week a private place to do work without the distractions from friends or other distractions.

Workshops. Seven workshops, some multi-part workshops that lasted two weeks, were presented over the course of the semester. Active participation from the undergraduate students, such as responding to questions and contributing to discussion, was limited, and attempted follow-up on implementation of ideas and techniques from workshops, whether by email between mentor and mentee or at the next workshop session, netted little response. The mentors had this to say about their attempts to involve their mentees in workshop planning:

Kathy: So usually, I contact them through email...if I know the topic of the mini-workshop, what that is just to kind of give them ideas. I'll be honest, I haven't gotten responses back...before the last workshop that I presented, I emailed them asking if there was anything in particular that they would like to learn more about, and that's what I could kind of focus my workshop on, and even that, no one responded back to me. (Interview, October 31, 2012)

Tabitha: I usually try to email them, especially since we've been doing the sessions [refers to the mini-workshops held during the sessions]. I try to email them, and I TRY to get them to respond about what they would like to hear during those sessions. (Interview, October 24, 2012)

Thus, I did not perceive the workshops as a part of the program that was valued by the mentees. In fact, one student, responding to the prompt, "Tell one thing you would like to change [about the program] if you could," responded, "Less workshops."

The survey listed seven workshop topics and asked the students to respond to whether or not the workshop was "interesting" and whether or not it was "useful." This survey item apparently was confusing, as some students appeared to feel that they needed to pick one of the two categories (interesting *or* useful), rather than rating each workshop on both its interest and its usefulness, as I had intended when designing the survey. This item will be restructured in future surveys. Responses are summarized in Table 3.5.

Table 3.5

Workshop Title	Interesting	Not Interesting	Useful	Not useful
Organizing	1	0	5	0
Time management	2	0	4	0
Procrastination	1	0	4	1
Note-taking	0	1	4	1
Test-taking strategies	1	0	3	0
Using your mornings well	2	1	2	0
Study spaces	2	1	2	1

Survey Response: Workshops (n=5)

Survey responses suggested that students did appear to regard at least some of the workshops as useful. My perception that students were not eager to participate in the workshops, but still rated them fairly positively may be explained by the fact that overall, the students rated the workshops low on interest but high on usefulness.

Individual comments on how the workshops could be improved included:

Maybe sending them by email after the lesson will help. Timing. I prefer to have workshops earlier in the study session. The workshops had originally been scheduled at the beginning of the study session, but had been moved mid-semester to the end of the session to accommodate individual student schedules and maximize participation.

Maybe set aside one day next semester to end 15 minutes later so there is solid two hours [of study time] for both days.

The issue raised in this comment has been an ongoing and genuine dilemma for the undergraduate students: weighing things that they believe are valuable, such as mentor contact and workshops, against their need for a substantial block of study time. The mentors and I understood that dilemma, as we saw students, sometimes exhausted and even ill, leaving the session with much work remaining—several hundred pages yet to read, an on-line assignment due in a few hours. It was hard to know how to prioritize the students' time with us. We, as educators often do, struggled to balance short-term and long-term needs of these students, and tried to address both.

Mentoring. The next survey item asked students to rate whether they would like more, the same as this semester, or less time from mentors for email contact, face-to-face contact, active assistance during study sessions, workshops, and focused time to meet with mentor and work on things. Services that most students wanted to continue at the present rate included email and face to face contact with mentors. Students wanted more time for active assistance from mentors during the study sessions and focused time to meet with mentor to work on things.

Table 3.6

Survey Response: Program Services (n=5)

	More	Same as this semester	Less
Email contact with mentors	1	4	0
Face-to-face contact with mentors	2	3	0
Active assistance from mentors during study sessions	3	2	0
Workshops	0	3	1
Focused time to meet with mentor and work on things	3	2	0

These comments were made in response to the prompt, "Tell one thing you would

like to change if you could."

If I were to change one aspect, it would be to have more direct one-on-one teaching as I felt there was little of it this semester.

I didn't really understand the structure. Can we talk and ask mentors questions or is it a strict quiet time? Need clarification on the rules.

While I was surprised to see this last comment, as mentees had freely sought assistance and mentor contact in various ways during the sessions, I realized that with our small group, rules were informal and evolving, and might need to be more explicit in order that all students could be comfortable and know that they understood the parameters of the setting and the program.

These survey results and comments led me to encourage mentors to initiate more contact and to work harder to appear available during study sessions in subsequent semesters. There was clearly an ongoing need to fine-tune our approaches, and to make sure that undergraduate students and mentors understand expectations more clearly. One way to support this emerged from an interview with Tabitha, one of the mentors.

Tabitha: I think maybe from our end a little more background about the students [would be helpful]. I mean we had those forms about why they signed up, but I feel like I don't really know...things like what they struggle with...what pushed them to decide to sign up for the program, other than that they wanted study time.

Sue: I think that might be a really good idea--an early meeting, asking, "What do you want to work on?" and make a plan that you could both refer back to.

Tabitha: Yeah, so it would kind of give us a focus for our sessions, things to cover, and then it gives them [mentees] an idea of what they wanted to work on for the semester as far as study habits or whatever it is that they're concerned about (Interview, October 24, 2012).

Extant research supported this idea. Introductory planning meetings between mentor and mentee at which goals focused on mentee needs were established (Bartlett, 2004), or a contract was drawn up following a session defining student needs (Zwart & Kallemeyn, 2001) were some of the approaches cited (Harris et al., 2011). I added to the program structure for the following semester an initial brief meeting between mentor and each mentee at which they draw up a short mentoring plan establishing goals for the semester. See Appendix K for mentoring plan form.

Experiences of the Mentors in the Program

Mentors' emerging knowledge related to transition.

Sue: Tell me what you know about transition for students with disabilities.Tabitha: Just filling out that section of the IEP--that was the extent of it.(Interview, October 24, 2012)

Sue: What preparation did you have prior to working in this program-coursework or experience--working with students with disabilities on transitioning into college?

Kathy: None. I mean, in some of my classes we talked about transition planning, but personally, I don't have any experience actually working with students doing that. And besides just kind of talking about the fact that that goes on the IEP, and that you have to start talking with students about their plans after high school, we didn't really go into much more detail than that. I haven't been involved with the transition planning at all. (Interview, October 31, 2012)

One of my earliest surprises was that the graduate students had very little knowledge about transition planning. I had assumed that these students, who were nearing completion of their program, would have gained more knowledge through coursework in IEP development, possibly through experience gained at a field placement, or through any previous teaching experiences they may have had. I have had to re-think some of my assumptions and make changes in how the course that surrounds the mentoring experience is taught. I realized that I needed to provide more background information, more reading material, and more guided discussion in order to gradually enable the mentors to make connections between their work with their mentees and their classroom experiences, past and projected. As my understanding of this need grew throughout the pilot study, I made plans to modify the course in which the mentors were enrolled. I realized that in order for the mentors to benefit maximally from their experience, they needed more input, more background, and more support in making sense of their mentoring experiences.

Mentors' insights. At the end of the semester, the two mentors completed their program and became eligible for certification to teach special education for grades 7-12. The mentors' statements below reflect their growing awareness of different expectations at the secondary and postsecondary levels, the need for self-advocacy skills on the part of students with disabilities, and implications of these insights for teaching practice.

The mentors became aware of the gap in expectations for self-advocacy between high school and college.

Being involved with this program has opened my eyes to a whole new world. Being a teacher, I am familiar with working with students with disabilities...However, I never considered how difficult it would be to leave a school where everyone was working to help me succeed, and transition to a large university, like [our] University, and be completely anonymous and suddenly in charge of advocating for myself. (Kathy, interview, October 31, 2012)

Tabitha also remarked on this shift.

And suddenly, [when they go to college] nobody's doing that for them [students with disabilities], and they have to be their own advocates.... (Interview, October 24, 2012)

Tabitha then connected this observation to high school teaching practices. So I think there needs to be more of a discussion at the high school level, of when you go to college, you're going to need to understand this for yourself.

She also spoke about the importance of scaffolded experiences in self-advocacy for students transitioning to college.

[We need to] teach them [high school students with disabilities] to advocate for themselves and to seek out resources...because they're going to have to do it in college on their own. So to see that these students [undergraduate mentees] have found a way to advocate for themselves, I think I would at the high school level push for the kids to advocate for themselves. (Tabitha, interview, October 24, 2012)

Tabitha described insights gained from observing her mentees and comparing them to her high school students.

Working with the [undergraduate] students, you can see their mannerisms and their habits. I think it's good to see-- I mean, I actually kind of picture the students that you have in high school, and their mannerisms and how they study affects how they are in college, so it gives you a good idea of skills or ideas to work on with your high school students who are transitioning out to college, so they can have strong skills, study skills and things like that when they get into college. (Interview, October 24, 2012)

Both mentors reflected on the practices of high school teachers they had observed and worked with relative to their new awareness.

A lot of times in high school or middle school, you see the special ed teachers taking the students under their wings and protecting them all the time, and I think that that's good to an extent, but after seeing that you have to advocate for yourself in college, I think you need to give them the space to practice those skills in high school. (Tabitha, interview, October 24, 2102)

A lot of times, in high school I feel like the special ed teachers are kind of following the students around, almost helping them too much, and not that that's not needed in high school, because you want them to pass, you want them to get that diploma, and to do that, they do need your help. And yet, that doesn't help them when they go to college. (Kathy, interview,

October 31, 2012)

Teachers are under tremendous pressure to assist special education students to be successful in meeting worthwhile shorter-term goals such as passing classes and exams toward graduation. These goals compete with students' needs for supported, scaffolded opportunities to take risks and practice self-advocacy and self-determination skills.

Another aspect of self-advocacy identified by Kathy was the need for students to understand their disability-related support needs in order to be able to self-advocate. When asked to speculate on what would help high school students prepare for selfadvocacy in college, Kathy suggested the following:

Just maybe helping the students understand their own disabilities better? Sometimes I feel like they don't always know what's on their IEP. And so they're not always aware of their own needs, almost.... (Interview, October 31, 2012)

Kathy also suggested a method of addressing the needs she had identified.

I think people at the college level could help high schools understand what is available at the college level, and how those students need to ask for the help themselves, and that sort of thing (Interview, October 31, 2012).

These observations by the mentors suggest that they are increasing their knowledge of transition practices and needs, enlightened by their opportunity to see and interact with students with disabilities both in secondary and postsecondary settings. They have observed the different expectations at these two levels, the gap that exists in expectations, and the need for students in college to have or develop a high level of selfadvocacy skills. They have observed and commented on teaching practices at the secondary level that contribute to or impede the development of these skills. This recounting and discussion of some of my interview data suggests themes that are further explored in the second pilot study described in Chapter Four.

Chapter Four: Second Pilot Study

I conducted a second pilot study during the spring 2013 semester. I again focused on the structure of the mentoring program and the experiences of the participants during the second semester of the program's operation. I also looked at responses to changes that I had made in the mentoring program and accompanying course that were suggested by the first pilot study. These included additions to the course in which the mentors were enrolled and efforts to increase meaningful mentor-mentee contact.

It became apparent quite early in the semester that we faced additional challenges that I had not anticipated. The following accounts, drawn from field notes recorded during and following early spring 2013 meetings and sessions, introduce some of these challenges.

I meet with the new mentors, Debbie, Sarah, and Ellen, before the semester begins. They're very nice and very enthusiastic, but I miss Tabitha and Kathy, the fall semester mentors. These three young women are lovely, but I don't sense the maturity and fine-tuned good judgment that I saw in the mentors last semester. This group will need more training than Kathy and Tabitha did. I also notice a shift now that I have a semester's worth of experience with the program. Last semester, the two mentors and I all worked together to shape the program, me leading, of course, but all of us contributing. Now I'm more of the authority on the program, the one who knows how things work, which makes sense, of course.

We meet with the DSO staff, and all goes well. However, I detect a shift in their attitude, similar to mine, after they meet Debbie, Sarah, and Ellen. I notice that unlike last semester, there is not an immediate embracing of the mentors as program staff. Rather than automatically emailing all of us following the meeting, as happened without comment last semester, I am asked, "Should I send that just to you or out to all the mentors?"

I take the mentors with me to check out the room in the University Union where we are assigned. It turns out to be a tiny windowless conference room. We look at each other and try to imagine this room with 14 people in it, attempting to confer, work quietly, and be productive. This is not going to work. (Field notes, January 21, 2013)

Room issues and space needs for the program were an issue during the fall 2012 semester, and these problems only became more pronounced during the spring of 2013. Despite communication with a number of staff and programs on campus, and advocacy from both the SOE and DSO, we were variously assigned to that tiny conference room in the student union, a small classroom packed with rows of tablet chairs in the Fine Arts building, and a similar classroom in the Student Wing. I spent uncounted hours exploring the campus and looking for suitable space, as well as seeking assistance from a number of sources. The first session goes well, despite the room. I realize that a slightly larger group of ten mentees rather than six, plus three mentors, calls for different strategies. In the fall, we all sat wherever, with little sorting among the mentees by mentor. I realize after the fact that starting out by having the students sit by their mentor would have been a wonderful idea, and would have supported my goal this semester to encourage more contact and more assistance.

The second night, in a different room: The room is small, and it is a challenge balancing constructive noise and not-so-constructive noise. Some students clearly prefer silence, yet mentors need to work with their mentees. So much to balance, including the need for a friendly, supportive environment and just enough enforcement for these undergrads who need this support, but also are adults who need to self-manage. I realize this as one of the mentees, Dan, comes late and clearly expects me to scold him. I sigh. This is going to be a long semester.

Balancing things for the mentors is going to be tough as well. They're trying to do what I tell them, to initiate interaction with the mentees and support them, addressing concerns raised last semester. But their judgment is not what I had become accustomed to with Kathy and Tabitha. Debbie is driving me crazy. She's like a house afire, wanting to adopt, take over, and enlighten everyone in her path. She tells her personal story, relating her own challenges and experiences, without seeming to consider its relevance for these particular college students. I *really need to encourage some reflective work on the part of all of these young people.* (Field notes, February 5 and 6, 2013)

Description of the Mentoring Program

The first pilot study reported in Chapter Three provides a detailed description of the structure and setting of the Study Skills and Mentoring program that began in the fall of 2012 and continued through the spring 2013 semester. A chronology of the history and early development of the mentoring program is also provided in Chapter Three. The schedule for the program remained the same as the previous semester. Mentoring and study sessions and workshops followed the schedule outlined in the first pilot study with one exception. In the spring 2013 semester, the program did not meet during finals week, as finals week sessions were not well attended the previous semester.

Students in the Mentoring Program

Undergraduates. Eleven undergraduate students with disabilities participated in the mentoring program in the spring of 2013. These undergraduates had previously selfidentified as a student with a disability and provided documentation of that disability to the Disability Services Office. Six of these students had participated in the program during the fall semester and had asked to continue. The other five students filed an application with DSO to participate in the program. That application form was developed by DSO staff with some input from me (Appendix B) and was distributed over the semester break to students whom their staff felt would benefit from participation in the mentoring program. This semester, DSO received only four new applications for the six openings in the program, and enrolled these students. Several weeks into the semester, they enrolled an additional applicant. **Graduate Students.** This semester, the mentors, who were graduate students in special education, were enrolled in an elective course titled *Supporting the Transition of Students with Disabilities to Postsecondary Education.* This new course was publicized by posting flyers around the education building and forwarding course information to other schools and departments with graduate programs, including Student Affairs, Social Work, and Psychology. In December 2012, the fall semester mentors and I visited SOE classes that enrolled potential mentors; SOE special education professors distributed flyers to their students, and SOE office staff sent email to currently enrolled graduate students via an email listserv. We also attempted to generate word-of-mouth publicity within SOE.

Mentor recruitment has been an ongoing challenge. While factors such as the newness of the program, lower enrollment across teacher preparation programs, and the fact that fewer special education graduate students take their elective courses during the spring semester may have limited registration in the course, the continuing low enrollment in this course, and therefore very small and uncertain number of mentors, continued to threaten the sustainability of this program.

In the spring 2013 semester, three graduate students enrolled and served as mentors. Two of these students were enrolled in a program that would lead to a master's degree and certification in adolescence special education. Sarah held a bachelor of science in English education for adolescents and was certified to teach English (7-12). She had previously had a disability diagnosis, but had not received special education services during her K-12 or college years. Ellen held a bachelor of science in social studies secondary education and initial certification in Social Studies (7-12). Not long before her semester as a mentor, she obtained a professional position with a youth agency that required a master's degree but not teaching certification, and midway through the semester, she changed her program from adolescence special education to Educational Studies, a graduate program that did not lead to certification and did not require student teaching. Ellen did not have a disability diagnosis. Debbie held a bachelor of science in childhood / early childhood education and initial certification in birth-grade 6. She was enrolled in a program in special education that would lead to a master's degree and certification in teaching students with disabilities birth-grade 6. She reported that she had a history of severe speech delays. See Table 4.1 for more information on the mentors.

Name	Age	Student status	Degree program	Disability status	Race/ethnicity
Sarah	23	Graduate student	MSEd Special Education Adolescence (7-12)	History of ADHD, no services	White, not Hispanic
Ellen	29	Graduate student	MSEd Special Education Adolescence (7-12); changed to Educational Studies	No disability diagnosis	White, not Hispanic
Debbie	22	Graduate student	MSEd Childhood/Early Childhood Special Education (B-6)	No disability diagnosis, history of severe speech delays	White, Hispanic

Spring Semester 2013 Mentors

Identification and Recruitment of Participants for the Pilot Study

Undergraduate students. The 11 mentees were given the choice of participating in this pilot study, but were told that participation in my research was not a requirement of receiving the services of the mentoring program. Because program issues impeded, I

did not conduct interviews with any of the undergraduate mentees during the spring 2013 semester. It seemed that every week there was a new challenge, such as changing rooms, attendance and tardiness issues, or mentor support, that took precedence over, or actually prevented, sitting down with the mentees for individual interviews. I obtained written informed consent to utilize survey results and demographic information from three of the mentees. Consent had been obtained from six of the mentees the previous semester. The other two were absent from the sessions during which I collected information and requested written consent. These students also did not respond to the end of semester survey.

Details about the nine spring semester undergraduate participants are found in Table 4.2.

Table 4.2

Spring	Semester	2013	Mentees
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Name	Age	Sex	Class year	Major	Disability status	Race/ethnicity
Carol	20	F	Sophomore	Biology and Geology	Asperger syndrome, Generalized anxiety Disorder	White/ not Hispanic
Joe	20	Μ	Transfer/ Sophomore	Geography	Autism	White/ not Hispanic
Kevin	20	Μ	Junior	History	Asperger syndrome	White/ not Hispanic
Karen	21	F	Junior	Biology	Learning Disability	White/ not Hispanic
Anne	19	F	Freshman w sopho- more standing	Undecided; considering Judaic studies	ADHD combined type; Generalized anxiety disorder	White/ not Hispanic
Michael	18	М	Freshman	Mechanical Engineering	ADHD	White/ not Hispanic
Nathan	26	Μ	Senior	Computer Science	Chose not to disclose	White/ not Hispanic
Megan	20	F	Junior	Nursing	Learning disability	White/ not Hispanic
Dan	20	М	Junior	Neuro- science	ADHD	White/ not Hispanic

Graduate students. Early in the semester, the mentors were informed about my study and told that they would be asked, but not required, to participate in interviews and other informal measures. They were also told that their written reflective papers (course assignments) would be utilized as data in the study with their consent. All three of the graduate students indicated willingness to participate. Prior to conducting interviews, the
study was again described to them individually, and they were asked to provide informed written consent to their participation (see Appendix E for recruitment script). Safeguards for ethical research practices were similar to the first pilot study.

Data Gathering

Interviews. As previously mentioned, this pilot study did not utilize interview data from undergraduate participants. I conducted individual interviews with the three graduate student mentors. These interviews variously took place in our classroom, in my office, and in the meeting room of a small public library that was mutually convenient for the interviewee and me, all locations that provided sufficient privacy. Two of the participants opted for an interview time immediately preceding one of the study sessions. The library meeting was scheduled after the interviewee finished her workday. All interviews were conducted during April 2013.

Observations. As the coordinator of this project and the instructor of the graduate student mentors, I again functioned as a participant observer at the study sessions. I attended all the mentoring sessions except one (25 out of the 26 sessions held; I also left two of the sessions early) and led one of the weekly study skills workshops. I recorded extensive field notes (Emerson et al., 1995) following study sessions, interviews, seminars, and meetings.

Documents. Document collection was similar to the first pilot study, with the addition of a series of reflective essays written by the mentors during their involvement with the project.

Data Analysis

Data analysis for this pilot study again consisted of direct interpretation (Stake, 1995) of observation field notes, interview transcripts, and documents, along with compilation of survey results to inform both program and course development and research design. Again, in-depth coding and analysis were not performed for this pilot study, as the focus was to continue to explore program development and refine methodology for the fall 2103 study.

Experiences of Undergraduates in the Program

While many aspects of the program worked as anticipated, the project encountered some significant obstacles and experienced "growing pains" during the spring 2013 semester. Issues identified in the first pilot study, such as attendance policy, space issues, and delivery of program services, persisted, and in some cases became more pronounced.

Of the 11 undergraduate students involved in the Study Skills and Mentoring program in the spring 2013 semester, 6 (55%) returned a confidential survey distributed at the end of the semester (Appendix L). The same attendance issues that plagued the program throughout this semester affected survey participation and contributed to my decision not to conduct interviews with the undergraduate mentees.

Program structure and schedule are helpful, but may not have matched expectations. The undergraduate students were asked to use a 5-point scale (1=strongly agree, 5=strongly disagree) to rate their agreement with two statements:

- This program has been helpful to me this semester.
- This program has been what I expected when I applied.

The response to the first statement was positive, in contrast to the second statement. While most of the survey respondents reported that the program was useful to them, five of the six students surveyed were undecided about whether or not the program was as they had expected. This finding contrasted with the unanimous agreement with the same statement on the fall 2102 survey. However, a new question later in the survey shed some light on their rating of program utility and expectations. "If given the opportunity, would you participate in this program next semester? Why or why not?" This netted the following responses, which underscored the diversity of demands on and needs of the undergraduates.

Yes, I would. It would allow me to focus more.

Depends. After a really long day (this semester Tuesday) I would maybe need a nap. Usually I am not tired but this past semester I stayed up almost all Monday nights.

Yes, but I found it's awkward because the dining hall closes at 8 PM.

I am not sure yet because I am afraid that it may affect my schedule.

Maybe. It depends. Think the program was great idea, but I found it hard to focus. Also sometimes I felt it was too short/ didn't have enough time to continue my work.

Yes, because having a designated study time and a conducive atmosphere has really helped me get HW done.

Students were also asked to give feedback on the scheduling of the study sessions.

Four survey participants rated the study session length as "just right" rather than too long

or too short, with one choosing "too long" and one choosing "too short." All participants

rated meeting twice a week as "just right" rather than "not enough" or "too much."

Program location is problematic.

I've been around and around about rooms and solicited help from every office I can think of on campus. Originally we were assigned to a tiny room in the student union that was totally unworkable. We're now assigned to room in the Student Wing (a classroom building) with tablet chairs and not enough space. When they come in for the first session, the students from last semester look askance and say, "I'd rather have our old room back." I look around the room as the students work and see papers, and even a laptop, fall off the tablet chairs. Students change their seats in order to access the few electrical outlets. (Field notes, February 5, 2013)

Our "old room" was a large classroom and meeting room in the student union that had many advantages, but was extremely noisy, resulting in frequent disruptions.

The second night, we find a class occupying our room when we arrive, and it turns out that the person in charge of scheduling rooms has assumed that we meet on Tuesday and Thursdays, similar to the university class schedule. We quickly move the group to a study room in the basement of a neighboring academic building that I had noticed and admired earlier in the day. I then attempt to get our program scheduled officially into that room, although is small, and the heavy tables provide little flexibility and make the mentors' work difficult. I learn that the room is under the scheduling jurisdiction of another department, and they will not schedule it. We are welcome to "squat," but others may be in the room when we need it. (Field notes, February 6, 2013) I contact my advisor, the SOE secretary who arranges classrooms, DSO staff, and the university office in charge of room assignments. DSO personnel contact other academic support programs on campus. I contact my counterparts in these programs as well. Everyone tries to help, but no solution is found. Many inquiries are made on our behalf, but with no results. Everyone wants to help, but when they make an inquiry and strike out, they just hope that somehow it's being picked up by someone else. But I am truly at a loss. I'm having a great deal of difficulty weighing the issues, weighing our entitlement to more space than a student organization or class of our size would normally qualify for, and the legitimate special needs of my students. (Field notes, February 13, 2013)

By mid-semester, a solution was found that enabled us to have suitable space for the rest of the spring 2013 semester, but was not a long-term solution for the project. The Career Development Center agreed to our use of their seminar room. The space was small and lacked sufficient numbers of tables, but it was a significant improvement. However, it was available only during the later part of spring semester because their use of the room for their own programs was less near the end of the academic year. Furthermore, we were required to vacate the room on any night that it was needed for Career Development Center programs. Mentee comments on an end-of-semester survey reflected their relative satisfaction with the workability of this space:

The location is great but the tables aren't good w the number of people in the workshop is hard not to invade other people's space.

I liked the room a lot. Needs smaller areas to study.

The current room is fine in terms of its size and location. I want the room to be not too far from the residential communities.

Keep the same room or find more spacious room.

Should have a bright room with outlets and enough space to spread out books, and quiet.

The room / space issue affected me with distance from my dorm to study hall. [The temporary location used earlier in the semester] was farther than [the current room].

Some of the students were challenged by the room changes that the program

underwent during the semester. Location issues interacted with attendance and tardiness

problems despite extensive efforts to communicate positively and well regarding any

room changes.

[The current room] is not a bad room. I actually like the room. I got lost/confused one session & completely missed it because I didn't know where we were supposed to be. (Mentee comment on end-of-semester survey)

Both DSO staff and I began well before the semester was over working to secure a suitable space for fall 2013. Emails, phone calls, and personal inquires were made to campus offices, other support programs, individual departments, and residential colleges beginning in April 2103 and continued throughout the summer.

Program policy decisions on attendance are increasingly complex. The

mentees' application to the program had a clearly stated attendance requirement (Appendix B). During our first semester, as described in detail in the first pilot study (Chapter 3), we realized the need for a more nuanced and individually negotiated attendance policy to meet the needs of the population of students we served. During the spring 2013 semester, we were plagued by poor attendance, as well as tardy arrivals, in some cases accompanied by poor communication between mentee and mentor about these absences. While attendance by mentees at scheduled sessions had been 94% in the fall, this spring it was 69%. (See Appendix M for Spring 2013 mentee attendance.)

The mentors believed that poor attendance of mentees made their work less effective. Debbie commented, "The emails aren't as responsive [don't net responses] as I would like and unfortunately my mentees aren't here as often as I would like either..." She also saw poor attendance compromising the effectiveness of the workshops. "...with the workshops, I think they're excellent, but when we only have like three people here, then no one gets the workshop, except those three people, who may not need it." However, she saw mentees' differing circumstances as warranting individualized responses. "I think attendance... that's not really something that we can do as a program. That's more case-by-case. I think [there is] a happy medium" (Interview, April 3, 2013).

Ellen also commented with some frustration on poor attendance. "I think we do need to make it clear at the beginning that even though they're not getting a grade, they still need to come. I think that if they had that from the beginning, it might help a lot...making them more accountable that way" (Interview, April 29, 2013).

We continued to respond to absences with concern, increased outreach, reminders, and offers of assistance in dealing with obstacles. If the mentees were working with a DSO staff member, we enlisted their support. In the coming semester, we will accompany those efforts with possible removal from the program for repeated absences, especially if the mentee does not communicate with or work with the mentor to resolve the issue.

Program components: Mentoring, workshops, and study sessions.

Students were asked to rank the usefulness of the three major components of the program—mentoring, study sessions, and workshops (see Table 4.3). (Although the term "mentoring" is used to describe the program as a whole, as well as the sessions, in this case, it referred to 1:1 work with mentor and mentee.) During the spring 2013 semester, the mentors and I had worked to improve the efficacy of this contact, a need identified in the fall 2012 survey. This increased emphasis on mentor-mentee interaction and mentor availability appeared to be reflected in the ratings on this item. While mentees again ranked the study sessions as most useful, this semester, mentoring was a strong second. Table 4.3

	Ranked # 1	Ranked # 2	Ranked #3
Mentoring	0	5	1
Study sessions	5	0	1
Workshops	1	2	3

Survey Response: Ranking of Program Components (n=6)

This survey item has been revised for the fall 2013 study so that the mentees rate each item for usefulness, rather than ranking them in comparison to each other, with the goal of providing data on the different program components that more accurately reflect mentees' experiences.

Study sessions. On this survey, mentees indicated that of the three major components of the program (study sessions, mentoring, and workshops), the structured study sessions were the most useful. When asked to, "Tell one way that the program has

been helpful to you," most responses referred to the structured time and place in their week to do schoolwork.

Responses included the following:

Allows me to focus more.

If I wanted to go to an activity that was not very important, I knew I had this study thing to go to, and it helped me insure that some work was done.

Mandatory time to stop what I'm doing to go do work.

The program has been helpful with giving me time to do HW.

Workshops. Seven workshops were presented over the course of the semester. There were several weeks that no workshop was held because we were in the process of changing rooms at the time the workshop would have been held. Participation from the undergraduate students, such as responding to questions and contributing to discussion, was generally good. Ellen noted, "The… workshop participation really surprised me, and pleased me that there seemed to be more class interaction and interest in my workshop this time. Overall, I think that the undergraduate students really seemed to enjoy the workshop on the do's and don'ts of preparing for final exams" (Reflective paper, April 16, 2013). However, attempted follow-up on implementation of ideas and techniques from workshops, whether by email between mentor and mentee or at the next workshop session, netted little response. Mentors' logs of their work showed no response by mentees to emailed queries about applications of workshop ideas and techniques.

The survey listed six workshop topics presented by the mentors and asked the students to respond to whether or not the workshop was "interesting" and whether or not it was "useful." Responses are summarized in Table 4.4.

Table 4.4

	Interesting	Not interesting	Useful	Not useful	Didn't attend/ Don't Remember
Calendars/ scheduling	0	0	4	0	2
Stress management	0	0	4	0	2
Reading retention strategies	0	1	2	0	3
Learning styles	1	0	2	0	3
Self advocacy	1	0	2	0	3
Preparing for final exams	1	0	3	0	2

Survey Response: Workshops (n=6)

While I attempted to clarify that this survey item did not call for choosing between "interesting" and "useful," and called for a rating in each area, participants appeared again to interpret this survey item as calling for one answer only. The survey was revised for the fall 2013 study to provide further clarification and restructuring of this item. In addition, the "didn't attend / don't remember" choice was modified to provide more accurate feedback.

Individual comments on how the workshops could be improved included:

Timing was sometimes disruptive.

There could be more direct notes (ppt, notes/ handouts, etc.)

Maybe shorter workshops would allow more time for study/work.

The workshops were scheduled at the beginning of the study session, a strong preference of the mentees, and began on time. However, mentees were frequently late for the sessions, and this hindered workshop attendance and disrupted the workshops. *Mentoring.* In fall 2012, mentees indicated that they wanted more active assistance from mentors during the study sessions, and they wanted time to meet with their mentor to work on things. These previous survey results, along with mentee comments, led me to encourage mentors to initiate more contact and to work harder to appear available during study sessions. Extant research on college mentoring programs supported the need for training for mentors in how to mentor (Adams & Hays, 2011; Brown et al., 2010; Rosenthal & Shinebarger, 2010; Strumbo et al., 2008; Vannest et al., 2008; and Zwart & Kallemeyn, 2001). The skills that graduate students brought with them from their teacher preparation program, such as sensitivity to individual differences, individualized approaches to instruction, and a broad approach to student needs that extended beyond academics, supported their mentoring work, but they needed training in communication skills, utilization of mentees' strengths, campus resources, and appropriate expectations (Adams & Hays, 2011; Rosenthal & Shinebarger, 2010; Strumbo et al., 2008; Zwart & Kallemeyn, 2001). These have been added to the course.

Mentors were encouraged to reflect on their practice in order to facilitate the contact desired. Sarah built on her initial contacts with students in ways that were productive for her mentees.

I find it really helpful when they first come in to ask them what they're going to be working on because then it kind of like opens the conversation up, and then a lot of times they'll be like, "Oh, I'm working on this, and I'm working on that," and then sometimes they'll kind of give me a lot of details about, "I have to do this," and I'll say, "OK, well, when is that due"? And "Do you have a plan to break it down?" And we'll kind of have a really good conversation before they get started, so I like to start off that way. (Interview, April 10, 2013)

Sarah found that even something as simple as furniture arrangement made a difference. *I like what we did with how we arranged the tables when we moved to the new room, because it's helped opening communication at the beginning, because people would come to sign in and then [I would ask], "Hi, what are you working on? How's everything going?" so I like the whole having them check in with you in the beginning thing.* (Interview, April 10, 2013)
My field notes include similar descriptions of Sarah employing these

Sarah has an easy camaraderie with her mentees. She's taking full advantage of the layout of our new room and new system of having mentors responsible keeping track of their mentees' attendance... I watch her mentees come in ... She checks with each one of them about assignments and events during the week, such as tests, that she seems well informed about. She asks them what are working on that night, and follows up with questions about due dates and strategies for attacking the assignments. Anne, who initially had been a little resistant to having a great deal of mentor contact, happily sits at the table with Sarah. Even Kevin, whose attendance at study sessions has been atrocious, checks in with her by email each week and tells her what's going on, what grades he's gotten, what assignments he's working on. Megan, who is actually Ellen's mentee, seeks Sarah out frequently for help... Sarah seems to have found that elusive balance between students working independently under our supervision and structure, and the needed check-ins and assistance that they need and desire intermittently. (Field notes, April 2, 2013)

The Spring 2013 survey responses suggest that mentors' approaches were successful in addressing issues of mentor-mentee contact and access. In response to a survey item asking students to rate whether they would like more, the same, or less time from mentors for email contact, face-to-face contact, active assistance during study sessions, workshops, and focused time to meet with mentor and work on things, most students wanted to continue all of these aspects of mentoring at the present rate. See Table 4.5 for results.

Table 4.5

Survey Responser 1 regrant Services (It e	Survey R	esponse:	Program	Services	(n=6)
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	More	Same as this semester	Less
Email contact with mentors	1	4	1
Face-to-face contact with mentors	1	4	1
Active assistance from mentors during study sessions	1	5	0
Workshops	1	3	2
Focused time to meet with mentor and work on things	2	3	1

Further evidence of improvement in mentor-mentee contact was shown in the survey item that asked to, "Tell one way that the program has been helpful to you." During the fall 2102 semester, all responses referred to the structured time and place in

their week to do schoolwork. This semester, a few of the responses referred to work with the mentors:

Proofreading papers.

The program has been helpful with giving me advice to get tutoring.

We initiated the use of mentoring plans this semester as a tool to enhance meaningful contact and to make sure that undergraduate students and mentors understood expectations more clearly, an approach that had emerged both from extant research (Bartlett, 2004; Harris et al., 2011; Zwart & Kallemeyn, 2001) and from a conversation with one of the mentors.

I think maybe from our end a little more background about the students [would be helpful]. I mean, we had those forms about why they signed up, but I feel like I don't really know...things like what they struggle with...it [a plan] would kind of give us a focus for our sessions, things to cover, and then it gives them [mentees] an idea of what they wanted to work on for the semester as far as study habits or whatever it is that they're concerned about" (Tabitha, interview, October 24, 2012).

The plans (see Appendix K) began with an initial brief meeting between mentor and mentee at which goals focused on mentee needs were established. The mentors then wrote up the plans and reviewed them with mentees. Both mentor and mentee signed the plan and kept copies.

Planned for the fall 2013 semester are the continued use of mentoring plans, renewed efforts to find a balance between active mentoring and quiet study support, and various methods of increasing engagement with workshops, including active soliciting of workshop topics as part of the mentoring plan development process, clear guidelines of expectations for participation, and refinement of mentors' follow-up techniques.

Experiences of the Mentors in the Program

The spring 2013 mentors all held initial teacher certification, but none had fulltime teaching experience. They were at various points in their special education masters' programs. Therefore I did not anticipate that they came to the course or the program with a great deal of knowledge of transition planning.

Sue: What preparation did you have prior to working in this program-coursework or experience--working with students with disabilities on transitioning into college or the workplace?

Ellen: I don't know if I didn't pay attention before or it wasn't mentioned. It just seemed like you filled out this stuff and then you planned for them to work towards it, and hopefully they met their goals. And that was it. I didn't hear anything more after you get it going...We did have coursework on IEPs --how to create them, and at what age you have to start thinking about the transition. (Interview, April 29, 2013)

Debbie, whose background was in childhood and early childhood education, viewed transition from that perspective.

I had some opportunities to see students transition from Head Start into Kindergarten and to the public school system. I had a lot of transitioning like that, but I had never had an opportunity to see what happens afterwards. I know that I make the IEP, but since I'm elementary, I don't know what happens in high school. (Interview, April 3, 2013). Sarah had a bit more experience.

[The professor] taught us that if the kid is like fifteen or older you have to have this transition plan and all that stuff, and I think the student I was writing it for - we each got a scenario and then we had to, based on the scenario, develop the IEP- so based on my scenario, my student was sixteen I think, and it had a lot of his interests, so I had to go through-these are his interests, this is what he wants to do-- and develop and plan and be able to do that after high school. I had some experience because I taught seniors [student teaching] and a lot of them were getting ready to go to college, so even just helping them with college applications, and a lot of them had questions and things like that. (Interview, April 10, 2013).

Drawing on my experiences during the fall 2012 semester, realizing that many graduate students have very little knowledge about transition planning, I made some changes to the course that surrounded the mentoring experience. I realized that in order for the mentors to benefit maximally from their field experience, they needed more input, more background, and more support in making sense of their mentoring experiences. Providing more reading material and guided discussion helped the mentors to make connections between their work with their mentees and their classroom experiences, past and projected. I required readings to provide information on transition mandates and requirements (NICHCY, 2010; US Department of Education, 2011), the needs of students with disabilities in postsecondary education (Harris & Robertson, 2001), and first-person accounts of successful college students with disabilities (Mooney & Cole, 2000). Readings from practitioner journals that made explicit the differences between high

school and college expectations (Madaus, 2005), and suggested specific interventions to help students with disabilities in postsecondary settings (Connor, 2013) were added and to the course and discussed in the seminar. Course assignments were modified to require a series of reflective essays, the topics of which have become more structured and respond to assigned writing prompts such as, "What have you learned to date about the needs of students with disabilities in college?" Other topics included, "How have your experiences as a mentor influenced your ideas about transition planning and programming for students with disabilities in secondary education?" and "How might your experiences in this program affect your teaching of students with disabilities at the K-12 level?" The aim of the assignments was to help the mentors make connections among their readings, their mentoring experiences, and their past and present classroom experiences, allowing them to accrue new understandings by linking theory and practice (Novak, 2010). Mentoring logs, which began as an open-ended method of recoding mentor-mentee contacts, were subsequently structured to provide both information on attendance, participation, assistance provided, and follow-up needed, and an opportunity to reflect on this work on an ongoing basis. A similar course was planned for fall 2013.

Mentors' insights. Themes that emerged from interviews, mentoring logs, and other feedback from mentors during the fall semester included (a) the mentors' emerging knowledge related to transition planning and practices, (b) growing awareness of different expectations at the secondary and postsecondary levels, (c) the need for selfadvocacy skills on the part of students with disabilities, and (d) implications of these insights for teaching practice. While in-depth analysis of interview transcripts and documents was not conducted for this pilot study, these themes also emerged from the mentors' work during the spring 2013 semester.

Mentors became aware of the gap in expectations and practices between high school and college.

I always assumed if you had an IEP or 504, you just automatically just had it in college, and that's not the case at all, so it's very eye opening. (Ellen, Interview, April 29, 2013)

The mentors were able to reflect on special education practices they had observed in the past in view of new knowledge acquired through their participation in the program. Ellen commented, "The main things that I observed were probably upsetting: teachers doing too much of the work for the student" (Interview transcript, April 29, 2013). She gave two contrasting examples of teacher practice.

There was a teacher in one of the middle schools I went to. She's very give-and-take, like they have to give her something in order to get something from her, and I learned a lot from her as to how to deal with students. She's very caring. She cares, but she's not too involved, but they know that she cares--like she'll ask, "How was your grandma this weekend?" If the girl said her grandma was sick or something, she remembered, and she always checked in, and I saw that the kids really seemed to feel that she cared, and they gave a lot more. I mean there was bad days and there were good days, but she seemed like a really good motivator to the students and was always there. And then, I saw other special ed teachers who would just sit down and "I'll help you get your work done," and then the kid's not really doing anything and the teacher's doing it all. So if I become a teacher someday, I'd want to emulate someone that was caring and was on top of things and paid attention to details more so than, just, "You're in my classes; let me just get this done and get you out there." (Ellen, Interview, April 29, 2013)

Debbie, whose work had been primarily with younger students, shed some light on how teachers might end up providing more than an optimal amount of assistance to students. Here she reflected on balancing assistance to prevent frustration and the need for students to develop independence.

[Students] have to be able to do things independently. And I think a lot of times that gets lost because we want to help and we want them not to feel frustrated... and they go [indicates student frustration], and they get frustrated, and we don't like that. Especially with the younger kids, we don't like that. We want you to be able to get from point A to point B without the stress, without the behavior. And sometimes they need to do it themselves, to find out if I can do it independently. (Interview, April 3, 2013)

The mentors had ideas about how their practice might change as a result of their experiences. Ellen identified self-confidence, independence, and self-reliance as traits to foster in students with disabilities planning to transition to college.

I could see maybe working with the students more to become self confident, more independent, because once they transition out of high school, they're on their own. I mean-- some aren't, but they're not going to have as many supports as they did in high school, so if we can start to prep them, make them more self reliant, that's going to help them in the long run. (Interview, April 29, 2013)

Ellen also stated,

So any skills we can give them from the beginning is definitely better for them all the way around than being too reliant on others. That's the main thing I think I've gotten out of this is-- they have to just really become independent, which is what we want for any of our kids. (Interview, April 29, 2013)

Sarah identified the ability to break down assignments into manageable chunks as a specific skill that she found important for college success, based on the needed of her mentees.

Sue: Can you think of any specific examples of work that you've done with the college students that you think you might apply to work as a high school special ed teacher?

Sarah: I think being able to break down large tasks, because I know a lot of them have had trouble with that, and I even had trouble with that when I started college, doing a little bit more of long term projects than in high school. Now [they have] ...a ton of work, but doing more long term things-- something that's due a month from now or two months from now, instead of always being due within a day or two, and having them being able to work on them for a longer period of time, because that's one of the *big shifts when you go to college-- things are more long term.* (Interview, April 10, 2013)

Sarah described a former high school student with a disability with whom she had worked who had struggled with this task. "She was going to [small state college nearby] and having a bit of a rough transition. I think she was transitioning to the workload and some of that stuff [breaking down large tasks] was challenging, she said" (Interview, April 10, 2013).

The mentors' interviews and written work suggest that they are increasing their knowledge of transition practices and needs, enlightened by their opportunity to see and interact with students with disabilities both in K-12 and postsecondary settings. They have observed the different expectations at these two levels, the gap that exists in expectations, and the need for students in college to have or develop a high level of independence and study skills. They have observed and commented on teaching practices at the secondary level that contribute to or impede the development of these skills. In Ellen's words, "I think this semester's been really great in learning the steps and the processes that we need to take as educators, and working with the students makes it more real" (Interview, April 29, 2013). This discussion both echoes themes from the first pilot study and suggests themes to be explored more deeply during the study outlined in Chapter Five.

Chapter Five: Case Study Methodology

The current study draws its methodology primarily from the traditions of qualitative inquiry. Brantlinger et al. (2005) defined qualitative research as "a systematic approach to understanding qualities, or the essential nature, of a phenomenon within a particular context" (p. 195). Qualitative research seeks to answer questions such as "what is happening?" and "why or how is it happening?" (p. 196). Some defining features of qualitative research are a naturalistic setting, the use of the researcher as an instrument of analysis, the primary use of description rather than numerical data, and a focus on attempting to gain entry into the conceptual world of the participants in order to understand the meaning of a particular phenomenon in a specific context (Bogdan & Biklen, 1982).

Bogdan and Biklen (1982) compared conducting qualitative research to taking a trip without a detailed itinerary. While the journey has a destination and some general guidelines, the actual course is not mapped out from the beginning, but emerges as the journey unfolds. Likewise, qualitative research begins with theoretical underpinnings and is anchored by research questions, but allows for evolution during the research process.

Qualitative inquiry methods were applied to a case study of a university-based program in which graduate students in special education served as mentors to undergraduate students with disabilities who were registered with the university's disability services office. These research questions guided the current study: 1. How does this mentoring program address the college support needs of undergraduate students?

2. What opportunities does the mentoring experience provide that support future special educators' preparation for transition planning?

3. How can the mentors' experiences and changing ideas inform teacher educators relative to the preparation of secondary special education teachers?

Case study research attempts to learn the "intricate complexities" of one case (Stake, 1997, p. 218), often but not always utilizing qualitative methods. A case study is a close examination of a person, topic, issue, or program, seeking answers to focused research questions (Hays, 2004) in order to describe, explain, or evaluate a particular social phenomenon (Gall et al., 2005). Bogdan and Biklen (1982) described conducting a case study as a process of "funneling," (p. 59) as the researcher initially casts a wide net and then continuously modifies the study as appropriate.

An important decision when conducting case study research is the choice of the case. Stake (1997) succinctly stated, "You usually know which case you care about" (p. 407). For three semesters, I had the opportunity to coordinate a program involving collaboration between the university's Disability Services Office (DSO) and the School of Education (SOE), where I was a doctoral candidate. I chose that case to study. I believe that case study is an appropriate method for studying the "bounded system" of this project (Glesne, 2006; Stake, 2005) and the experiences of the participants in this specific context (Hays, 2004).

This case study is an *instrumental case study*, defined by Stake (1995, p. 3) as a case study that is undertaken to understand something else, beyond the case (in this

instance, the program) itself. I hope to use findings from this case to advance understanding of transition planning during K-12 education and supports for college students with disabilities, through studying the experiences of the undergraduate mentees and graduate student mentors.

During the fall 2012 and spring 2013 semesters, I conducted pilot studies, which are detailed in Chapters Three and Four. These pilot studies allowed me to make changes to the structure of the mentoring program and to refine the course surrounding the mentoring experience to allow for increased learning opportunities for mentors. The pilot studies also allowed me to make changes that enhanced my opportunities to collect meaningful data for this study. For example, I refined my interview protocol, incorporating new realizations based on my ongoing literature review, conversations with other professionals in the field, informal feedback from participants, and preliminary data analysis. Likewise, the pilot studies helped me refine the research questions that guided the current study.

Description of the Mentoring Program

The Study Skills and Mentoring program was a collaborative program that began in September 2012 in which graduate students in special education worked as mentors with undergraduates who were registered with the DSO. The overall aim of the program was to provide support for the undergraduates toward their success in college, and at the same time, to provide an educational experience to the graduate students in which they gained knowledge of, and experience with, transition from high school to college for students with disabilities. Each undergraduate student was assigned a graduate student mentor. Mentor assignments were made using information from each mentee's application, attempting to match college major or other indications of student interests or needs with the mentors' areas of expertise or subject content knowledge. Mentors and mentees attended scheduled study sessions supervised by the mentors, received instruction in various study skills, and had ongoing contact via email or text messaging. My role was to serve as the coordinator of this project and instructor of the accompanying graduate course as part of my responsibilities as a Teaching Assistant in the SOE.

Mentoring and study sessions were held for two hours on two consecutive evenings beginning the second week of classes and continuing throughout the semester. The graduate students and I provided weekly small group instruction in student selfmanagement skills such as time management, organization, and study skills, with followup. Seminars with the graduate students were originally planned for one hour each week prior to one of the study sessions. The seminar provided discussion of assigned readings and transition topics and brief discussion of ongoing project concerns. However, class schedules and other commitments of the two mentors did not allow for common discussion time. The seminar therefore took place online, utilizing the social learning platform Edmodo. Once the semester was underway, responsibility for leading the seminar rotated among the mentors and me. All three of us became frustrated with the limitations of this online discussion, especially with such a small number of participants. This led to our augmenting the online discussion with a very short (20 minute) weekly meeting prior to one of the sessions, as well as conversations after the sessions and by email throughout the week.

Setting

As in the pilot studies, the program took place at a medium-sized state university campus enrolling approximately 15,000 students, including 25.5% students of color, and 3% (430) students who identified themselves as having a disability. The campus is located in a small city in the northeastern United States.

Finding an appropriate location on campus for the mentoring program had been an ongoing obstacle and challenge. During the semester of the current study, we were able to locate in a medium-sized classroom with large and small tables and chairs and a moderate number of electrical outlets located on the ground floor of the dining hall complex in one of the university's residential communities. While not ideal in size or number of tables, and not centrally located on the campus, the room provided a stable, accessible location for the program throughout the semester. The room was part of an area devoted to tutoring and other student support services, with a computer lab nearby.

Students in the Mentoring Program

Undergraduate students. The mentoring program served 10 undergraduate students during the current study. Three of these students had participated the previous two semesters. Six of the seven new enrollees were new to the university as freshmen or transfer students. All were recruited via an application process conducted by DSO from among students registered with that office. I worked during the previous summer with DSO personnel to refine the application form (Appendix N) to provide additional information about the students' needs and academic interests to assist in matching with mentors. DSO staff worked to recruit more newly transitioning students (freshmen and

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transfers) to the program. Many contacts were made by their staff during summer orientation programs.

DSO received 10 applications, and all 10 students were accepted into the program. Two of these students dropped out during the first week, and were replaced by two additional students who had subsequently applied. Details about the undergraduate mentees are found in Table 5.1.

Table 5.1

Fall Semester 2013 Mentees

Name	Age	Gender	Class year	Major	Disability status, reported by student	Race/ethnici
Carol	20	F	Sophomore	Biology and Geology	Asperger syndrome, Generalized Anxiety Disorder	White/ not Hispanic
Joe	20	М	Transfer/ Junior	Geography	Autism	White/ not Hispanic
Jennifer	19	F	Transfer/ Sophomore	Undecided/ Considering English	Learning Disability	White/ not Hispanic
Doug	18	М	Freshman	Undecided	ADHD	White/ not Hispanic
Ginger	18	F	Freshman	Undecided	Learning Disability in reading; ADD	White/ not Hispanic
Michael	19	М	Sophomore	Mechanical Engineering	ADD, Asperger syndrome, executive function disorder	White/ not Hispanic
Teresa	17	F	Freshman	Business Management	Learning Disability in reading comprehension	White/ Hispanic
Justin	19	М	Freshman	Accounting	ADHD	White/ Not Hispanic
Rachel	20	F	Junior	English	Learning disability processing speed	White/ not Hispanic
Donald	18	М	Freshman	Undecided	ADD, Generalized Anxiety Disorder	White/ not Hispanic

Graduate students. Two graduate student mentors worked in the program during the current study. These students were enrolled in a special education elective course, *Supporting the Transition of Students with Disabilities to Postsecondary* *Education*, which was first offered in the spring 2013 semester. An independent study with similar course content was offered in fall 2012. The course was publicized by posting flyers in the education building and through outreach to other schools and departments with graduate programs, including Student Affairs, Social Work, and Psychology. The spring 2013 mentors and I visited SOE classes that enrolled potential mentors, SOE professors distributed flyers to their students, and SOE office staff sent email to currently enrolled graduate students. Despite extensive recruiting efforts, by late August, only two graduate students had enrolled in the course.

Both graduate students were enrolled in a program that leads to a master's degree in special education and initial certification in adolescence special education. Jonathan held a bachelor of arts degree in geography, a master of arts in teaching social studies, and teacher certification in Social Studies (grades 7-12). Jonathan did not have a disability diagnosis. During the time of this study, he was employed as a teacher aide in a junior high school. David held a bachelor of arts degree and initial certification in Business and Marketing Education (grades 7-12). See Table 5.2 for more information on the mentors.

Table 5.2

Name	Age	Student status	Degree program	Disability status	Race/ethnicity
Jonathan	30	Graduate student	MSEd Special Education Adolescence (7- 12)	No disability diagnosis	White, not Hispanic
David	24	Graduate student	MSEd Special Education Adolescence (7- 12)	No disability diagnosis	White, not Hispanic

Fall Semester 2013 Mentors

Recruitment of Research Participants.

Recruitment procedures for study participants from among the mentors and mentees remained the same as those employed during the Fall 2012 and Spring 2013 semester and are detailed in Chapter Three. All of the undergraduate and graduate students in the program agreed to participate in the current study.

Data Gathering

Similar to the pilot studies, data for the current study were obtained through interviews, observations recorded in field notes (Emerson et al., 1995), and document collection, common sources of data in qualitative and case study research (Bogdan & Biklen, 1982; Brantlinger et al., 2005; Gall et al., 2005; Glesne, 2006; Lincoln & Guba, 1985; Maxwell, 2005; Stake, 2000). I also collected and compiled descriptive information on all of the participants including their age, class (freshman, sophomore, transfer, graduate student, etc.), major, disability status, race and ethnicity, gender, and degree program in which they were enrolled. Some of this information was available from the mentee program applications. I requested the remaining information during my interview with each participant, after obtaining written consent and reviewing confidentiality practices. At the end of the semester, the undergraduates completed a short survey to provide feedback on the program (see Appendix O). Some of the items on the survey were modified following administration during the two pilot studies with the goal of obtaining feedback that was a more accurate reflection of mentee experiences. Items asking mentees to rate workshops on interest and usefulness were modified to clarify that a rating was desired on both items, and an item that had previously asked mentees to rank the three major program components, study sessions, workshops and

working with mentors was changed to one in which mentees rated each item independently for usefulness. I also maintained records of all participants' attendance and hours in the program.

Interviews. Hays (2004) maintained that interviews are "one of the richest sources of data in a case study" (p. 229). I conducted individual interviews of all 10 of the undergraduate students. These semi-structured or guided interviews (Brantlinger et al., 2005; Glesne, 2006; Weiss, 1994) were intended to focus on my research questions but be flexible enough to allow for the participants' concerns and voice. The interviews focused on the students' experiences in the mentoring program as well as their experiences in high school relative to college preparation. I made changes to the interview guide based on my experience in the pilot studies. When I conducted my initial interviews for the first pilot study (Chapter Three), I began the conversation about mentees' high school experiences by asking about transition planning. After finding myself on the receiving end of a number of blank looks or very brief answers, I restructured the interview to begin with a more general inquiry about things students remembered doing in high school to prepare for college, whether or not they felt prepared when they got here, and whom they recalled had helped them to prepare. I realized that the questions in my interview guide needed to reflect an emic perspective and include language and sequence that corresponded to their experience, rather than the regulatory framework so familiar to me. My revised queries netted responses that were far more elaborated and informative than had my original questions. They also paved the way for me to ask productive questions about formal transition planning and special education supports later in the interviews (see Appendix P for Interview Guide).

I conducted the interviews in our classroom or a nearby room before or after the study sessions, a convenient and familiar location that provided sufficient privacy. The participants were offered the option of being interviewed at other times during the week, but all opted for an interview time immediately preceding or following one of the study sessions. The interviews were conducted during October, November, and December of 2013. In order to assure completion of total of 12 interviews before the end of the semester, I began undergraduate interviewing in mid-October. This meant that some students were interviewed mid-semester, and some near the end, an interval that may have been important to the students' accounts. As I had in both pilot studies, I worked to create and maintain a positive and unpressured atmosphere during the interviews in order to protect the rights of the participants and to increase the likelihood of obtaining meaningful research data. I described how confidentiality would be maintained, explained the informed consent forms, and endeavored to frame questions in a way that encouraged participants to respond without concern for correct answers. I made an effort to listen to their responses with care and seriousness, in order to "give them a sense of importance and specialness" (Glesne, 2006, p. 143). Participants demonstrated their comfort level with me by agreeing readily to be interviewed, asking questions about my study, appearing relaxed during interviews, and offering me advice and technical support related to my recording devices.

I also conducted individual interviews with both graduate student mentors. Interviews with the graduate students focused on their prior experiences working with high school students transitioning to college and their knowledge of transition planning and programming for secondary special education students. I also asked about their

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experiences as mentors in the project, their interactions with their mentees, and how they believed their involvement in the program might inform their ideas and future practice related to transition planning for students with disabilities. (See Appendix J for interview guide.) Both interviews were conducted in December 2013. One was held in a conference room at a college in the interviewee's home town, and one was held in my office. See Appendix Q for interview schedule.

Observations. Glesne (2006, p. 50) noted that while participant observation lacks the perspective that an "uninvolved outsider" brings, it provides more opportunities to learn through involvement with participants. As the coordinator of this project and the instructor of the graduate student mentors, I functioned as a participant observer at the study sessions. I recorded field notes (Emerson et al., 1995) following each study session; each interview; and each meeting related to the project (e.g. meetings with my faculty supervisor and with DSO personnel); and each discussion with the mentors, documenting their comments and participation and triangulating reflections and interview responses.

Documents. Document collection is a common data gathering method in qualitative research (Brantlinger et al., 2005.) Some of the documents I collected were notes from meetings, emails, notes from phone calls, and the undergraduate students' applications to the program. I also collected mentoring plans (individual goal-oriented plans drawn up by mentor-mentee pairs early in the semester) and mentoring logs that were maintained by each mentor throughout the semester. These logs contained both documentation of contacts with their mentees and reflection on those contacts. In addition, I collected a series of reflective essays written by the mentors as part of their coursework. This augmented requirement for written reflection by the mentors is elaborated in Chapter Four. Finally, I collected notes from weekly seminars with the graduate students. The types of documents collected are consistent with those enumerated by Hays (2004) as commonly used by case study researchers.

Validity and Reliability

Merriam (1998) outlined six strategies to enhance internal validity: triangulation, member checks, long-term observation, peer examination, collaboration, and recognition of researcher's biases.

Triangulation is the use of multiple data sources and multiple methods to address each research question (Hays, 2004), and is used in case studies to address concerns about validity (Gall et al., 2005). I used interview transcripts, field notes, multiple documents, and survey results to provide different ways to understand the case (Stake, 2000). Appendix R provides a chart of data sources used to respond to each research question.

Member checking, which might involve sharing interview transcripts, analytical thoughts, or drafts with participants, is a method used by qualitative researchers to make sure that they represent the participants' ideas accurately (Brantlinger et al., 2005; Glesne, 2006; Maxwell, 2005). I shared interview transcripts with the two graduate students, and both responded that the transcript represented what they were trying to convey. David commented that the transcript, "seem[ed] to reflect exactly what I meant to say during the interview." I also shared survey results with the mentors in order to give feedback on their mentees' collective responses. They did not

provide any feedback on the survey. Finally, I shared the findings related to the mentees that appear as Chapter Six. I have not yet received feedback on that draft.

I did not share interview transcripts with the undergraduates. That decision was based partially on previous poor results in getting feedback from this group of participants after the semester ended. The larger reason was my sense that reading their words some weeks after the interview might cause discomfort as they re-visited challenging situations. Brantlinger et al. (2005) described similar situations in which a researcher would choose not to use member checking for particular groups of participants.

Prolonged engagement or "long-term observation" (Merriam, 1998, p. 204) involves spending sufficient time at the site of a case to be able to make necessary observations. My role as coordinator of the project, weekly meetings with mentors, and twice-weekly attendance of study sessions provided me with ample time with participants, abundant observation opportunities, a large sample of interactions between mentees and mentors, and the opportunity to observe the development of these relationships and of the project over time.

Peer examination. Merriam (1998) recommended asking colleagues to comment on the researcher's finding as they emerge. I met separately with two fellow doctoral students during the time period in which I performed much of my data analysis. At the first meeting with the first examiner, we reviewed my statement of researcher positionality. I asked for feedback on clarity and for my peer examiner's thoughts about how my background and ideas might influence my research findings and conclusions. I believe that I benefitted from the self-reflection that occurred as I clarified the content of my drafted statement for my examiner. Second, the peer examiner reviewed drafts of my findings (Chapters Six and Seven), providing feedback on issues of clarity, presentation of data, and the degree to which the findings I reported appeared to be consistent with my data. Finally, I met with a second doctoral classmate to review the findings (Chapters Six and Seven) along with my conclusions reported in Chapter Eight. I asked for feedback on correspondence between findings and conclusions, as well as perceived effect of researcher positionality. I asked at several points if she saw "too much about me" (Peshkin, 1988, p. 20) in the writing. Once again, the feedback I received, along with the process of self-reflection as we discussed my work, aided in revision of the draft.

Merriam's (1998) final two strategies for addressing internal validity are collaboration, and recognition of researcher's biases. Because of the nature and purpose of this study, I was not engaged in collaborative research. I address the topic of researcher bias in the section, "Researcher as Instrument." However, while I have addressed Merriam's identified strategies, which are similar to those outlined by other researchers (Brantlinger et al., 2005; Stake, 1995), the validity of this study is not truly measured by addressing a list of criteria (Maxwell, 2005) but by creating a narrative that is credible and trustworthy to the reader (Brantlinger et al., 2005).

Lincoln and Guba (1985) wrote that "dependability" and "consistency" (p. 288) of results are terms better suited to qualitative research than the term *reliability*, or the extent to which research finding can be replicated. Merriam (1998) outlined three strategies for ensuring dependable results: the researcher's positionality, triangulation, and audit trail, or the provision of a detailed account of how data were collected and analyzed, such that a reader can follow the process and judge the authenticity of any

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findings. External validity refers to the extent to which ones findings can be applied in other situations (Merriam, 1998). For a study such as this one, external validity is determined by its resonance with my readers and their ability to find meaning in my work. I endeavored to report with candor, describing my methods in sufficient detail, triangulating my findings, and supporting my conclusions in a way that allows the reader to find meaning in this work.

Data Analysis Procedures

Data analysis is a systematic search for meaning. It is a way to process qualitative data so that what has been learned can be communicated to others. Analysis means organizing and interrogating data in ways that allow researchers to see patterns, identify themes, discover relationships, develop explanations, make interpretations, mount critiques, or generate theories. (Hatch, 2002, p. 148)

I began the process of data analysis by organizing all data into two binders, and two corresponding computer files. I separated data that originated with the undergraduate students from data that I obtained from the graduate students. One binder contained the 10 transcripts of my interviews with the mentees; followed by their application forms which I received from DSO; their mentoring plans; copies of emails relating to mentoring, and my field notes, in chronological order, primarily recorded after study sessions. Following the completion the course in which the mentors were enrolled, I reviewed all of their course materials and set aside those that also served this data for this study. I compiled a second binder that comprised the two interview transcripts, the graduate students' reflective essays (4 for each mentor), their mentoring logs, and all records of course seminars, both the verbatim records from our online seminar and my notes from our brief in-person seminars.

Next, I read through all of the data carefully. I had conducted some preliminary analysis of data throughout the semester as it became available (Emerson et al., 1995; Maxwell, 2005; Merriam, 1998), but at this point, I sat down with all of it. None of it was new to me; I had reviewed the applications, looked over the mentoring plans, and spent much time with the interview recordings and transcripts. I had graded the essays and reviewed the seminar notes, but I came to these data now with a different purpose. I revisited my research questions, looking at them both as a funnel for the large amount of data I had before me, and to determine whether they still pointed in the direction in which I saw the study going.

Beginning with the undergraduate interviews, I read through each transcript, making line-by-line notes, or assigning codes. This process, in which the researcher looks to identify all ideas, themes, or issues suggested by the data, is known as open coding (Emerson et al., 1995, p. 143). I generated a list of codes, and paused periodically to review these codes and organize them into categories.

LeCompte (2000) used a puzzle analogy popular with qualitative researchers to illustrate the process by which codes are grouped by similarity, overarching themes are identified, and relationships between codes are explored, describing the analogous process of putting together a jigsaw puzzle by first sorting all the pieces, putting similar pieces (edge pieces, sky) in piles (p. 147). The goal is to "take apart" (p. 100) the data, to find patterns, and to reassemble the pieces in a coherent explanation of the problem. In this way, a qualitative researcher creates a structure that is imposed on the data that makes interpretation possible. However, while qualitative data analysis is in some ways analogous to working on a puzzle, it differs in the important way that the researcher does not know ahead of time what the picture will look like when finished (Bogdan & Biklen, 1982).

When I had completed this process for approximately half of the 10 undergraduate interviews, I stopped the open coding process, because I observed a consistent pattern of codes and categories across the interviews and found that I was generating few if any new codes. At that point, my process shifted to focused coding, defined by Emerson et al. (1995, p. 143) as subjecting data to a "fine-grained, line-by-line analysis on the basis of topics that have been identified as of particular interest." At the same time, I remained alert to any new ideas or outlying data. I went back and reviewed the original interviews as well. Following that process, I made a concept map of the categories that emerged. These categories suggested three overreaching themes or issues: (a) orientation and preparation for college, (b) identification of needs, and (c) ways the program did or did not address those needs.

I utilized an open coding process with the graduate student data as well. After completing this process with the two interviews and eight reflective papers, I explored my list of codes, began to organize them into categories, and began to see emergent themes. Following a process of concept mapping, I looked back at the themes generated by the two pilot studies and compared and contrasted these to current findings. I reviewed the data from the current study with those themes in mind. I revisited my concept map and generated the overarching organizing themes or issues of (a) mentor background, (b) insights related to effective transition planning, and (c) future practice, including anticipated obstacles.

Using those categories and overarching themes, I also reviewed all records of the seminars. I struggled with the fact that the data from one of the mentors, Jonathan, was voluminous in contrast to David's. I reviewed all of David's data an additional time to make sure that I had not missed anything that he had said or written. I read through the mentoring logs, also making line-by-line notes. I re-read my field notes and coded them using codes and categories generated during the two pilot studies.

When I had completed that process, I then began sorting the data. Unlike the process of literal cutting up and filing of printed data described by Weiss (1994, pp. 156-157), I did this digitally rather than with paper and scissors. Similar to the puzzle piece sorting analogy (Bogdan & Biklen, 1982; LeCompte, 2000), I copied and pasted sections of data that seemed to belong together under a common category or theme and placed them into series of Word documents. I also retained the original documents in order to have ready access to all data in context as well as in my newly organized and categorized documents and files (or piles of puzzle pieces).

I applied a different process to the undergraduate students' applications and mentoring plans. Because of the nature of these documents, in which the mentees responded to very focused questions about their needs that were similar to the information I sought, I made a chart of each students' expressed needs, with columns for needs identified their applications, their reasons for applying to the program, and the goals formulated with their mentor. That chart allowed me to look at correspondence of needs across documents and to look at and assess the frequency of recurring needs, as well as to compare and contrast these written statements with interview responses.

The final data source that I utilized was a survey administered to mentees at the end of the semester. I tallied all numeric responses and listed all comments from the survey. I use the same structure as the two pilot studies to report survey data. I used comments from undergraduate student interviews to elucidate and triangulate survey data, or at times to provide contrast.

This process transformed my interview data from audio recordings to written transcripts to themed files containing verbatim quotations from students, and transformed my field notes and collected documents into themed files as well. These themed files were then used to generate drafts of Chapters Six and Seven. I had attempted to use qualitative data analysis software during the pilot studies, but did not find it efficient or helpful. In addition to inefficiency, I disliked the fact that while data were quickly and easily broken apart and manipulated, the resulting decontextualized data proved less useful than I hoped. The current study utilized many tools within Microsoft Word to assist me in marking and digitally sorting the data.

Ethical Research Considerations

I obtained approval from the university's Institutional Research Board on October 9, 2012 for the two pilot studies, and obtained continuing approval on October 9, 2013 for the current study. I maintained the standards of ethical human subjects research in the area of informed consent, data storage, and confidentiality, and I endeavored to form and maintain ethical and mutual relationships with all of the program and research participants. I considered and sought balance in the situation of being both the instructor of the graduate student mentors and an appreciative recipient of their assistance in data collection. Their assistance included sitting for interviews, obtaining information from the undergraduates on my behalf, and giving feedback on the project. Likewise, I had many opportunities to reiterate to the undergraduates the voluntary nature of research participation as separate from receiving the services of the program as a whole.

Researcher as Instrument

Researcher reflexivity is an important consideration in qualitative research. As all data passes through the researcher's mind as it is recorded (Bogdan & Biklen, 1982), and again when it is analyzed, interpretation of qualitative data should include consideration of researcher positionality. Rather than attempting to maintain an objective stance, qualitative researchers consider and expose their biases, becoming "meaningfully attentive to their own subjectivity" (Peshkin, 1988, p. 17). Glesne (2006) wrote that subjectivity is always a part of research; our obligation is to be aware of and to describe those subjectivities.

My roles. As I played several important roles in the project and in this study, including coordinator of the program and instructor of the course in which the graduate student mentors were enrolled, it was especially important that I remained aware of the perspectives and assumptions that I brought to this research. I am doctoral candidate in the School of Education and do not have a disability diagnosis. It has been a number of years since my undergraduate studies. Therefore, I was an outsider in terms of the undergraduate study participants, though I had a great deal of recent contact with adolescents, both those with disabilities and without, through my own high school teaching, directing of school and community theater, and general family and community

involvement. While this experience provided insight and perspective in communicating with the youth participants and greatly enhanced my ability to learn from them, it also had limitations. At times, I failed to query interview responses because I unconsciously made the decision that I understood the meaning of the students' response, when in fact asking further questions might have provided richer data.

My identity as a former middle and high school special education teacher for almost 15 years and my current SOE student status may have afforded me some insider perspectives in terms of the graduate students in the current study. My relationship with the graduate students was multi-faceted. On one hand, they were enrolled with me in a credit-bearing, graded course and clearly regarded me as their instructor. On the other hand, there were times when they appeared to consider me a fellow SOE student, sharing with me stories from and frustrations with other courses they were taking, asking for help with course assignments, and querying me about my own teaching experiences, while at the same time deferring to me on matters related to the project. Initially they were quite deferential, as one would expect in an instructor-student dyad; as the semester went on, however, they seemed to see me as somewhere between a professor and a very senior peer.

Practice informs theoretical understanding. Shaping my understandings of transition are experiences I had and beliefs that I hold that contribute to who I am as an educator and researcher (Glesne, 2006; Peshkin, 1988). My evolving understanding of disability and difference contributed to these understandings. I began my journey as an educator at a time when a medicalized view of disability predominated, in which disability was seen as intrinsic to the person and relatively unchanging (Valle & Connor,

2011). In school, this took the form of deficit-oriented special education practices that segregated those students and led to lack of opportunity in school and outside of school as well. Over time, I have seen, learned about, and participated in a shift from that medical model to one in which disability is increasingly viewed as a social construction (Ware, 2006). This view, that context and environment determine the degree to which certain individual differences are disabling, influences the way I train teachers, the way I educated students with disabilities, and the way that I view student needs.

The belief that disability manifests differently in different contexts supports inclusive practices in society and in schools. It supports universal design in architecture and the built environment, and universal design for learning and instruction in classrooms. I believe that this view of disability is democratic and social justice-serving, and it is a lens through which I view my practice and assess supports and services for individuals with disabilities in school and beyond.

Connecting the way that I taught students with disabilities with issues of social justice, equal opportunity, and civil rights helped me to appreciate disability as an aspect of diversity, and to look with a critical eye at the way groups in society, including individuals with disabilities, are privileged or not by existing programs, laws, and practices. I am able to see that as a special educator, I need not only to facilitate improvement in individual students' skills but also to advocate for full participation by students with disabilities in all levels of education and in the community.

My evolution as a transition planner. Another facet of my identity as a researcher was my own background in transition planning. When I was a secondary special education teacher, I had a great deal of transition planning experience that is

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relevant to this study. I was introduced to transition planning and programming on the job, first as a teacher of a self-contained classroom of middle school students with severe/profound medical and developmental disabilities. From this experience, I learned that transition planning must begin early, as my students took a long time to acquire new skills, and must involve professionals, agencies, and services well beyond the school system. I learned that parents of children with limited skills needed time and support to envision their children as adults and to begin the process of planning for their future.

My next experience was in inclusive programs in middle and high school. There, transition planning was a compressed process subsumed in annual IEP writing and planning for annual reviews. After being found out of compliance in a state review, my district developed assessments and procedures to guide teachers' transition work at each grade level. Along with excellent tools came a frustrating amount of attention to precisely correct wording of goals, correct places for IEP entries, and the like. Despite this attention to detail, transition seemed to be regarded as something "extra," something done correctly but often not meaningfully, at the last minute, to satisfy paperwork requirements, to prevent sanctions. Minor requirements seemed to change frequently, demanding time and energy that might have gone into meaningful work with students on their future goals and dreams for life after high school.

After several years of teaching high school students in my small community, I had a growing cohort of graduates with whom I maintained at least minimal contact, and I began to compare and contrast their experiences after high school with their own goals as well as my hopes for them. At this point, I was finally able to connect the annoying technical procedures of "transition planning" and my real, genuine concern for my students' futures. It was not until then that I truly understood the connection between what I had been writing on their IEPs and the students' adult lives. I was finally able to understand and value transition work with students not just as a way to comply with a mandate, but also as something compelling and crucially important.

I was also able to connect preparing students to transition to an adult life that was as rich as possible in educational and other opportunities with my other beliefs relating to equality of opportunity. Furthermore, I believed that preparing students with disabilities to go out into the world involved not only their individual preparation, but also working toward ensuring the rights and access of individuals with disabilities in the larger society.

Because of my experiences and my own evolution of awareness around transition, I feel strongly that other special educators will benefit from an opportunity to gain their own insights in this area. The insights gained by the graduate student participants in the current study are detailed in Chapter Seven. Preceding that chapter is an exploration of the undergraduate participants' backgrounds, needs, and responses to the Study Skills and Mentoring Program, detailed in Chapter Six.

Chapter Six: Findings—Undergraduates

Once again, I look around the room as I await the students' arrival for our first session of the semester. We are nicely situated in a classroom in one of the university's residential communities, which is made up of several newish dorms on a hillside above the main campus. We are located in the dining hall building, known for its breathtaking view of the campus and surroundings. The entire ground floor is devoted to academic support. There is a computer lab, residential community staff offices, and a few rooms where university classes are scheduled and held. There is a brand new lounge area with tables, comfortable chairs facing windows that overlook the campus, and cubicles for the staff of the academic support program.

The faculty member who oversees this residential community heard about our program's quest for suitable space and invited us to locate here. So far, it seems like a great fit. Our classroom could be a bit larger, to allow for students to spread out, work alone or with their mentor, and have some space around them. I'd love to have more tables, smaller tables, rather than the three very large conference tables that dominate the room. But we can make it work. There are no windows in this room, despite the gorgeous view nearby, but perhaps that's just as well. The windows that look out onto the hallway corridor are curtained, thank goodness, and the door can be shut without the room becoming stuffy, though so far, the halls seem quiet enough.

The mentors, Jonathan and David, arrive, coming from a graduate class and hurrying up the hill to our room. I count it as a good sign that neither complains about the distance nor had any trouble locating the room, which is certainly off the beaten track for education grad students. We chat a bit, and wait for the undergrads to arrive. Three of them are returning to the program from the previous semester, so I know these students fairly well. The rest are new to not only the program, but most are brand-new to our university as well. I am pleased about this, as I believe those students can benefit the most from the program.

The undergrads trickle in. I greet the returning students, trying to direct their attention to their new mentors as soon as possible. Carol arrives in a wheelchair, recovering from knee surgery over the summer. She missed the bus and found someone to push her up the hill! Pretty soon all 10 mentees have arrived. We get everyone matched up and seated at two of the big tables, one for each mentor, and everyone introduces themselves. (Field notes, September 10, 2013)

These undergraduate students, like many of their peers, sought higher education after high school; in fact, the majority of students with disabilities who graduate from high school indicate interest in further education (Cameto et al., 2004). The purpose of this case study is to examine how the Study Skills and Mentoring Program addressed the needs of these students with disabilities as they entered and progressed through college, as well as to describe and explore the experiences of the program participants. Using individual interviews, application forms filled out by students seeking to participate in the program, mentoring plans drawn up early in the semester by mentor and mentee, field notes, logs maintained by the mentors, and an end-of-the-semester survey of the mentees, I have sought a triangulated view of the experiences of these undergraduate students. Their support needs and experiences in the program are shared by (a) looking at the background of the undergraduate students' support needs, (b) identifying what those support needs were, and (c) identifying how those support needs were addressed by the Study Skills and Mentoring Program.

Mentees' Background Provided Context for Their Support Needs

Individual interviews were conducted with each of the 10 mentees who participated in the Study Skills and Mentoring Program and in the current study. These interviews revealed personal history and background information that provided a context for identifying the support needs that these students brought to the program. Across the 10 interviews, three themes emerged related to these students' (a) orientation to college attendance, (b) insights about college preparation during high school, and (c) response to early experiences in college.

Orientation toward college attendance: "Raised to want to go to college."

I always remembered, it was always a thing to go to college, so it was never, "Do you want to go?" It was never a question. It was always, "You're going to go, no matter what." But I really began focusing on how I did in ninth grade, when I decided what I wanted to do in life, and that was to be a lawyer." (Interview, Teresa, November 6, 2013) All 10 of the mentees in the current study reported sentiments similar to Teresa's. In response to the interview question, "Do you remember when you first decided that you wanted to go to college?" mentees responded,

Justin: I don't really remember when I first decided I was going to go to college. It was kind of just expected of me...I didn't really question whether or not I was going...I kind of always assumed I was going to go to college (November 19, 2013).

Carol: Well, for me it was never really a decision; I always planned on going to college (November 20, 2013).

Donald: It was never really an option, so it was just always, from when I was in middle school, like...both my parents went to [our] university" (December 4, 2013).

Doug: Well, I always sort of took it for granted that I was going to go to college" (October 29, 2013).

Rachel: I guess it was kind of a given. I guess it was kind of assumed that that was going to happen. Freshman year (of high school) my mom told me, "You should probably start thinking about colleges." So yeah, I guess I never really gave it much thought. It was going to happen either way (December 3, 2013).

Michael: I've always wanted to go to college...I was raised to want to go to college (October 23, 2013).

I detected in the mentees' tone of voice and body language as they made these statements no ambivalence and no indication of their feeling pressured. They were matter-of-fact, or even proud, as they reported their histories related to college planning. Jennifer made a revealing statement when asked about her decision to attend college. She replied, similar to the other mentees, "I think it was just, like, the norm—like, that's what everyone does is go to college." Then she went on to say, "But since I didn't have--I wasn't, like, an Olympian, or I didn't have a special thing that would inhibit me from going to college, I just knew that it would be the right thing to do" (Interview, October 15, 2013), implying that she, and possibly those around her, did not view her disability diagnosis (a learning disability in reading comprehension) as precluding college attendance.

Attendance at a four-year college by a student with a disability appeared unremarkable to Jennifer, and was regarded similarly by the other nine mentees as well. Factors that correlate with college enrollment for students with disabilities include disability category and demographic factors such as parents' income, parents' level of education, and high-quality high school program and preparation, factors that are similar to those that correlate with college attendance for typical students (Murray & Wren, 2003; Newman at al., 2009).

Preparing for college: "Actually experiencing it was a little bit different than just hearing about it."

I would say I was well prepared from an academic standpoint starting out, but I was not ready for the environmental change. I was not ready to assume that many responsibilities that weren't purely academic all at once, and that indirectly made my first year fairly hard on me, because I was not used to managing so many different factors in my life all at once.

(Michael, Interview, October 23, 2013)

Michael, Joe, and Doug, when asked about things they had done to prepare for college, reported taking advance placement (AP) courses while in high school. Joe, a junior geography major who had transferred to our university after a year at his local community college, remarked, "The only thing I can think of [that I did to prepare for college] is, I took some AP courses when I was in high school. I took AP history courses in tenth and eleventh grade, and I took AP physics, and there was an econ [economics] class where you get college credit" (Interview, November 6, 2013). Doug also reported, "In my junior year, they did a lot of programs preparing us for the application process and stuff like that, and I took several AP courses in high school" (Interview, October 29, 2013).

Rachel, a junior majoring in English, reported not having access to AP courses. *I kind of wish I did. No. My school was a little unorthodox; I went to a school that was specifically for students with learning disabilities. And they didn't offer any AP courses, which I kind of wish they did in hindsight.* (Interview, December 3, 2013)

Justin, Michael, and Teresa also recounted coursework designed to assist with preparation for college-level work or life away from home. "There was one course I took that was an art history class, and basically it was a lot of writing, but it was supposed to prepare you for how to write research papers in college, and it gave me a lot of practice for that" (Justin, Interview, November 19, 2013). Similarly, Michael, a sophomore engineering student, noted, "The English classes would progressively get harder in their essays-- more frequent essays, so that we'd be able to write what we needed to professionally, and it was a bit of a help, though they kind of threw it all on us at once, which made everyone hate English. I took honors classes, and my senior year I took AP classes in order to get myself on that level" (Interview, October 23, 2013).

Teresa, a 17 year old freshman business major, described a different sort of college preparatory course. "It was called College 101, I think it was -- I forget what it was called, but it was a transition class that prepared you, showed you how to do laundry, told you about different definitions about the bureaus--I don't know how to pronounce it-- the offices, because in high school I wouldn't know what that meant, 'office hours,' and stuff like that" (Interview, November 6, 2013).

Justin, a freshman business major, also spoke about non-academic preparation, in his case, preparing for a different religious environment. "I also was [prepared] religiously, for how I would be able to stay religious in an environment where I was-- in my high school, everyone was the same as me. I was in a Jewish private school, but now I'm in a public college. I had to take a lot of classes that would help me, to talk about what that transition would be like and difficulties I would have" (Interview, November 19, 2013).

Jennifer, a sophomore transfer student, spoke of her own role in preparation, and the need to become more independent in her schoolwork. "I challenged myself, because that's exactly what they do here; they challenge you in college. I mean, I took classes that did challenge me, so I think that's important to get ready. And also doing stuff more on your own instead of letting everyone help you ...I just tried to do stuff on my own instead of having them help me start the essay. Like, I would start it and then have them look it over, but I wouldn't... I just tried to do it myself" (Interview, October 15, 2013).

When I asked the mentees if they felt that they had been adequately prepared for college, I received a variety of responses. Those responses ranged from unequivocal "yes" answers (N=4), to mixed responses (N=4), to equally unequivocal "no" responses (N=2). Table 6.1 summarizes these responses.

Table 6.1

Name	"Did You Feel Prepared?"	Comments on Preparation
Jennifer	Yes	Believed that preparation depended on "personality" and personal desire and commitment to do well
Joe	Yes	(Followed "yes" response with account of differences he had noted between high school and college)
Doug	Yes	Preparation was "very helpful"
Carol	Yes	(Did not elaborate)
Teresa	No	Did very little school work during her senior year of high school; unprepared for workload
Ginger	Yes/No	(Did not elaborate)
Rachel	Yes/No	Wished for better preparation in time management; found long-term assignments challenging
Michael	Yes/No	Believed he was prepared academically but not in other ways; wished for more information on "college lifestyle," in order to better prepare while still supported at home
Justin	Yes/No	"Thought I was more prepared than I really was"; Struggled with workload and time management.
Donald	No	Reported lacking study skills, motivation, "work ethic," self- discipline, and confidence

Mentees Report Their Perceptions of Adequacy of College Preparation

Justin remarked, "Obviously there were some things that I expected, but I thought

I was more prepared for it than I really was. So actually experiencing it was a little bit

different than just hearing about it... I guess I thought I'd be more prepared for the workload and time management, but that's really a difficulty still" (Interview, November 19, 2013).

Teresa contrasted the very low academic demands of her senior year in high school with her (current) first year of college.

Sue: Do you feel that you were prepared for college? Teresa: Not with the amount of work that I had to do, because senior year I practically did no work; I was that senioritis-type of kid who wouldn't do anything, but now, a month or two in, I was, like, now I'm shocked--not shocked, but I opened my eyes, and I'm like, wow, now I should actually begin doing my work and complete it on time, and I should really care because it really matters [Laughs]. (Interview, November 6, 2013)

Of the six students who believed that they were not or may not have been prepared for college, all but one (who did not elaborate on the type of preparation that would have been helpful) mentioned needs in the area of self-management, such as study skills, time management, ability to address long-term assignments, and managing workload. None mentioned academic preparation; perhaps this is not surprising given that these students had chosen to apply to a program focused on support and instruction in self-management.

Unlike Alwell and Cobb (2006), Sparks and Lovett (2009) and Stodden et al. (2003), who identified lack of challenging college preparatory coursework and inclusive educational opportunities for students with disabilities, I found that this group of students reported unwaveringly high expectations from family and teachers for college attendance, as well as inclusive college preparatory education. The only exception among this group was Rachel, who attended a private school for students with learning disabilities. Rachel's school experiences, while not inclusive, were geared toward preparation for postsecondary education, similar to her fellow mentees.

Several of the mentees shared in individual interviews ideas about how they could have been better prepared for college. They identified increased confidence, a better understanding of the college environment and demands ahead of time, and better time management strategies. Although each of these three students named different challenges, a suggestion of being overwhelmed with new, unexpected demands underscores their responses.

Donald: I could have been a lot more confident in my ability to do the work. I was definitely lacking in confidence. It was just very overwhelming (December 4, 2013).

Michael: It probably would have helped more if there were more opportunities to get an understanding of what the college lifestyle was while I was at home, so that I would simply know what I was getting myself into from the start. There's just this stigma that everyone's --you know-- you go to college, you're going to live on your own, you're going to have a roommate, manage your own schedule, and it sounds perfectly fine and completely doable on paper, but starting out it's very, very sudden and quite a change. (October 23, 2013) Rachel: I guess maybe talking about time management with someone.

That maybe would have been a good idea (December 3, 2013).

Several students emphasized personal traits that related to college preparation. Jennifer said, "It's the personality it depends on, because you have to want to do well or you just don't do it. You either want to do it or you don't" (Interview, October 15, 2013). Donald, newly diagnosed with ADHD and a freshman who was struggling academically, also attributed college readiness to personal qualities, in his case, ascribing some of his struggles to his need for a better work ethic. "What I would have needed, good study skills, a really strong, motivated work ethic, where like you have the ability to just sit down and say, OK, for the next two hours I'm sitting down and I'm going to write the first half of this essay, and whatever happens, you finish" (Interview, December 4, 2013).

While both Jennifer and Donald alluded to the role of self-determination in college preparation, their behavior demonstrated two very different approaches. Jennifer actively sought out help from a number of sources on campus, engaged her mentor frequently, and overall presented as an assertive advocate for herself. She reported attending tutoring sessions for several of her courses, going to faculty office hours, talking to a course TA on the recommendation of her mentor, and pointing out a grading error to a professor. Jonathan's mentoring log contained eight specific entries related to work with Jennifer, more than any other mentee (Jonathan, Mentoring log, September 17 & 18, 24 & 25, October 1 & 2, 29 & 30, November 12 & 13, 19 & 20, December 10 & 11, 2013; entries did not reflect all mentor contact). Donald also assumed responsibility for his struggles, labeling even challenges related to his disability as problems with "work ethic." Unlike Jennifer, however, he presented as unable to act on his own behalf and grateful for assistance. He readily described his role and responsibilities related to his

shortcomings, but was unable to imagine how his circumstances could be improved other than by external controls.

Jennifer's self-determined approach, her statement "I didn't have a special thing that would inhibit me from going to college" (Interview, October 15, 2013), and her abundant efforts at seeking help, support Hartman-Hall and Haaga's (2002) finding that college students who viewed their disability as circumscribed and modifiable, compared to students who viewed their disability as more global and less modifiable, were more likely to seek help.

Support in preparing for college: "My guidance counselor was very helpful." I had an English teacher that told us stories from his college days, during my senior year, in which he would tell us about all these different things that happened in college and what we actually really had to look out for, and he gave us some of the best advice we could have gotten for knowing what was in store for us. (Michael, Interview, October 23, 2013)

Nearly all the interviewees were able to name individuals who had helped them prepare for college in a variety of ways, whether with good advice, help selecting a major, assistance with researching and choosing colleges, or help with the application process. Many named guidance counselors, teachers, and parents. If teachers were named, I queried what type of teachers these were who provided this help. None of the interviewees specifically mentioned special education teachers or staff, or transition coordinators, in answer to this initial inquiry. Mentees' responses to this question are detailed in Table 6.2.

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Table 6.2

Name	Title of Individual Identified	Type of Help Received		
Jennifer	"All my teachers," especially one who had attended [our] university Guidance counselor Parents	Helped Jennifer determine a path, but had to research the schools on her own / with parents Helped research schools, helped sort out money issues		
Joe	(Did not identify anyone)			
Doug	Guidance counselors Teachers	Were "very helpful"		
Carol	(Could not recall person's title)	Helped students get ready for college, sign up for tests, help with applications		
Teresa	Mother Health teacher	Helped with college applications Taught "College 101" course		
Ginger	Guidance counselor	Helped "a little"		
Rachel	Guidance counselor History teacher English teacher	Taught students to "space out" work on very long term assignments Taught how to write essays properly, as needed in college		
Michael	English teacher Math and science teachers	Told stories about his college days and gave good advice about situations in college Helped Michael figure out that he wanted to pursue engineering, and helped with college search		
Justin	Teachers Rabbis (attended Jewish parochial school) Older friends who had been to college	Talked about transition from religious to public school "Gave me the lowdown"		
Donald	Guidance counselor Parents	Helped with applications, taught summer college prep course Helped with applications		

Mentees Identify Individuals Who Helped Them Prepare for College

Responses from the undergraduate student mentees focused entirely on college preparation supports from general rather than special education teachers and staff.

College-bound students with disabilities currently may spend little time outside of general education settings (Newman, Marder, & Wagner, 2003). So, while some of the mentees reported receiving resource room support in high school, the impression left by these interviews was of students who primarily identified with their cohort of college-bound classmates, and looked to the same sources for support in pursuing a college education as did their peers without disabilities, such as general education teachers who taught their favorite subjects and guidance office personnel. Parents also provided assistance such as help researching colleges, financial support, and help with applications, consistent with the students' statements about early and unequivocal family expectations of college attendance.

After this general exploration of college preparation, I asked the mentees about their involvement with special education. I began by asking if they remembered having an IEP or 504 Plan in high school. If they were not able to answer this question, I asked about receiving accommodations, and that often provided a concrete connection and terminology that helped them recall and describe their involvement with special education services. Seven of the 10 students had IEPs in high school, one did not recall and was unsure even with prompting, and two students had not had a disability diagnosis prior to postsecondary education. None of the students reported having a 504 Plan.

I asked students who indicated that they had an IEP if they remembered any sort of transition planning process, or if they recalled their college preparations being part of discussion at their IEP meetings or with their special education or resource room teacher. Most students had little recall of this process, though some remembered participating in IEP meetings. Sue: Do you remember going to IEP or CSE meetings?

Carol: I know that once or twice a year me and my parents and some of my teachers would all meet to talk about my progress and how I was doing.

Sue: Do you remember what role you had? What did you do at the meetings?

Carol: Mostly I listened, but I did talk some about how I thought things were going.

Sue: Do you remember people talking at that meeting about plans for what you were going to do after high school?

Carol: I don't remember any time specifically when we talked about that. (Interview, October 20, 2013)

Sue: Do you remember working with anyone, maybe a special ed teacher, on something called transition planning, or getting ready to leave high school?

Doug: No, we had generalized things as part of the college prep program where everyone did it. (Interview, October 29, 2013)

Sue: Do you remember if you had an IEP or a 504 plan when you were in high school?

Joe: Yes. I had an IEP.

Sue: Do you remember a special ed teacher, or any teacher, working with you on a transition plan that was part of that IEP? Maybe asking you questions about what you want to do when you get out of high school, and *Joe: I think I did. I'm not really sure, though.* (Interview, November 6, 2013)

Sue: Do you remember if you had an IEP or 504 Plan?

Justin: I think I had an IEP. I had extra time on exams. Also I was in a learning center, with tutors, I guess, that were available.

Sue: Do you remember anyone working with you on—it might have been called transition planning? Part of your IEP that was related to moving from high school to being out of high school?

Justin: No.

Sue: Were there special education teachers in your school [private religious school]? Maybe they would have been the people staffing the learning center?

Justin: Yeah, I guess so. They didn't teach any classes, so I guess they were all special ed teachers; they worked with special needs people. Sue: But they didn't work with you on anything specific [toward getting ready for college]?

Justin: No, they didn't do any study skills or stuff like that; it was just if I had trouble with homework, they could help me. They were like tutors essentially.

Sue: Do you remember having IEP meetings? Justin: No. (Interview, November 19, 2013) Carol, Doug, Joe, and Justin described a passive role, if they recalled a role at all, in IEP development, IEP meetings, or transition planning. In contrast, Jennifer recalled more active involvement and advisement.

Sue: You told me that you had an IEP in high school. Do you remember part of it being about transitioning out of high school? Jennifer: Yeah.

Sue: Can you tell me anything about that?

Jennifer: At the end of the year, you have your exit meeting. I mean it's just saying goodbye, but they're telling you what you should keep with you to college [what accommodations the student should seek], and they give you recommendations. They do it earlier in the year so you can get a gist of where you want to go, because in March I was figuring out where I wanted to go in May. They said I should go to a small school. I did go to a small school my first year of college, but it really wasn't for me, but it was good. If I didn't do that year, I don't think I would be as prepared for this year. [Jennifer had transferred from a small private college after her freshman year.] They were very helpful, and they told me I should always keep my time with me [continue to receive extended time on tests] as long as I can. And as long as I have it, then I should use it. (Interview, October 15, 2013)

Like Jennifer, Teresa described receiving helpful information and active support, although she was unclear about many aspects of her special education supports while in high school. Sue: Did you have an IEP or a 504 Plan?

Teresa: Yes.

Sue: Was it an IEP?

Teresa: What's the difference between them?

Sue: [Explains] Did you go to a resource room?

Teresa: Yeah, I was in resource room. I have a disability and I received accommodations.

Sue: You would have a disability for both kinds of plans, but it sounds like probably you had an IEP. Do you remember working with anyone in your high school, like your resource room teacher or someone else, on any sort of transition planning as part of your IEP?

Teresa: Yeah, my resource room teacher always helped me out with that, and she also helped me with the transition to college too.

Sue: Tell me more about what she did.

Teresa: She always... senior year, she explained to me what my disability was, because I had no idea what my disability was until senior year, and she would help me with understanding it and trying to achieve- not achieve- but conquer, I guess, the disability, and help me through practicing with the reading and different types of things. (Interview, November 6, 2013)

As a former high school special education teacher charged with coordinating transition planning for my students, these interviews were eye-opening and sometimes disturbing. I heard account after account of students, most of whom were currently meeting expectations at a selective university, who had little recollection of their special education teachers or services. Some of the "gold standards" of high-quality transition planning, such as student-led IEP meetings (Kohler & Field, 2003) or even participation in IEP meetings, seemed far from the consciousness of these students. Only Jennifer recalled such involvement in any detail. Most of the students were able to name their disability when asked, but were not at all clear about whether or not they had an IEP, or even what an IEP was.

While these students appeared to lack experiences associated with good outcomes for college success such as active involvement in transition planning, they were prepared for college in three other key areas: challenging college preparatory coursework, effective inclusive education opportunities (Alwell & Cobb, 2006; Sparks & Lovett, 2009; Stodden et al., 2003), and parental involvement and support in their college preparation and transition (Morningstar et al., 2010).

Table 6.3 summarizes the mentees' responses to questions about their special education services in high school, as well as the accommodations they received in high school and those they were currently receiving in college.

Table 6.3

	IEP,	High School Accommodations	
Name	504 Plan, other	and Services	College Accommodations
Jennifer	IEP	Extra time, separate location for tests	Extra time, separate location for tests
Joe	IEP	extended time, alternate testing location	Extended time, alternate testing location
Doug	Unsure, had accommodation plan	Extended time, use of laptop	Extended time, use of laptop
Carol	IEP	Extra time for tests, reduced homework or extra time, Resource Room	Extra time for tests, note taker, computer to type long written exam responses
Teresa	IEP (unclear)	Extended time, Resource Room, Separate location for tests	Extended time (reduced from x2 in HS to x1.5 in college), Separate location for tests, text-to-speech software
Ginger	IEP	Extended time, Resource Room daily	Extended time, separate location for tests, textbooks on computer (allows use of text-to-speech software)
Rachel	Unsure what plan, attended a private high school for students with learning disabilities	Extended time	Extended time, smart pen.
Michael	No disability diagnosis in high school	No accommodations	Extra time on tests, preferential seating if needed, ability to record audio during class with teacher's permission, earplugs during tests
Justin	IEP	Extra time, support from learning center /tutors	Extra time, use of recording device in class
Donald	No disability diagnosis in high school	No accommodations	Organizational coaching

Special Education Services Received in High School and College, from Mentees' Reports

Bolt et al. (2011), Madaus (2005), and Marshak et al. (2010) raised concern that differences in available accommodations between secondary and postsecondary education presented problems for transitioning students. However, the students in the current study overall received accommodations in high school that are typically available in the college setting, a transition practice recommended by Shaw (2010), and most were receiving very similar accommodations in college. Only Carol, who had her amount of homework reduced in high school, reported an accommodation that was not common in the college setting.

Students begin to transition to self-advocacy in college: "I went to the office and I signed up."

Jennifer: I called them [the Disability Services Office]. I said, I have an IEP, and I'd like to have my testing accommodations with me [receive the same accommodations in college], so I had to send them all my forms, and I sent it to [DSO staff member], and she looked them over, and we were supposed to do it over orientation, but it got so overwhelming, so I was like, "We'll do it when I get here," and she made an individual plan for me and she gave it out to my teachers—professors.

Sue: Did you give the letters to them [your professors], or did she send it to them?

Jennifer: I gave it to them... My brother also had an IEP, but he didn't use it in college, and I'm wondering if that could have helped him more, just to have extra time, because all you have to do is sign up with them and send the form. So my mom was proud of me that I got that done by myself! (Interview, October 15, 2013)

Students' recollections of how they became connected with the DSO, and consequently eligible to receive accommodations and other services, including

enrollment in the Study Skills and Mentoring Program, provided a window on their early experiences in advocating for themselves in a postsecondary setting. Self-advocacy expectations increase dramatically as students transition to postsecondary education and a changed regulatory framework (Getzel, 2008; Madaus, 2005). More than two-thirds of students with disabilities who received special education services in high school do not make contact with or register with the DSO or equivalent program at their college or university (Newman et al., 2009). The undergraduate students I studied were part of the 28% of students who disclosed their disability and registered with their DSO.

The shift in legal and regulatory frameworks from secondary to postsecondary education systems (IDEA, 2004; Madaus & Shaw, 2004; Rehabilitation Act, 1973) means that from a legal standpoint, the primary advocacy role shifts from parents and school personnel to students with disabilities themselves. However, my interviews revealed both a continuing role for parents and a variety of levels of functioning in this area. The students' accounts of their experiences ranged from independent functioning to a complete lack of personal agency regarding the process. In contrast to Jennifer's account above, Donald reported,

Sue: Do you remember registering with the disabilities office on campus? Donald: My parents were really great with all this stuff. They'd kind of help you because they did all that stuff... My parents were very on top of it...Once I got the diagnosis, I guess in the early summer, my parents began contacting people, and they worked really hard, and they contacted everyone, and somehow I ended up here [now referring to Study Skills and *Mentoring Program]. They handed me this form to sign it and then - I'm here.* (Interview, December 4, 2013)

Other mentees' experiences fell between Jennifer's newfound independence and Donald's dependence and confusion (understandable as it may have been, accompanying a new diagnosis). Parents mediated the transition from one regulatory framework and service constellation to another, assisting their children in making the transition from parental advocacy to self-advocacy in various ways and with varying levels of support.

In one case, a mentee recalled her high school special education teacher providing such transitional support. Teresa recounted initial contact with DSO through her special education teacher, following which she met independently with DSO staff during her prefreshman year summer orientation. Teresa reported advocating for herself at that meeting in a manner that netted services she might not have accessed otherwise. "She [DSO staff member] thought that I didn't even need accommodations in the first place, but I told her that it really does take a lot of work for me to focus and understand my--what I'm reading and everything, so she gave me time and a half" (Interview, November 6, 2013).

Ginger reported similar scaffolded assistance, in her case from parents who arranged the initial meeting and accompanied her to the office, a sequence of events that culminated with a meeting between her and DSO staff without others present. In contrast, Donald's account is unclear as to whether or not he was even present during most DSO contact, which was completely managed by his parents. More details on students' recollections are found in Table 6.4.

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Table 6.4

Name	Who made initial contact?	Who was present at initial meeting?	When did meeting take place?	Student's recollections / outcome*
Jennifer	Jennifer, called DSO	Jennifer, DSO staff member	Early fall semester (sophomore transfer)	"All you have to do is sign up with them and send the form. So my mom was proud of me that I got that done by myself!"
Joe	Joe and father, stopped in DSO during summer orientation	Joe, father, DSO staff member	Summer orientation (sophomore transfer)	
Doug	Doug	Doug, DSO staff member	Summer orientation prior to freshman (current) year	"I went to the office and I signed up."
Carol	DSO staff, by email	Carol, DSO staff member (unclear if parents attended)	summer orientation before Carol's freshman year	
Teresa	High School Resource Room Teacher	Teresa, DSO staff member	Summer orientation prior to freshman (current) year	
Ginger	Mother	Mother accompanied Ginger to DSO office, actual meeting was Ginger and DSO staff	Summer orientation prior to freshman (current) year	
Rachel	Parents	Rachel, parents, DSO staff member	Summer orientation prior to freshman year	Doesn't use resulting accoms. much, doesn't feel she needs them, hard to talk to profs.
Michael	Michael and mother	Unclear	Michael initially had no diagnosis, there were a series of contacts over his freshman year and summer before (current) sophomore year	

Mentees' Recollections of Registering with the University Disability Services Office

Name	Who made initial contact?	Who was present at initial meeting?	When did meeting take place?	Student's recollections / outcome*
Justin	Didn't remember	Unclear	First met with DSO staff member at orientation; another meeting second or third week of fall semester	"I had to meet with [DSO staff member] but I don't remember everything. She went over the things for students with disabilities, what they provided, but I don't remember anything about the process really"
Donald	Parents ("very on top of it"	Parents, DSO staff member (unclear if Donald was present) "handed me a paper to sign"	Early in the summer	"My parents were really great with all this stuff."

*See table 6.3 for accommodations that resulted from plans drawn up at/after the initial meeting.

While the outcome of this process was similar for all 10 students, they were engaged at very different levels. Only Jennifer reported making the first contact independently. Carol reported that DSO contacted her, although that would not be a typical procedure. I suspect that either she was mistaken about the initial contact, or that her prior relationship with one of the DSO staff members was involved. Ginger, a very soft-spoken freshman, reported that her mother made the appointment and accompanied her to the DSO office, but then stayed in the waiting area while Ginger met w DSO staff. Donald, on the other hand, appreciated that his parents knew what to do and was very happy to have them handle everything.

Not every 18 year old can independently self-advocate; however, as legal adults, this is exactly what they are expected to do This is the rationale for students with disabilities taking an active role in their IEP meetings, something most of these students either did not do, or did so in a manner that made little impression on them. It is imperative that college students with disabilities who are not yet at the point of advocating for themselves begin the process of learning to do so. Differences between high school and college: "No one's checking up on you." Nobody's holding your hand in college. You have to do everything yourself, and to do well, you have to want to do well. No one's going to be telling you to do well. I remember last year, at my old school [college Jennifer had transferred from], one of my professors-- the grade was wrong, and I knew that I wasn't supposed to get that grade. So it was only me telling her it was wrong, to change the grade. So you're really your own self-advocate. I mean, your parents aren't here to help you. They're gone. My parents are 200 miles away, so they're not going to be here to talk to my professor about my grade. I have to do it, and I'm going to be the one who decides when I have to study. (Jennifer, Interview, October 15, 2013)

Mentees had a variety of ready responses to the question, "What was the biggest difference you noticed between being in high school and being in college?" When interviewed, they commented, with little prompting, on differences in the level of supervision, increased workload that called for better management strategies, different classroom structure and learning expectations, and the sheer size of the university compared to their smaller high school.

Several students commented, similar to Jennifer, above, about the difference in level of supervision.

Teresa: Your freedom to go to bed whenever you want. Yeah, I'm a big procrastinator when sleeping too [Laughs] (November 6, 2013) *Donald: That no one's checking up on you* (December 4, 2013).
Michael: Not having my family around makes it completely different in how I run my own daily life, and that, sometimes directly and sometimes indirectly, affects my school work, and it's interesting to see how I've actually adjusted my entire sleeping schedule to work around everything that I do here at the university, and how I have to spend time learning to take on more responsibilities that I wouldn't have at home, and work that around my school work. (October 23, 2013)

Rachel, Teresa, and Ginger commented on the change in workload. *Rachel: Definitely the increased workload was a huge difference, and I think time management became more key. I think the amount of hours that I spend doing work, that's definitely been one of the biggest differences. It's a lot more, and I guess just trying to figure out how to plan my time accordingly around that has been the biggest difference.* (December 3, 2013)

Teresa: The amount of work you have to do, the amount of studying, especially (November 6, 2013).

Ginger: In high school, I had 10 easy classes, but now I have four hard classes (November 2, 2013).

Doug also commented on differences in instruction and expectations for learning. "It's a different type of class and setting. In college, it's a lot of lectures, whereas in high school it's more like a classroom; the teacher teaches. Here, the teacher lectures, and you go back and learn yourself, so it's a completely different type of class setting" (Interview, October 29, 2013). This shift, from educational experiences tightly supervised by others to having not only the schedule, the responsibility, but also the learning itself become completely the responsibility of the student, constituted a large change for these young people. Doug's concept of what classroom teaching was clearly involved direct interaction among teacher, student, and content, similar to what his mentor Jonathan described as, "teaching practices, such as modeling, gradual release of responsibility, and guided practice, which form the backbone of effective teaching in secondary education," and were, according to Jonathan, "used only in rare cases" in college classes (Reflective paper, October 19, 2013). For example, Doug was assigned to attend a concert and write a music critique, with few guidelines and no exemplars. He worked with his mentor to find resources that might guide him on what to include in such a paper (Jonathan, Mentoring log, October 8 & 9, 2013).

Joe and Justin, who came to the university from very small high schools, noted the difference not just in size, but in Justin's case, in diversity as well.

Obviously, not everyone is like me. I think that was a big thing, but also the size of the school, because I was in a class of 50 people and now I'm in... there's probably, what, like 3000 undergrads or freshman or something, or 4000 maybe, so that's definitely weird not knowing everyone. That's probably the biggest thing. The biggest difference is the size of the school, and it's weird not knowing people in your grade or in your classes. (Interview, November 19, 2013) Joe: I had never taken a class in a lecture hall before. My graduating

class was smaller than one of the lecture halls.

Joe also commented on dorm life and meeting new people. "Obviously living in a dorm, that was one [difference]. I had to go out and meet entirely new people. That was another big difference" (Interview, November 6, 2013).

While the new environment and demands of postsecondary education call for new skills on the part of *all* students, the cumulative impact of these new demands was particularly large for these students with disabilities. They were asked to cope simultaneously with new and higher level learning demands, demands for increased selfmanagement, and a change in support systems. Many new college students who do not have disabilities struggle with these demands as well. However, students with disabilities that impede organizational skills and attention to task, such as ADHD, faced greater challenges from the increased demands created by large amounts of unstructured time, increased workload and the resulting need for good time management and organizational skills, along with decreased supervision. Without the academic support students were accustomed to in high school, students whose disabilities involved reading and other learning challenges faced the situation that Doug described: "The teacher lectures, and you go back and learn yourself." Furthermore, students with autism, Asperger syndrome, or anxiety disorders were challenged by decreased structure and increased social demands.

Undergraduates Identified Their Support Needs

While college students revel in newfound freedoms and independence, many, including students with disabilities, are not prepared to meet the demands of the college setting (Getzel, 2008; Madaus et al., 2010; Newman et al., 2009). In order to determine in what ways the Study Skills and Mentoring Program addressed the needs of students with disabilities in college, I began by exploring the mentees' own perceptions of their needs. I looked first at the applications that these students filled out to become part of the program. The application included two items related to support needs, "What are your strengths and weaknesses related to effective study skills and homework completion?" and the two-part question, "Why do you wish to participate in the program, and what do you hope to gain?" Several students' responses follow.

I feel like as far as study skills are concerned, I don't have very many strengths. I'm good at scheduling time to complete my homework, but I have problems with actually following through on the time I set aside. I can schedule little blocks of time to do my homework and work on larger projects and papers, but somehow I end up procrastinating and wasting my time until I end up completing everything at the last minute. As a result, I end up turning in assignments that I know aren't my best work, working a lot later than I should be, and am thrust into a vicious cycle where I'm perpetually tired and end up completing my homework later and later as a result. (Rachel, Program Application, August 2013) I am presently having difficulties in understanding my assignments and would like to gain the knowledge of a mentor for help. This would be a great opportunity to learn some study and homework skills to incorporate into my everyday assignments that I have difficulties with. I think this would be a great way to do my assignments and not become distracted through the little things I find interesting (a horrible paint job on my dorm wall). This program will push me to complete my homework and not

procrastinate on working on my coursework. I had a class like this program back in high school called Resource Room in which I utilized my resources and asked my teachers for assistance for subjects I did not understand. I thought it vastly improved my grades in high school and I wish to see that in college as well if I become part of this program. I would also like to meet other peers my age, as I am a freshman, trying to get to have a diverse group of friends. (Teresa, Program Application, September 2013)

I procrastinate and often don't do work when I schedule it, and I'm easily distracted. Having a designated time to do homework and study in a conducive environment will really help me to complete my work on time and not procrastinate. (Carol, Program Application, August 2013)

Second, I looked at Mentoring Plans that were developed by mentee and mentor together at a meeting in the first few weeks of the semester. Each plan established expectations for contact between mentor and mentee, and required a minimum of two goals for the semester. The process of formulating the goals was mentee-driven, though mentors were encouraged to look back at the mentee's application if the mentee was unable to generate ideas for goals.

The most common needs identified by the undergraduates were: a need for help structuring their study time (N=10), organizational skills (N=7), and time management and issues related to procrastination (N=5). Table 6.5 provides more detail on the responses of all 10 mentees.

Table 6.5

Name	Needs Identified on Application	Reasons for Applying to Program	Mentoring Plan Goals
Jennifer	Difficulty determining what to study when preparing for exams. Help organizing what to study	New transfer student, gain skills, get support for higher level of learning	Organizing and writing essays; Time management/ organizing schoolwork
Joe	Have a hard time focusing when studying	Time to get homework and other vital studying done; learn ways to focus better when studying.	Editing and evaluating written work for coherence; Preparing for unexpected assessments (pop quizzes) through effective notetaking/highlighting
Doug	Trouble focusing, poor organizational skills	Work more efficiently, improve quality of work, decrease stress	Learn to focus better; set aside specific time for "hard tasks"
Carol	Procrastination; don't do work when scheduled; easily distracted.	Designated time to do homework and study; help completing work on time; prevent procrastination.	Avoid procrastination; have structured time to study; improve focus and concentration
Teresa	Takes time to comprehend difficult topics; easily distracted; difficulty starting homework or studying, getting through an assignment in one time period.	Difficulty understanding assignments; learn study and homework skills; struggling with everyday assignments; avoid distractions; push to complete homework, not procrastinate. Looking for setting similar to high school Resource Room; meet peers	Develop test prep strategies; getting started on work, avoiding distraction
Ginger	Procrastination, difficulty with time management, trouble completing work for all classes; very slow reader, takes a long time to comprehend.	Gain skills in organization and time management, in order to have enough time to complete all work. Gain skills in studying for tests.	Avoid procrastination; have organized study time
Rachel	Problems with following through on time set aside for homework, larger projects, and papers; Procrastination, wasting time, last minute completion with resulting poor quality work. "Vicious cycle," chronically tired/ completing homework later and later.	Need effective study skills, disorganized about completing homework Learn how to effectively complete homework and larger projects in a more timely manner, avoid last minute rushing, learn time management skills, improve quality of work	Better skills in determining how long tasks take; budgeting time to avoid last- minute rush

Mentees' Support Needs, from Program Applications and Mentoring Plans

Name	Needs Identified on Application	Reasons for Applying to Program	Mentoring Plan Goals
Michael	Planning and organizing skills, loses focus, over- focused on interesting subjects, loses track of assignment due dates	Improve organizational skills and work habits, and provide discipline to study routine. Develop a more structured study plan; learn how to break work into discrete chunks.	Improve study skills and habits; Organization; Notetaking
Justin	Getting stuck—won't stop working on task, leads to stress and anxiety. Difficulty managing time and taking breaks effectively. Lacks effective study skills	Learn skills toward effective studying. Help with homework, help writing papers, help organizing thoughts.	Improve writing assignments; learn how to take good notes
Donald	Procrastination, poor attention and study skills	Struggles with ADHD and anxiety, wants to "take control" of work	Become more organized; Learn better reading strategies

The Study Skills and Mentoring Program Addressed the Needs of the Mentees

I reviewed end-of-semester surveys filled out by mentees along with responses to interview questions about specific aspects of the program. Of the 10 undergraduate students who participated in the Study Skills and Mentoring program and the current study, eight (80%) returned an anonymous survey distributed during the last week of classes of the fall 2013 semester (Appendix O). One student was absent on both days that the survey was given, and one student did not return the survey. Among students who returned the survey, not all responded to every question.

Program structure and schedule were helpful. The undergraduate students were asked to use a 5-point scale (1=strongly agree, 5=strongly disagree) to rate their agreement with two statements:

- This program has been helpful to me this semester.
- This program has been what I expected when I applied.

The response to both statements was positive, with all students who responded indicating agreement or strong agreement except one, who was undecided (see table 6.6).

Table 6.6

Survey Response: Program Helpfulness and Expectations (n=8)

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	No Response
This program has been helpful to me this semester	4	2	1	0	0	1
This program has been what I expected when I applied	4	2	1	0	0	1

Students were also asked to give feedback on the scheduling of the study sessions.

Most respondents were satisfied with the length and frequency of the program sessions,

rating the study session length as "just right" rather than too long or too short (See Table

6.7). Most participants rated meeting twice a week as "just right," with two indicating

that they wanted more than two sessions per week. In response to the prompt, "Tell one

thing you would like to change if you could," two mentees commented,

The schedule would prove more beneficial to me if it was for shorter, more frequent periods.

Offer it more days.

Table 6.7

Survey Response: Program Schedule (n=8)

	Too Long	Just Right	Too Short/ Not Enough
I found the study sessions	2	6	0
Meeting 2x/week was	0	6	2

Interview data supported the survey results. Carol remarked, "The main reason why I did this is for the structured study time. That's very helpful" (November 20, 2013). Jennifer commented, "Twice a week is good" (October 15, 2013), though Teresa said that she would prefer "... separating the two days, because right now it's back to back" in order to address her weekly workload more effectively (November 6, 2013). Rachel said, "It's definitely a good environment to be in, in terms of getting work done" (December 3, 2013). A few students, however, had different expectations of what the program would provide. Doug commented, "I thought when I first signed up that there would be mentoring—kind of like help with work, but I realize it's more of a quiet study time" (October 29, 2013). While mentoring logs and field notes, as well as other mentee comments, document a great deal of mentor-mentee contact and time spent on "help with work," clearly Doug had expectations that were not met.

Program location was workable. Finding an appropriate location for the Study Skills and Mentoring program had been a challenge over both previous semesters (see Chapters Three and Four). This semester's location, in a classroom in an on-campus residential community, while not convenient for all students, was at least workable for all. The classroom itself provided sufficient space, quiet, work areas, and comfort for all participants.

The survey item, "Please comment on the location for the study sessions, and the room in which we met," netted the following responses:

I'd prefer [a campus center in a different residential community] because I live in [that residential community], but the location isn't terrible.

Keep it in [current location]!!!

The location was fine. Not really much to say.

Location is too far.

I felt that it was good, it was quiet [illegible] the loud noise from various nearby events.

The room has plenty of space and a quiet environment. The location is farther from my dorm than I'd like.

It was pretty far but nice and quiet.

Again, these ratings and comments echoed interview responses. Michael commented, "I love the location; it's right by my dorm. The time is—well, for me now, I'd like it a little earlier, because I have early morning classes this semester" (October 23, 2103). Doug said, "I'm in [name of dorm], so it's not far" (October 29, 2103), but Jennifer commented, "I don't like walking here, since it's a long, long walk" (October 15, 2013).

Despite the program location being less central than in previous semesters, it did not appear to negatively affect attendance. Attendance overall during the fall 2013 semester was 89%, which contrasts to attendance rates of 94% in the fall 2012 semester and 69% during spring 2013. (See Chapters Three and Four for an exploration of attendance polices. See Appendix S for fall 2013 mentee attendance.)

Study sessions, workshops, and mentoring address mentees' needs to varying degrees. Students were asked to rate the usefulness of the three major components of the program: study sessions, workshops, and 1:1 mentoring, on a scale of 1 to 4, with 1 being "not at all useful" and 4 being "very useful" (see Table 6.8).

Table 6.8

	4 very useful	3	2	1 not useful	No Response
Structured study sessions	3	4	0	0	1
Workshops	1	3	4	0	0
Working 1:1 with mentor	4	1	2	0	1

Survey Response: Rating Usefulness of Program Components (n=8)

Study sessions. All respondents, with the exception of one who left this item blank, rated the study sessions useful or very useful. Supporting this rating were the following comments responding to a prompt to tell one way that the program had been helpful:

Aid in finding time to do my work and study, providing a useful study environment separate from other crowded areas on campus.

The program has definitely been beneficial as a place to get studying done.

Gave me a time that I was forced to do my work.

It gave me the [word missing] to work and to complete various tasks, including essays and studying for tests.

The main way the program helps me is it gives me designated study time in a structured setting.

Helped me set aside time for studying. Good time management.

It became apparent during the first pilot study chronicled in Chapter 3 that simply

having the expectation of attending the program for two hours twice a week, apart from

any workshop instruction or mentor input, was a powerful intervention. Mentees

remarked repeatedly about the value of that aspect of the program in interviews.

Sue: Have the study sessions been helpful?

Carol: Yeah, that's the main reason why I did this [applied to the program] is for the structured study time. That's very helpful (November 20, 2013).

Donald: It's a great opportunity to-- I just can't focus. I can never get down to actually doing work, and this forces me to be here at a certain time. I read half my psych for one hour the first day, half my psych one hour the second day, and I have another hour do other work. It's the only structure I have outside of classes, and so just forcing myself to at least do one subject here has kept me well above water in that class. In poly sci, I wasn't doing the readings in here, and I fell behind miserably. (December 4, 2013)

Sue: You found the sessions helpful?

Justin: Yeah, I mean, definitely, because it gets me to do work. It's hard sometime to motivate yourself to do work, but when I know that I have two hours to do work, then it's part of my structure; it helps (November 19, 2013).

Michael: For me, the biggest thing is the program simply being a nice place to get away and do your work and buckle down (October 23, 2013). Rachel: I think it's a definitely a good environment to be in, in terms of getting work done. It's not distracting, which is good. I can get my work done without distractions. And it's an environment where I know I have to work so it's-- I know that I'm going to be productive during that period of time, which I like a lot. (December 3, 2013) Students also found it helpful to have a handy explanation for peers, or an "excuse" to leave a social situation and do schoolwork.

Jennifer: I get caught up [on my work], and twice a week is good. I sometimes lose track of time and I'm like, "OMG, I have to go." Like sometimes I'm with a friend and I have to leave, which is good because I can say, "I have to do my work now." It gives me time just to do it. I was talking to one of the girls in the program, and she lives in my building, and she was like, "I'm not going to do it [school work] in my room." It just gives me a place where I know I'm guaranteed to do my work. (October 15, 2013)

Similar to Bartlett (2004), these undergraduates found support from simply being at the study session, in the presence of their mentor, even when they were not actively seeking or receiving assistance.

Sue: Can you describe your interactions with your mentor, David? Donald: He's always available to talk, which is great, even when I don't use him, it's still-- it's formalized and structured, which is something that I think kids with ADD lack immensely. I haven't really talked to him that much, but because having him as a resource kind of provides this legitimacy, and makes it like, if I do need help with anything, he's right there, so it's OK. I don't have to worry about anything. I can just sit here; I can do all the work. I have someone who would yell at me if I tried to talk to someone, somebody who just structures it, and also, every day he walks in he's like, "You need any help?" so it's good to have someone updating on your academic life. (Interview, December 4, 2013)

Overall, similar to the pilot studies, mentees consistently rated the structure and scheduling support of the study sessions as very useful, a rating corroborated by mentee comments as well as my observations.

Workshops. Nine workshops were presented over the course of the semester. Participation from the undergraduate students, including attendance, responding to questions, and contributing to discussion, was fair. The survey listed workshop topics presented by the mentors and asked students to rate both their level of interest and their level of usefulness on a scale for 1 to 4, with 1 being "not at all interesting" or "not at all useful" and 4 being "very interesting" or "very useful." Responses are summarized in Tables 6.9 and 6.10.

Table 6.9

	4 Very Interest- ing	3	2	1 Not Interest- ing	Did Not Attend	No Response
Notetaking	0	5	2	0	1	0
Breaking Down Long Writing Assignments	1	4	2	0	1	0
Studying for Tests	2	5	1	0	0	0
Procrastination	1	6	1	0	0	0
Reading More Quickly	3	4	1	0	0	0
Healthy Lifestyles	1	3	2	1	1	0
Tips for Having a	2	4	2	0	0	0
Surviving Setbacks	2	4	0	0	2	0

Survey Response: Interest Level of Workshops (n=8)

Table 6.10

	4	3	2	1		
	Very			Not	Didn't	No
	Useful			Useful	Attend	Response
Notetaking	1	5	1	0	1	0
Breaking Down Long Writing Assignments	1	3	2	0	1	1
Studying for Tests	1	4	2	0	0	1
Procrastination	2	2	2	1	0	1
Reading More Quickly	2	3	1	1	0	1
Healthy Lifestyles	0	3	3	0	1	1
Tips for Having a Successful Semester	1	3	2	1	0	1
Surviving Setbacks	1	2	2	0	2	1

Survey Response: Usefulness of Workshops (n=8)

Ratings varied somewhat across workshop offerings, with higher overall ratings for interest than usefulness. Reading More Quickly (M=3.3), Surviving Setbacks (M=3.3), and Studying for Tests (M=3.1) were narrowly rated of highest interest. Notetaking (M=3.0), Studying for Tests (M=2.9), and Reading More Quickly (M=2.9) were rated highest in usefulness. Topics that appeared more closely aligned to selfidentified mentee needs, and identified in the literature as correlated with college success (Murray & Wren, 2003) such as Procrastination, were narrowly rated lower, though that particular topic netted positive comment about specific application of workshop skills in two interviews.

The survey yielded these individual comments on how the workshops could be improved:

They should be shorter. Similar topics broken across more days. They could be more interactive.

The workshops could possibly rely more on visuals, in order to give a picture of how the person should follow the topic.

They were great.

I would like to make the workshops a bit shorter so that more time can be spent on doing homework.

The workshop component of the Study Skills and Mentoring Program was challenging to mesh with mentees' perception of their needs. This semester, during the current study, the mentees were receptive and participated somewhat more than they had other semesters. Their survey ratings of workshops, while not consistently positive, showed a high degree of satisfaction on the part of some of the mentees, a finding supported by interview responses.

While the survey limited feedback to rating interest and usefulness, interview comments provided a more nuanced view, especially of issues around applications of workshop ideas. Michael stated, "For me, the biggest thing is if the mentors run workshops on specific study skills or preventing procrastination things like that. I find those to be the most useful part [of the program]" (Interview, October 23, 2013). Students reported a variety of approaches to implementing strategies and tips from the workshops. Michael and Teresa both reported applying specific strategies from the workshops.

Sue: Any particular workshops that you found helpful? Michael: The one on procrastination and--was there one on time management? Sue: Early on, we did a general discussion of calendars and scheduling your week.

Michael: I found that one useful.

Sue: Do you find that you've actually used the information from them? Michael: Yes, I've tried a few things from the procrastination workshop. I've just been getting a lot better at reminding myself of what I need to do and setting my priorities, making sure I know what I need to do in what order, because otherwise I would just want to work on a specific subject because it's the easiest for me or most interesting, but if it's not due immediately and it's not at all the most important thing I have to do, then--I'm starting to get better at remembering to prioritize. (Interview,

October 23, 2013)

Teresa: I really enjoy the workshops. I really love them. And I liked the last one with the tests. I really use that now.

Sue: Any others that you remember using something from? Teresa: With the procrastination, I make lists. I always made lists, but now I do it for everything. (November 6, 2013)

In contrast, Carol and Justin reported that they gained little useful information from the workshops.

Sue: Do you feel the workshops have been helpful? Carol: I mean... they're interesting, but I haven't really been applying anything from them really. Either they're things that I already do... sometimes they're things that I already do and other things I just don't feel like I need to do, or I don't implement them (November 20, 2013). Justin: We have done some time management stuff before, but... there are a couple of them, which I didn't find necessary or helpful. They were just common sense, like the last one was nutrition, and, yeah, you should be healthy, because obviously, I think most people understand that will help their brain functioning, but I don't know, I just didn't think it was that helpful. (November 19, 2013)

While some students reported implementing strategies and tips from the workshops, and others clearly reported not doing so, a third response also emerged. Students commented that while they believed that the ideas offered in the workshops were good ones, they found it very difficult to implement them, as that would involve a commitment of time and effort that they felt they could ill-afford now when they were already struggling to manage their time around new and large demands. Unlike Teresa and Michael, who were able to select from the suggested strategies and make small changes in their own practices as they were able, Jennifer, Ginger, and Doug reported were not able to do this. Jennifer felt that the workshops had helpful content, but had not yet applied any of it. Doug and Ginger felt that current demands and workload precluded a major change in their approach to studying or organizing. While they were not completely satisfied with their present status, they felt that it was sufficiently functional that they chose not to make changes, which they perceived as necessarily global and time-consuming.

Sue: Have the workshops been helpful?

Jennifer: Yeah, they've been helpful. I'm glad we're doing them. They're interesting.

Sue: Has any one [of the workshops] stood out to you as particularly helpful?

Jennifer: Breaking down a paper was helpful, because he gave us the outline. That was good.

Sue: Have you tried out anything from the workshops?

Jennifer: Not really. Not yet. (October 15, 2013)

Sue: Do you feel like you used the information from the workshops? Doug: Some of it. Some I haven't really had the time to. It's hard to change my schedule when I have a set amount of things to do. Once I have a way of doing things, it's easier to stick with that way, rather than change in the middle of my work in progress. (October 29, 2013) Ginger: The workshop on testing had good ideas, but I don't know if I'm going to, like, change. What I'm doing now is working fine; it's what I'm used to. (November 2, 2013)

Donald commented on the potential benefit of knowing that there were other ways to approach tasks and challenges, even if they were not able to or did not choose to implement these approaches immediately.

Sue: Have the workshops been helpful?

Donald: It's not like I'm taking notes or anything, but the ideas are getting to me. I start realizing that there is a better way to do things. It might not be--oh, you gave me 20 tips on how to write an essay, next time I write an essay... But at least, I know it gives me the idea that there are other ways to do it.

Sue: Have you used any information from the workshops? Donald: Not specifically, but it's reinforced what a lot of other people have been saying about how you need to do work in college. (December 4, 2013)

Overall, response to workshops, while not uniformly positive, was much improved from previous semesters. (See Chapters Three and Four for detailed information on workshop topics, ratings and other feedback.) Clearly, one next step might be more specific instruction and follow-up on implementation, with an emphasis on helping students find areas in which they truly want change, and help realizing what that change might look like and be implemented.

Mentoring. Mentees' ratings of the usefulness of working with their mentor, rated on a Likert scale of 1-4, reported in Table 6.8, were overall positive, with four ratings of 4 (very useful) and one rating of 3.

The process of assessing and gradually expanding the active mentoring component of the program concurrent with augmenting training for mentors to equip them to do this was detailed in Chapters Three and Four, and extant research supporting this approach was cited in Chapter Two. This process continued, and in fact accelerated, throughout the current study, as new mentees, mostly freshman and new transfer students, presented with higher levels of need, expressed more desire and expectation of 1:1 time with mentors, requested more active assistance with assignments, and generally

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expected more of their time in study sessions to be spent in interaction with their mentor than had students in previous semesters.

The survey responses suggest that the mentors' approaches were generally effective in addressing issues of mentor-mentee contact and access. In response to a survey item asking students to rate whether they would like more, the same, or less time from mentors for email contact, face-to-face contact, assistance during study sessions, and focused time to meet with their mentor, most students generally wanted to continue these aspects of mentoring at the present rate. The item, "focused time to meet with mentor and work on things," netted the least satisfaction with current levels, with four students desiring more time, and an equal number indicating satisfaction with the current level (See Table 6.11 for responses).

Table 6.11

Survey Response: Working with Mentors (n=8)

	More	Same as this semester	Less
Email contact with mentors	1	7	0
Face-to-face contact with mentors	2	6	0
Assistance from mentors during study sessions	2	6	0
Focused time to meet with mentor and work on things	4	4	0

Mentees' comments from interviews supported the survey finding that some of the mentees were looking for a more active relationship with their mentor.

Doug: I thought the mentors would be more involved and ask me exactly what we had to do and help us in any way we could. (October 29, 2013) Jennifer also expressed expectations of more assistance from her mentor. Jennifer: I did have Jonathan help me with my first paper, which I appreciated a lot because it gave me an idea of what I had to do, and it led me to talk to my TA, so finally I got the gist of the paper, which-- she looked at it and she said it looked good, so I'm crossing my fingers that it's good, but... he was very helpful, but I think as a mentor they should know exactly what's going on with my studies.

Sue: Do you email with Jonathan during the week? Jennifer: No, because I'm-- I get so caught up and busy with everything, and then I just forget to tell what-- I should email Jonathan more with exactly what I have to do, but you know I really don't email him that often... (October 15, 2013)

During the study sessions, I observed quite a bit of interaction between mentors and their mentees, though this differed by mentor, and by both the mentor's perception of mentee needs and the mentee's willingness or ability to seek assistance or let the mentor know how he could be helpful. In response to the survey prompt, "Tell one way that the program has been helpful to you," in addition to the answers cited above that refer to the schedule and structure of the program, mentees offered these comments:

I've had guidance in writing a research paper for class.

The program has also been helpful to have someone to help me.

I understand my assignments and get help with essays.

Some mentees did not seek and were not interested in a great deal of assistance from their mentor, feeling that the program met their needs in other ways.

Sue: Do you feel that you mentor has been helpful to you this semester?

Carol: I guess so. I haven't really had any need for help from him.

(November 11, 2013)

Other mentees sought help as needed.

Sue: Do you think that working with your mentor being part of the program has been helpful this semester?

Doug: Yeah. I had a paper a few weeks ago, week or two ago, and it was really helpful to be here for that. (October 29, 2013)

Sue: Can you describe your interactions with your mentor? Do you communicate by email, in person...?

Justin: I let him know I was going to be late today, but sometimes-- I asked him to look at my resume once, and he made some changes and gave me some advice on that. I feel like I could ask him for things but I don't really do that very much. (November 19, 2013)

Sue: How do you usually interact with your mentor? Here, by email...? Teresa: I see him here, and I just ask him for help whenever I need it, and I also email him if I have any questions or anything.

Sue: Has that worked?

Teresa: Yeah.

Sue: Can you tell me any ways that your mentor has helped you this semester?

Teresa: He, well, the first day that I was here I was really confused by my Hawaii [course] reading, so he helped me a lot with understanding it, and I did really well on that quiz. I was really happy. In addition, he helped *me with English as well, with essays, and helping me come up with ideas.* (November 6, 2013)

The 10 mentees brought to the program a wide range of strengths and needs. They ranged from new freshman and transfer students to students in their third year at our university. Their disability diagnoses and learning profiles varied considerably as well. Overall, mentee feedback revealed a range of expectations, as well as a range of responses to work with mentors

Support beyond the Study Skills and Mentoring Program. Mentees were asked to think beyond the program about what service, preparation, or other program had been most supportive of their success (to whatever degree they felt they had been successful) in college. Several mentioned specific services, most frequently organizational coaching provide by DSO. Three of the mentees received this service, individual half-hour weekly meetings at which the student and a learning specialist planned their week's schedule and discussed strategies and potential obstacles. It provided more intensive, specialized, and directive input than mentees typically sought or received from their mentor.

Sue: What do you think overall has been most helpful to your success in college?

Carol: I have been doing organization coaching with [DSO staff member]. It was really helpful, figuring out exactly everything I have to do and how long it will take and what I have to do when. (November 20, 2013) Sue: Do you feel that you're being successful college? 189

Rachel: Yeah, I'm still here. I think I'm doing--OK. I'm doing not as well as I would like to be doing, but I don't think I'm failing. Sue: Can you think of anything that has been helpful? Rachel: I definitely think organizational coaching was helpful in terms of talking about talking about methods that I could use to try and--organize my work. I think that talking about methods that I could use is definitely helpful and figuring out what worked and what didn't (Interview, December 3, 2013).

Jennifer did not name a program or service, but three approaches: asking for help when needed, keeping up on schoolwork, and balancing academics with other activities. *Sue: Other than this program, what do you think has helped you the most to be successful in college?*

Jennifer: Always reaching out for help if you need it. Make sure you get your work done, but that it's efficient. You don't want to do it not well, and understanding exactly what you have to do, and also taking courses that won't overwhelm you-- balance your schedule. Last year at my old school I took a dance class. I think it was the best thing for me, because I balanced -- it wasn't all academics. I enjoyed going to dance; it's awesome. And then here, I do the running club, so that helps me so it's not all academics, which is nice because I don't think I could deal with that (October 15, 2013).

Justin spoke about personal insights that helped him, as well as the fact that he came from a rigorous high school program.

Sue: What skills and knowledge or services or things you do now, what has helped you? Can you think of reasons that you have been successful thus far?

Justin: I guess knowing myself and what my study patterns are. I know that I'm pretty realistic of what I can do and so I know... I understand myself, so for instance, I need to-- I can't study something for an hour or two straight. I need to take a break, and that helps me. I can never set a time, like two hours, I have to break it up, so that's pretty helpful to my success. Also the fact that I'm used to my private school; our day was a lot longer than it is here, because we had class from 9:00 to 5:30, whereas here I may have only class for two hours, so just because of the fact that I'm more... I have more free time, like a cursing or blessing at the same time, but I think it was... I had a pretty tough high school so that was pretty helpful I guess. (November 19, 2013)

Michael identified finding a positive academic peer group as his most helpful support. Sue: Overall, not this program, what has been most helpful for your success in college?

Michael: I would say getting into an engineering community, rather than having been originally signed up for college among the masses, because the learning community gave me a group of students who were all in the same field of studies, and so I had people I could go to talk about what the work was and could help keep me on track, because once I gained friends in that learning community, they became-- some of them became my roommates this year and some of my best friends at college. We really do support each other and help each other figure out what we need to get done and working in groups helps a lot in keeping track of everything that needs to get done. (October 23, 2013)

Teresa cited locating a space conducive to studying.

Sue: What overall, except the program, has been helpful to your success in college?

Teresa: Well, I guess finding a secluded place to study. I tend to now go to a different floor that I actually live on and it's, like, no one knows me. (November 6, 2013)

Despite being asked to think beyond the Study Skills and Mentoring Program, Donald named the program as the support most responsible for his success.

Sue: Overall, not this program, what has been most helpful to you being successful in college?

Donald: Is it weird that it's this program? Like, that's what's made me most successful. This program is probably the only thing that I've been doing right in college. I'm only taking three classes this semester yeah and I've messed up everything I can possibly mess up this semester. I've screwed up everything. The only class I'm getting an A in is psych, and that's because every week, I'm here reading my psych textbook and every week I'm- maybe I'm failing all my other classes, but I'm getting an A in psych just because I'm here and I'm doing it so if there's anything that's going right, it's this program. The significant difference between the classes that I do work in here and the classes that I don't do work in here is that the work I actually do in here gets done. (December 4, 2013)

While it was gratifying to hear Donald's words about the value the program had for him, his message was troubling as well. While the Study Skills and Mentoring Program clearly succeeded in Donald's mind in meeting his needs, his words raised concern for me that it did not successfully build skills for future success. It is an ongoing challenge, beginning well before the college years, to assist students with disabilities in ways that provide appropriate support and simultaneously build competencies for the future. This is precisely the challenge that special educators face working with high school students toward both current success and the development of needed transition skills.

Additional support needs. The last question of the survey asked, "In addition to this program, what other supports for students would you like to see at [our] university? Three mentees answered this question, all mentioning academic support.

Study Halls similar to this open to all and have teaching professionally [tutoring in course content].

A more centralized study center with aid in popular courses available on a walk-in basis, rather than by scheduled appointment.

I'm fairly happy in terms of supports. A drop-in study/tutoring center would be nice.

Mentees were also asked in their interviews what other supports they would like to have to support their college success. Most of the mentees were not able to name a type of program or support. Jennifer and Teresa wanted increased availability of academic support; Donald wanted a higher level of support similar to the Study Skills and Mentoring Program. Sue: Are there any additional supports that you feel that you need to be successful, not necessarily things in this program, but in general? Donald: I wish there was more programs like this (Study Skills and *Mentoring Program). I just wish I could have this five times a week,* regularly, something like that where it's just an extra class. I feel like I don't have the ability to make my work into a class... [People advise you to] make your work your job and all that, and it's so easy to say, but it's near impossible, at least for me, to do, so I wish that there was a real easily accessible study hall program that's actually just treated like a class, you show up five times a week. (December 4, 2013) *Sue: Can you think of any other additional supports that would be helpful?* Teresa: Well, I take different classes than I guess normal people [Arts and Sciences majors], because they take chemistry and let's say, calculus, but I'm taking very different classes, so I don't have a tutor available for me. Sue: They don't offer tutoring for your classes? If tutoring were available, that might be helpful?

Teresa: Yeah. (November 6, 2013)

Sue: Can you think of anything, outside of this program. What additional support would you like to see on campus?

Jennifer: Not more services, but extra help, in case anyone-- I guess it would be through the support services, but help with people to help you, but they know the specific subject you need help with.

Sue: More like tutors?

Jennifer: I go to the tutors, and they don't all know what they're doing. Well, they do, but it's in a group setting; it's not on an individual basis. Sue: So more availability of individual tutoring?

Jennifer: Yeah, exactly. (October 15, 2013)

The Study Skills and Mentoring Program was designed to address primarily selfmanagement skills, rather than to provide course-specific tutoring. While the mentees initially identified self-management needs such as structure, organization, and time management when asked about their needs, when asked about other services, they defined some academic needs as well. Mentors provided information on available tutoring through several campus programs when mentees expressed those needs, and provided self-advocacy support and follow-up. Like Jennifer, mentees found tutoring variously helpful. Campus tutoring services were provided in a group setting, and were not disability-focused. It is possible that mentees needed a higher level of support, or were in a few cases, were accustomed to resource room support individually tailored to their needs. In any case, academic concerns did not arise with any frequency. This might be attributed to the focus of the Study Skills and Mentoring Program on self-management skills; it is also consistent with literature linking college success for students with disabilities with non-academic factors such as avoidance of procrastination (Murray & Wren, 2003), self-efficacy (Fitchen & Goodrick, 1990), a high level of self-management skills, and self-determination (Getzel, 2008).

Mentoring toward independence. The Study Skills and Mentoring Program clearly addressed many of the needs mentees brought to the program. The original conception of the program was to assist students accustomed to high school resource

room support to bridge to more independence in completing coursework outside of class. Finn et al. (2008), Getzel (2008), Getzel and Thoma (2008), and Thoma and Getzel (2005) identified self-management needs as important to college success for students with disabilities. Some of the mentees used the supports offered by the program to enhance their self-management skills toward more independence and college success. Teresa stated one of her needs, "I would get so distracted if I was back at my dorm because everyone would be talking to each other, and I would be in the conversation as well." The structure of the program helped Teresa to avoid these distractions, but in addition to attending the study sessions, she also began to seek out less distracting places to study on her own outside of the program. "I tend to now go to a different floor than I actually live on and it's, like, no one knows me" (Interview, November 6, 2013). Michael, who participated in the program during both pilot studies as well, also reported growth in self-management. While he found the program to be "a nice place to get away and do your work and buckle down," he also reported value in learning new ideas that he could apply to his work, "I'm starting to get better at remembering to prioritize," a comment about applying ideas from a workshop on avoiding procrastination (Interview, October 23, 2013).

In contrast, Donald, despite workshop input and focused work with his mentor, was unable during the course of the semester to find any strategy or system that enabled him to complete coursework independently. Therefore his feedback on additional service needs focused on needing more of the same type of support provided by the program; in fact, he described a level of support and supervision reminiscent of what might be provided in a K-12 setting. A third type of response was Jennifer's. Jennifer had high expectations of the program and of her mentor, stating, "I think as a mentor they should know exactly what's going on with my studies" (Interview, October 15, 2013), calling to mind, similar to Donald's comments, a level of support a special education student might find in high school. Jennifer also requested assistance from Jonathan, her mentor, more frequently than did other mentees. However, Jennifer combined her stated desire for a high level of support with self-advocacy in finding other supports and services, and self-management in terms of lifestyle choices. In contrast, Carol expected little from her mentor, perhaps because some of the needs she might have brought to a mentoring dyad were addressed in weekly session with DSO staff, but sought structure that she relied on over the three semesters that she was involved the program and appeared to struggle to impose on herself in any other way.

These students struggled with disability-related self-management needs. The program provided assistance and support; it did not make them go away. Many of these students will continue to struggle with procrastination, organization, and a need for structure. The program provided both instruction designed to lead to better independent functioning, and services that assisted students with their current needs.

Summary

The 10 undergraduate student participants presented with a variety of disability diagnoses, high school experiences, and personal and educational histories. They also brought differing needs and expectations of the Study Skills and Mentoring Program, which were met in a variety of ways through 1:1 work with mentors, group workshops, and structured study sessions. Providing a backdrop for mentees' support needs were

these findings: (a) these students reported being surrounded from an early time in their lives and school careers by high expectations for college attendance, (b) they described a variety of experiences that prepared them to differing degrees for college, and (c) they described varied early self-advocacy experiences in college.

These students identified their support needs primarily around self-management skills including structure, help with organizational skills, and assistance with time management and procrastination avoidance. They uniformly found the program helpful in addressing needs for structure and scheduling, though they considered the workshop format somewhat less helpful in addressing their self-management needs. They found relationships with their mentors supportive and generally helpful. They identified services and factors in addition to the Study Skills and Mentoring Program that they believed were associated with their college success: more intensive support for organizational skills provided by DSO; personal traits, decisions, and priority setting ability; peers; and study environment. Despite little mention of academic needs in interviews, they did identify the availability of a higher level of course-focused academic support as an additional need. Finally, the mentees differed in their response to the program in terms of their capacity to utilize the services provided to not only meet their current support needs but also to develop greater independent self-management skills.

Chapter Seven details the experiences of the two graduate students who served as mentors to these 10 undergraduate students Chapter Eight provides further discussion of the lessons educators might take away from the experiences of all of these students.

Chapter Seven: Findings—Graduate Students

With the increased emphasis on college and career readiness and the changing labor market, more students with disabilities are transitioning to higher education. Serving the needs of my [secondary] students will mean informing them about and preparing them for what lies ahead. They will need knowledge and support that I am beginning to grasp as I immerse myself in this course and get to know my mentees. (Jonathan, Reflective paper, October 13, 2013)

This case study examined how the Study Skills and Mentoring Program addressed the needs of students with disabilities and explored the experiences of the graduate students who served as mentors in the program. In this chapter, I describe the experiences of these graduate students and document their learning during the study. First, I reintroduce the two graduate students who served as mentors in the program during the current study and further describe their background related to transition planning and instruction as they reported it. I then share themes that emerged from analysis of mentors' individual interviews, a series of reflective essays completed by the mentors as part of their coursework, records from course seminars, and field notes. These themes included (a) an increased awareness of the differing expectations of students with disabilities at the secondary and postsecondary levels, (b) implications for transition planning and programming drawn from that new awareness, and (c) identification of obstacles to implementing those practices at the secondary level. They also included observations of additional challenges students with disabilities might encounter on the postsecondary level, and finally, the mentors spoke of the power of the mentoring experience to shape their future work.

The Mentors

During the fall 2013 semester, two mentors enrolled in the course *Supporting the Transition of Students with Disabilities to Postsecondary Education* and provided support for 10 undergraduate student mentees. David held initial teaching certification in Business and Marketing, but recalled no work with students with disabilities from his student teaching or any other experiences. It was typical for the mentors to come in with little background in transition regardless of their teaching experience, certifications, or status within the masters' program. However, David, who was in his first semester of graduate study, also came with little experience or prior contact with students with disabilities in any setting. In fact, he described his participation in the program as his first experience of any kind with individuals with disabilities. Jonathan, on the other hand, had interacted with students with disabilities and special education teachers while student teaching in social studies. He was midway through his masters' program, so had also participated in course-related special education field placements. In addition, he was concurrently employed as a 1:1 aide for a junior high school student with autism.

Mentors described lack of background in transition. While the two mentors came to the course and the program with very different levels of experience in special education, they shared the belief that they had little or no background related to transition planning.

Sue: Prior to participating in this program, what preparation coursework and other experience-- did you have working with students with disabilities transitioning to postsecondary education? David: Absolutely no experience coming into this program (Interview, December 11, 2013).

Jonathan: I had had absolutely no experience. Doing fieldwork, I was able to sit in on a few meetings where transitions were discussed, but in terms of actually seeing what happened with those students, how they were being prepared in the classroom, how teachers were working to prepare them, special ed and general education, I had no experience with it. It was not dealt with in any of the introductory courses in special education, or at the MAT program at [our] university, so I had no experience through either of the two programs. I was able to sit in on a few meetings, but it was separate from the actual actions of the special educator. The special educator wasn't even present [at those meetings].

Sue: Have you had coursework in IEP development that dealt with writing transitions plans or goals?

Jonathan: I have had coursework in IEP development but not in terms of transition or transition goals. It was briefly touched on in the severe disabilities course, but [it was] not something really developed-- like it was something we could include if we wanted to. It was kind of extra in our goals. I believe there may have been an article on it, so we built that into the IEPs and lessons-- the goals we were writing then. It was seen as
a positive, but there was no real instruction on it that I remember.

(Interview, December 5, 2013)

Teacher preparation in transition, or lack of such preparation, has been the subject of much research and commentary (Morningstar & Kleinhammer-Tramill, 2005; Thoma, Baker, Saddler, 2002; Thoma, Nathanson et al., 2002; Webster, 2003). This is a pertinent concern, as special education teachers are often the primary providers of transition services, especially in small school districts.

David, just beginning his special education studies, would not be expected to have exposure to special education transition, though as a certified teacher in a career-oriented subject (Business and Marketing), he certainly would have viewed transition to the workforce or higher education from that point of view. Jonathan, with more experience and further along in his studies, echoed mentors from the pilot studies, several of whom had been in their final semester, who nevertheless reported minimal exposure to transition content in coursework.

As the semester proceeded, the mentors were asked to reflect on work with their mentees, along with their course readings. These reflections formed the basis of four short papers, and were discussed in weekly seminars held on-line or in person. While I found David to be a conscientious and responsive mentor, his written reflections and interview responses were shorter and less developed than those of his fellow mentor, Jonathan. I attempted to give both mentors an equal voice in this report; however, Jonathan's words, while no more important than David's, are more abundant.

Mentors Identified Effective Transition Practices

Working with their mentees, the mentors were able to (a) recognize differences in expectations for students with disabilities between high school and college, based partly on the process of observing mentees and imagining what their prior experiences comprised, (b) formulate ideas about what high school transition planning and instruction might include, (c) recognize the role of self-advocacy for students, (d) note a need for advocacy by special education teachers, and (e) recognize the need for transition planning to begin early and be infused throughout a student's program.

Mentors contrast secondary and postsecondary environments. Over the course of the semester, through reading and working with the undergraduate students, both mentors gained insights into not only the needs of their current mentees, but into their own future work as secondary educators. They became aware of the differences in expectations of students with disabilities between high school and college, insights that were heightened by the process of observing mentees and imagining what their prior experiences comprised. David commented, "I actually had to sit back and think, 'What support did they have in high school that made them successful enough to get to [our] university?" (Interview, December 11, 2013)

Jonathan observed, writing about the contrast in expectations at the secondary and postsecondary levels, "Academic demands (quality and quantity) increase significantly in post-secondary education, and students are expected to have already mastered requisite reading and writing skills" (Reflective paper, October 19, 2013). Later in the semester, he wrote,

By working with undergraduates with disabilities, I was able to get a unique perspective on secondary special education. I grappled with the similarities and differences between these two learning environments. I also learned from my mentees... which skills, strategies, and routines are most important in their success. (Reflective paper, December 15, 2013)

The mentoring experience addressed the lack of awareness of the expectations of postsecondary education on the part of special education teachers identified by Janiga and Costenbader (2002). Jonathan pointed out an additional dimension when he wrote, "Given the importance of goal setting in education and learning, it's clear that we must be able to envision the future for the students we teach before we begin to teach them," (Reflective paper, October 19, 2013) as he connected this awareness with the ability to set appropriate goals.

Need to teach academic, self-management, and social skills. Both mentors generated ideas about what they believed comprised good transition planning and instruction for secondary students based on their new awareness of expectations at the postsecondary level. David recommended identifying college-bound students with disabilities and then giving appropriate information and explicit instruction on college expectations and self-management and self-advocacy skills that students need.

What I think we should be doing is recognizing the college-bound students based on their interest and providing them with information on how to prepare to make this transition, and this is a big transition for anybody, I think, coming into a four-year university. It can be very overwhelming for anybody, and it usually is. So for students with disabilities I think we've got to actually give lessons, inform them, and give them the resources that they need to succeed at this level. (Interview, December 11, 2013)

Jonathan identified important transition skills, including academic skills such as writing, and self-management skills, including structuring writing tasks, breaking down tasks, and note taking, being addressed in secondary classrooms he observed. He saw that these skills needed to be taught explicitly and well (with clear goals, guided practice, and fading of prompts) in order to prepare secondary students for transition. "[Transition-related] skills must be taught with transferability and maintenance in mind. If I am going to teach students an organizational or time-management strategy, I want them to be able to apply it in many different settings, including college" (Reflective paper, October 19, 2013). Jonathan also identified social skills, such as listening skills, speaking skills, and eye contact, as skills needing direct instruction. He based his recommendations on needs he had observed among his mentees. Commenting on the need for instruction in social skills, he said,

I've noticed teachers assessing students for their use of eye contact without offering any previous instruction for this skill. For some students with disabilities, such as those with autism, explicit instruction in speaking to an audience and discussion may be essential. (Reflective paper, October 19, 2013)

Need for instruction in self-advocacy. While Jonathan observed students with disabilities being prepared in terms of academics and self-management skills on the secondary level, he did not observe preparation in self-advocacy occurring, nor did he

believe that students or their parents were receiving needed information about laws and regulations governing services.

I think they are being prepared well in terms of strategies, if we're talking about what is considered good instruction in special education right now, and in general education, they're being as prepared academically, at least they should be, if quality instruction is taking place and if you have a good learning environment in the school and the classroom. Where I don't think they're getting prepared at all at the necessary levels would be in terms of legal preparations, in terms of self-advocacy, in terms of knowing and understanding how they learn and how their disability affects that... (Interview, December 5, 2013)

Jonathan identified a need for instruction and practice in self-advocacy.

I would consider developing an explicit program for teaching selfadvocacy. One way that this could be done is using a problem-solving approach combined with role-playing. Students could identify key moments where they need to advocate for themselves and set a selfadvocacy goal that they can re-visit and monitor. For each of these, the goal is independent student practice, as one finds very little scaffolding in higher education. (Reflective paper, October 19, 2013)

The need for scaffolded opportunities to learn and practice self-determination skills, including self-advocacy, as well as the dearth of opportunities to do so, is well-documented (Johnson et al., 2002; NDC, 2003; Patwell & Herzog, 2000; Thoma, Baker,

& Saddler, 2002; Trainor, 2007; Wehmeyer, 2004). Jonathan identified an important instructional need, method, and rationale.

Special education teacher as advocate. Jonathan also commented on the need for special education teachers to not only to be prepared to teach these skills, but also to look for opportunities to work with others to teach them as well.

In addition to teaching students self-advocacy skills, I also need to be a powerful advocate for teaching [by others] these skills to secondary students. One should advocate for both the inclusion of these strategies in content-area, grade-level curriculum and across grade level (in the teaching practices of other special educators). One must be ready to make the most of all co-teaching opportunities and collaborate readily on any project that provides an opportunity to practice skills that are transferable to post-secondary education. (Reflective paper, October 19, 2013)

In Chapter Six, the undergraduate students described having little contact with special education teachers while in high school, lending support to Jonathan's recommendations for infusing instruction in transition-related skills into the general education curriculum and for the special education teacher to advocate for the inclusion of these skills.

Transition needs to start early, be integrated. Jonathan spoke about the need for transition-related goals and needs to become part of a student's program from an early time, and for transition needs to be infused throughout the student's program, similar to "transition-focused education" advocated by Kohler and Field (2003).

I would want this kind of instruction to be there from the beginning, to be something that's always going on, whether it's also paired with other goals. Overall, it seems like no matter what I'm doing, it should also always be moving towards something that will be preparing them for their transition-- that it's preparing them for what's next, so this [the mentoring experience]helps me understand what that really means, basically. (Interview, December 5, 2013)

This echoed an observation Jonathan made early in the semester upon learning that formal transition planning must begin by age 15 (in our state) or 16 (IDEA, 2004).

Explicitly instructing students on how to learn about how they learn best and utilize self-knowledge about their disability and how it affects their learning should begin much earlier – before the student is asked to participate in developing their transition plan. (Jonathan, Seminar, September 28, 2013)

Jonathan's remarks highlight the need for transition services that meet not only the minimum requirement of activities and goals in the student's IEP at the appropriate age, but instruction that positions students with disabilities to participate meaningfully in the transition process. He identified the need for transition work to begin early, initially by means of a transition-oriented mindset on the part of the teacher, so that transition is "something that's always going on...no matter what I'm doing, it should also always be preparing them for their transition."

While IDEA (2004) mandates that formal transition planning begin "not later than the first IEP to be in effect when the child turns 16," the text of the law continues, "or younger if determined appropriate by the IEP Team" (IDEA, 2004). IDEA also mandates "a coordinated set of activities...based on *the individual child's needs, taking into account the child's strengths, preferences, and interests* [emphasis added]." For students with disabilities who are interested in pursuing postsecondary education, starting at 16 leaves only two short years for preparation. College-bound students need to begin planning no later than their first year of high school to ensure requisite college preparatory coursework (Shaw, 2010). While students with disabilities may remain under IDEA until age 21, few college-bound students do so. Teresa, the young woman in Chapter Six who reported learning from her special education teacher during her senior year what her disability was, entered college at age 17.

If students are to receive scaffolded learning opportunities in keeping with "the gradual nature of transition planning and instruction," (Trainor, 2007, p. 41), and gain "practice in making decisions that pertain to [their] learning" (Jonathan, Interview, December 5, 2013), then that work needs to begin well before age 16. If a student's "preferences and interests" include college attendance, transition planning must begin earlier in order to meet the requirement that it be "based on the individual child's needs" (IDEA, 2004).

Mentors Identified Obstacles to Effective Transition Practices

With their newfound insights on what they believed comprised good transition planning, both mentors identified obstacles that they felt they might encounter in implementing such programming. These included (a) some secondary teaching practices, (b) competing priorities for teachers' time and attention, (c) issues related to tracking of students with disabilities, (d) finding time and access to students, and (e) poor communication between general and special education teachers.

Teaching practices fostered dependence. Similar to mentors in both pilot studies, David and Jonathan trained a critical eye on practices of special education teachers that they identified as counter-productive to preparing students for life after high school.

It's become clear that we're missing a crucial opportunity to teach students how to manage these aspects of their transition themselves. I don't think that they're being as well prepared as they could be. And this is something I've thought for a while--about the resource rooms and how they're used. I think that they're nothing, most of the time, more than a study hall where teachers help students get their homework done. This is where the transition skills should be taught, I believe, where we should be teaching them study skills, life skills, teaching them how to learn, rather than giving them the answers to their homework assignments, pretty much, and I've seen that in the field quite a bit. That's what [special education] teachers I've observed do. (David, Interview, December 11, 2013).

"Although Tom is always 'working towards independence,' he is provided remarkably little instruction or practice in making decisions that pertain to his learning" (Reflective paper, November 11, 2013). Jonathan also commented in an earlier reflective paper that while the need for explicit instruction with an eye on transfer and maintenance of skills

Jonathan remarked about the junior high school student he worked with,

seemed clear to him, "...this is something that we're not really doing" (October 19, 2013).

Competing priorities. Jonathan identified a high level of stress for teachers and students resulting from current education reforms being implemented at a rapid pace. He spoke about "the whole system of all the standardized tests, and all the things that seem to distract from real quality instruction in the classroom," as a barrier to dedicated instructional time for transition programming (Interview, December 5, 2103). Jonathan commented further,

What is very clear right now in terms of transition in the schools that I've been in for the last two years, is that the teachers are stressed, and students are stressed, by all the changes that are already taking place, that it seems like there's very little time for planning for transitions.

(Interview, December 5, 2013)

Jonathan spoke about the challenge of meeting short-term goals of addressing instructional objectives, completing currently assigned work, and obtaining passing grades in general education classes while also addressing students' future needs, "the push and pull of other shorter-term needs" (Reflective paper, October 19, 2013). I believe that this "push and pull" is a contributing factor in the teaching practices Jonathan and David criticized above.

However, Jonathan also identified practices that potentially supported students with disabilities transitioning to postsecondary education, especially the infusion of more strategy instruction into general education classes through co-teaching. I do see a lot of good things in the school I work with now, which is a junior high school, where the special educator through co-taught classes is trying to bring a bit more strategy instruction into it in terms of the writing process, in terms of organization, in terms of different things that I do see having value, sort of moving in that direction. There is a clear understanding that even at the junior high level we're preparing them for a transition in a way. It's [instructional time] not always taken up by just what's going on right now in class, how can they get their assignments done. (Interview, December 5, 2013)

On the other hand, Jonathan also commented that transition-related needs were not a focus, as other demands were more urgent and filled teachers' time:

I'm going to completely contradict myself. It's completely filled up by other demands right now on the teachers, and the discussions that I hear between special educators and general educators are focusing on other things; they're not talking about transition, and they have very little planning time, which you hear about all the time. (Interview, December 5, 2013)

These seemingly contradictory statements reflect the current reality of rapidly implemented reform initiatives that drive priorities away from longer-term transition goals (Blalock et al., 2003; Cole, 2006).

Tracking. Jonathan identified another obstacle to effective planning for transition to postsecondary education. He observed that by 7th grade, students with disabilities were already unofficially tracked as not college-bound. "Working with the

grade levels I'm working with, I do feel like most of the students I'm working with already seem to be tracked, in many ways, and thought of as not transitioning to postsecondary education" (Reflective paper, October 19, 2013). The mentees' consistent description of being "tracked" for college from an early time (Chapter 6) provided contrast to Jonathan's observation, but supported his assertion that tracking takes place and likely affects transition toward college. Jonathan's observations also support the findings of Alwell and Cobb (2006), Sparks and Lovett (2009), and Stodden et al. (2003), who noted the need for challenging college preparatory curriculum for students with disabilities bound for postsecondary education.

Finding time and place for transition programming. Both mentors commented on structural challenges to effective transition programming that resulted from college-bound students with disabilities spending very little time with special education teachers and vice versa. Therefore, focused transition work with students needed to take place during existing resource room time, if that was a service that was provided, in co-taught classes, or with support service personnel such as counselors or social workers. David commented that special education teachers' access to students with disabilities was limited to scheduled resource room time. "I just think-- that's the only time that we're going to have to work with these students [on transition-related programming]." In fact, David saw access as the major obstacle to providing transition programming. "Specifically it would be to actually having the opportunity to speak with the student in an in-depth way so they would understand that, how different it's [the environment in college relative to expectations and supports] going to be." (Interview, December 11, 2013). Jonathan elaborated on this theme. At least at [area] junior-senior high school where I work, time with the special educator is only for students with some sort of intellectual disability. The students in seventh grade that do not have either mild intellectual disability or a more significant one are not included in any resource room time. They qualify for co-taught classes, so that strongly limits the opportunity for small group transition preparation, and that pushes the burden of it onto these co-taught situations where there's a general education teacher and special education teacher focusing more on academic strategies which they can implement and which can help these students, but there's no room in there for addressing those other things, unless it's done with the parents, with the psychologist, or with the social worker and it's planned in the meetings that they have with them.

(Interview, December 5, 2013)

Both mentors recognized the appropriateness and desirability of inclusive general education for college-bound students with disabilities, but also recognized, similar to Blalock et al. (2003), that this created a challenge in providing transition curriculum necessitating alternative methods, personnel, or settings for that instruction.

Lack of communication. Jonathan identified as a potential barrier to successful transition work the lack of communication between special education and general education teachers that he had observed in the field.

Jonathan: I student-taught at a school where the general education teachers hardly spoke to the special educators. There was no cooperation, no collaboration. It's probably not uncommon, but it was surprising. The co-taught classes there were the instance where the special educator comes, sits down, when there's a quiz, they leave with the students. They were silent the entire time, and that was enforced, almost, when I was student teaching, by the general education teacher. He had a plan; he wanted me to follow that, and it didn't involve bringing the special educator into a larger role. (Interview, December 5, 2013)

Given the mentors' observations of students with disabilities spending time primarily in general education settings with general education teachers, possibly in cotaught classrooms, the lack of communication Jonathan described constitutes an important obstacle. While the classroom Jonathan described clearly was not truly cotaught, classrooms that fit this description, where the special education teacher's role is similarly curtailed, are unfortunately not uncommon in my experience. Some of the mentees' accounts in Chapter Six of little time spent with special education teachers further reinforce the need for effective communication between general and special educators that Jonathan reported as lacking in his experience.

A hopeful outlook. Finally, despite the obstacles identified above, Jonathan saw room for a knowledgeable special education teacher to implement good transition planning and programming.

I believe that a teacher, that a special educator that really knows what they're doing, who comes in with this plan to make transition a major framework for how they organize things with their team or at the grade, and how they advocate for it could really do a lot. I feel like there's a lot of room for personal agency in implementing transition preparation programs-- despite everything. I feel like from what I've seen, even though everyone is stressed out, I feel like there's room for that in the conversation. (Interview, December 5, 2013)

Mentors Described Challenges at the Postsecondary Level: "One finds very little scaffolding in higher education."

The mentors identified what they believed were good secondary level transition practices and obstacles to be overcome in providing those services. They also identified obstacles at the postsecondary level that they believed further challenged students with disabilities even when those students had good preparation. The mentors noted that students with disabilities in college not only faced the loss of mandated special education supports and the advocacy of parents, but they also encountered teaching methods on the college level that provided additional challenges. They observed that some college teaching practices contrasted sharply to those on the secondary level that often featured some differentiation based on students' strength and needs.

The following is an email that I sent after a conversation with one of the mentees. *Hi Jonathan*,

I just wanted to let you know about a conversation that David and I had w Joe after the session on Wednesday. He was concerned that he is not scoring well on pop quizzes that are given in one of his classes. These quizzes are apparently given on material that has been delivered by lecture THAT DAY. We made a few suggestions (such as, look at your notes and see if you are choosing things to write down that end up on the quizzes), but it did seem like a challenging situation for Joe (who always asks for visuals) to process a lecture and memorize key material at the same time! (and a pedagogically questionable approach IMO). Our best recommendation was to go and talk to the prof. during office hours and ask for suggestions. (FYI, the quiz Joe showed us scored 7/10, so not what he's used to, but not awful.)

I'll assume that you'll check in w him on Wednesday about this. Sue (Email, September 30, 2013)

Both mentors had firsthand experience with postsecondary education through their own studies. However, their work with their mentees provided them with a different lens for viewing that experience that yielded new insights. A theme that emerged from interviews, logs of contact with mentees, and reflective papers was the contrast between the pedagogy that constitutes best practices in K-12 classrooms and teaching methods that the mentees reported encountering in the university setting.

Early in the semester, Jonathan noted contrasting expectations and pedagogical approaches in K-12 and postsecondary settings. "It is often blatantly clear that your professor has never taken an education course, and has particular strengths and obvious 'deficits' when it comes to teaching" (Seminar, September 28, 2013). In a subsequent seminar, Jonathan noted additional challenges.

They [undergraduate students with disabilities] are often working with professors who lack experience and knowledge about teaching students with disabilities, or even teaching students. A Ph.D. is often required to teach post-secondary, but no courses in education are required. As a result, they [students with disabilities] may not be getting certain services that they would need and often must go without or develop strategies to overcome this. Joe and the pop quizzes are an example of this. (Jonathan, Seminar, October 5, 2013)

Jonathan noted in his first reflective paper, "[K-12] educators are expected and, indeed, taught to meet students where they are... This is not the case in post-secondary education. Students are expected to gain prerequisite knowledge on their own. If they fall (or begin, for that matter) behind, the show will go on" (October 13, 2013). Jonathan's statement calls to mind a mentee's observation that, "…in high school it's more like a classroom; the teacher teaches. Here, the teacher lectures, and you go back and learn yourself..." (Doug, Interview, October 29, 2013).

David saw self-advocacy on the part of the student as an approach for coping with this on the postsecondary level.

If students are having difficulty with a specific topic or teaching method, like Joe was having with his pop quizzes, they should not be afraid to approach their professors. Professors like to see a student who is concerned about their studies and are almost always willing to help struggling students. (Seminar, September 27, 2013)

However, David also spoke about students whose learning strategies did not align well with the expectations of their professors.

Michael told me that his problem with his math class is that he has a specific way of solving most math problems, and the way he does it is not the way that the math teachers want him to do it. He says that he usually ends up with the same answer as doing it the other way, but the teachers want him to show the work that they want to see. I can see how this mustcause a great deal of frustration for Michael. (Seminar, October 6, 2013)In a subsequent seminar, David commented further on the difficulties students with

disabilities faced when confronted with the different pedagogy of the college classroom.

I can also attest to their [text authors'] belief that not all instructors are skilled at lecturing. Knowing how a professor lectures ("the rambler, the reader, the disaster, and the speed demon"), and having an idea of what information they want their students to get out of the lecture is very important. (Seminar, October 20, 2013)

Jonathan commented in a reflective paper about specific teaching practices that were absent at the postsecondary level, "Professors don't plan their courses with the strengths and needs of their students in mind. Teaching practices, such as modeling, gradual release of responsibility, and guided practice – which form the backbone of effective teaching in secondary education – are used only in rare cases" (October 19, 2013).

Finally, David commented on the dual issues of systemic change that may be desirable and the shorter-term needs of individual students with disabilities in college.

Trying to change the system is not something that an individual student in college really needs to be focusing on. While we [graduate students in education] can agree that there should be a change done in a way that addresses all types of learning styles, undergraduate students matriculated in all sorts of different majors have one goal: graduating with the most amount of information gained in their field, with a grade *point average that will be competitive in the job market* (Seminar, October 20, 2013)

David's comments point to the need for postsecondary education-bound students with disabilities to learn strategies that will serve them in the college classroom, as well as the need for them to acquire self-advocacy skills. He also suggests a role for educators in making "the system" work better for all students.

Mentor Insights Meshed with Established Transition Frameworks

I looked for concurrence between themes that emerged from the mentors' work and extant standards for knowledge and skills that special educators charged with transition planning require. Kohler's (1996) Taxonomy, frequently a reference point in the field, is an evidence-based framework for transition practices. More focused on specific teacher competencies is the *Transition-Related Planning, Instruction, and Service Responsibilities for Secondary Educators* summary of promising practices (DCDT, 2000a). Table 7.1 highlights alignment of major categories from Kohler's (1996) Taxonomy, DCDT's (2000a) framework, and mentor insights from the current study.

Table 7.1

Taxonomy for Transition Programming (Kohler, 1996)	DCDT Transition-Related Planning, Instruction, and Service Responsibilities for Secondary Special Educators (2000a)	Mentor insights gained from participation in Study Skills and Mentoring Program
Student- Focused Planning	 Identify students' post-school goals, learning preferences, and need for accommodations. Use a variety of assessment information. Identify measurable transition-related goals focused on post-secondary education or training, employment, independent living, and community and leisure activities. Develop educational experiences that correspond with post-school goals and objectives, such as participation in college preparatory curricula and/or in vocational and technical education. Through the IEP, specify responsibility for transition-focused instructional activities or services. Develop students' abilities to participate meaningfully in the development of their IEP. Utilize a planning process that is student- centered and facilitates students' self- determination, including student decision- making. Provide appropriate accommodations that facilitate student and family involvement in the individual planning process and in the IEP meeting. Evaluate progress toward goals at least annually; student evaluates his/her own progress. 	"Given the importance of goal setting in education and learning, it's clear that we must be able to envision the future for the students we teach before we begin to teach them," "We should be recognizing the college-bound students based on their interest and providing them with information on how to prepare to make this transitiongive lessons, inform them, and give them the resources that they need to succeed at this level." "I would want this kind of instruction to be there from the beginning, to be something that's always going on, whether it's also paired with other goals." "Explicitly instructing students on how to learn about how they learn best and utilize self-knowledge about their disability and how it affects their learning should begin much earlier – before the student is asked to participate in developing their transition plan."
Student Development	 Teach academic skills in the context of real life experiences. Teach self-determination skills. Teach social skills for school, work, and community living. Teach learning strategies and study skills. Teach independent and family living skills. Develop students' career awareness. Develop accommodations and adaptations that meet student needs across a variety of settings. Use mentors to facilitate student learning. 	Mentors identified transition skills: academic skills, such as writing, and self-management skills, including structuring writing tasks, breaking down tasks, and note taking. "[These] skills must be taught with transferability and maintenance in mindto be able to apply it in many different settings, including college." Mentors identified social skills: listening skills, speaking skills, eye contact, as skills needing direct instruction. "I woulddevelop an explicit program for teaching self-advocacy using a problem-solving approach combined

Mentor Insights Aligned with Kohler and DCDT Frameworks

problem-solving approach combined with role-playing."

Taxonomy for Transition Programming (Kohler, 1996)	DCDT Transition-Related Planning, Instruction, and Service Responsibilities for Secondary Special Educators (2000a)	Mentor insights gained from participation in Study Skills and Mentoring Program
Interagency Collaboration	 Interact effectively with community service providers to identify and address students' service and support needs. Collaborate with general and vocational educators regarding students' learning needs and instructional programs. Provide information about upcoming service needs of students for strategic planning purposes. 	"One must be ready to make the most of all co-teaching opportunities and collaborate readily on any project that provides an opportunity to practice skills that are transferable to post-secondary education."
Family Involvement	 Provide pre-individual education program planning activities for parents. Identify and provide information about transition services and program and/or curriculum options. Facilitate parent attendance at individual education program planning meetings. Actively include parents and family members in planning and decision-making. 	"Parents are not getting preparedin terms of legal preparations" [parents and students not getting information they need on differences in laws and regulations governing secondary vs. postsecondary education].
Program Structures and Policies	 Develop outcome-based curricula. Provide flexible program and curricular options to meet student needs. Participate in program and curriculum development and evaluation. Teach students in integrated settings. 	"Overall, it seems like no matter what I'm doing, it should also always be moving towards something that will be preparing them for their transition." Mentors commented negatively on de- facto tracking, and assumed that inclusive programming was the setting of choice and default for college-bound students.

(DCDT, 2000a; Kohler, 1996)

While knowledge acquired by the mentors in one semester did not include all that the DCDT framework indicates is needed by secondary special educators, their learning overall meshed well with these frameworks for transition-related competencies. Because of the mentors' focus was on transition to college, their learning emphasized certain aspects of transition and de-emphasized others.

Mentoring Provided Powerful Learning: "I don't think I'll forget it."

Both mentors commented on how their mentoring experience had shaped

their ideas. They commented on learning experiences provided by (a) working

directly with students, (b) seeing the specific challenges that the undergraduate students faced, and (c) developing strategies to assist these students.

This was different, because rather than a teacher telling you the challenges that we're going to face, I actually saw the challenges that they [mentees] were facing and had the student themselves express those challenges to me. They were able to tell me, not what their disability is, but what they have trouble with, and things like that. It made it so I actually had to critically think, "How can I help this student with this transition process?" I really had to try to come up myself with the ideas that I used in the mentoring program to help them. I don't think I'll forget it. (David, Interview, December 11, 2013)

Jonathan also commented on the experience of working to help meet the needs and challenges of his mentees.

Really interacting with real, living, breathing, postsecondary students-- It just clears a lot of the preconceptions about what you would be doing, and if I didn't actually have to sit down and see what their needs are, see how I can actually help them-- what kind of help they ask for and could use, what kind of things they're struggling with, I think I would be selecting entirely different things to be helping them with, and I would be probably missing the point. (Interview, December 5, 2013)

Both contrasted their mentoring experience to coursework in which challenges were identified for them by professors, such as scenarios to discuss and address. Jonathan commented that he would be more confident applying what he learned as a mentor than he might be coming from a less-field based course. "I get much more out of it that I feel confident applying later on in practice than if I sat in a lecture class and read articles and discussed them every week." He added that while his other coursework included more than reading and discussion, and might involve simulations or even field placements, "This is structured in a way that does help you understand how it's all connected, and I think that's good" (Interview, December 5, 2013).

Jonathan commented on another aspect of his mentoring work. He found that his work brought concreteness to the popular phrase "college and career readiness."

For me, this experience is a much more effective way to think about what I'm doing as a secondary educator or special ed or general education teacher than the college and career readiness goals and abstract things like that. Now, I really get a sense of, by working with these students, what skills help them succeed, what they might need help with, what kind of strategies would benefit them coming in [to college], what kind of preparation for the transition would be necessary, all of these things become much more tangible through being in this program, and it definitely has a strong impact on how I envision my role as a special educator. (Interview, December 5, 2013)

Summary

The two mentors, coming to the program and course with different backgrounds, after working directly with undergraduate students with disabilities in a mentoring capacity were both able to see issues and situations these students faced and have interactions with the students that shed light on their current needs and previous high school preparation. Drawing on that experience, one or both mentors then identified (a) desired transition practices, including instruction in specific academic, self-management, social, and self-advocacy skills, (b) the need for this instruction to begin early and be well-integrated into the student's program, (c) the importance of good communication and collaboration between special and general secondary educators, (d) potential obstacles to providing high-quality transition services at the secondary level, (e) additional challenges students with disabilities face at the postsecondary level, and (f) ways the mentoring experience shaped their learning.

Through their experience in the Study Skills and Mentoring Program, the mentors learned about the relationship and connection between high school preparation and college success for students with disabilities, generating ideas about transition that corresponded with research based practices (DCDT, 2000a; Kohler, 1996; Kohler & Field, 2003).

Chapter Eight provides further discussion of the lessons educators might take away from the experiences of all of these students.

Chapter Eight: Conclusions and Implications

Just as typical high school students have responded to the changing economy and job market by seeking further education beyond high school, increasing numbers of students with disabilities now attend college as well (Newman et al., 2010). These students experience varying degrees of success in persisting towards graduation; overall, graduation rates are lower for students with disabilities than for the general student population (Newman et al., 2009). However, a growing body of research shows that with accommodations, assistive technology, and appropriate supports, students with disabilities can achieve graduation rates similar to the general student population (Alwell & Cobb, 2006; California Postseondary Education Commission, 2008; Harrington & Fogg, n.d.; Nguyen et al., 2004; Oguntoyinbo, 2012; Vogel & Adelman, 1990; Vogel & Adelman, 1992).

Increased interest in higher education means that more high school students with disabilities have college attendance and graduation as a post-high school goal. These students need, and are mandated to receive, transition planning and programming toward their goal of postsecondary education (IDEA, 2004). However, despite the existence of a plethora of evidence-based transition practices (Alwell & Cobb, 2006; Kohler, 1996; Kohler & Field, 2003; Landmark et al., 2010; NSTTAC, 2007), many special education teachers only minimally address transition mandates. Teachers often fail to address two areas important to preparation for postsecondary education: (a) self-determination skills, including self-advocacy (Agran et al., 1999; Alwell & Cobb, 2006; Cook et al., 2007;

Janiga & Costenbader, 2002; Trainor, 2007) and (b) provision of college preparatory coursework (Alwell & Cobb, 2006; Sparks & Lovett, 2009; Stodden et al., 2003).

High school teachers are often the personnel charged with coordinating and implementing transition planning (Morningstar & Clark, 2003; Morningstar & Kleinhammer-Tramill, 2005); however, these teachers often have little exposure to or knowledge of the postsecondary environments their students will face or the needs of students in those environments (Harris & Robertson, 2001; Janiga & Costenbader, 2002; Levinson & Ohler, 1998). They need this knowledge in order to make the best decisions about effective transition planning for their increasingly college-bound population of special education students. The status of transition planning for college-bound students with disabilities raised concern about the preparation of special education teachers who will be charged with this transition planning and will guide transition programming. These concerns include the lack of and need for (a) effective instruction in transition planning in teacher preparation programs (Kohler & Greene, 2004; Thoma, Baker, & Saddler, 2002; Thoma, Nathanson, et al., 2002; Webster, 2003) and (b) pre-service exposure to evidence-based transition practices such as inclusive programming, social skills training, family involvement, self-determination training, and community and agency collaboration (Landmark et al., 2010).

This case study examined how a university-based Study Skills and Mentoring Program addressed the support needs of undergraduate students with disabilities enrolled as mentees and the transition preparation learning needs of graduate students in education who served as their mentors. This model was studied through investigating the responses of undergraduate students who received services through the program, as well as studying the responses of the graduate students to their experiences in the program, with the larger goal of contributing to the knowledge base around transition of students with disabilities to postsecondary education, especially in the area of teacher preparation for transition planning to support those students.

The study addressed the following research questions:

1. How does this mentoring program address the college support needs of undergraduate students?

2. What opportunities does the mentoring experience provide that support future special educators' preparation for transition planning?

3. How can the mentors' experiences and changing ideas inform teacher educators relative to the preparation of secondary special education teachers?

Meeting Undergraduate Support Needs

Chapter Six described findings related to the 10 undergraduate participants.

These undergraduate students presented with a variety of disability diagnoses, high school experiences, personal and educational histories, and support needs. These students:

- reported high expectations from family and school personnel for college attendance,
- described a variety of experiences that prepared them to differing degrees for college, and
- described varied early self-advocacy experiences in college.

They identified their support needs around

• structure,

- help with organizational skills, and
- assistance with time management and procrastination avoidance.

Their background and needs, as reported by the students, echoed extant research in some areas, and contrasted in other areas. These are detailed in Chapter Six. In particular, this group of undergraduates, enrolled in a selective university, reported high levels of college preparatory coursework and uniformly high expectations for college attendance, unlike concerns raised by researchers (Alwell & Cobb, 2003) and a report by a mentee in the first pilot study, who reported lack of access to challenging college preparatory courses in her intended major based on test scores.

I didn't do well on tests, so I had to take courses [in high school] like Chemistry in the Community and Biology for Everyday Life, instead of college-prep courses. So I arrived at [our] University not only with a learning disability, but already behind in my major [Biology]. (Karen, Interview, November 14, 2012)

Undergraduate participants found the program very helpful in addressing needs for structure and scheduling, and generally helpful in addressing their self-management needs. They found relationships with their mentors supportive and generally helpful. They identified factors, in addition to the Study Skills and Mentoring Program, that they believed were associated with their college success: more intensive support with organizational skills provided by DSO; personal traits, decisions, and priority setting ability; peers; and study environment. They identified the availability of a higher level of course-specific academic support as an additional need. They varied in their personal approach to meeting their support needs in that some mentees simultaneously utilized program supports and used mentor input to build skills toward academic autonomy, while some mentees were not able to do this. These students continued to rely on program supports, and in fact desired higher levels of similar support, in one case seeming to need and request supports reminiscent of secondary school.

The first research question asked, "How does this mentoring program address the college support needs of undergraduate students?" It is reasonable to conclude that the program addressed many of the support needs, detailed in Chapter Six, that the undergraduates brought to the program. While no program can meet all needs and desires of all participants, both survey results and interview responses indicated that the program met undergraduate support needs in the areas of self-management identified by the mentees themselves. These self-management needs of postsecondary students with disabilities are consistent with those documented by other research (Getzel, 2008; Getzel & Thoma, 2008; Thoma & Getzel, 2005).

Graduate Student Experiences

Chapter Seven described findings related to the two graduate students who participated in the current study. My second research question asked, "What opportunities does the mentoring experience provide that support future special educators' preparation for transition planning?" The graduate student participants, who initially reported a lack of background in transition planning and programming, over the course of the semester were able to identify a number of effective transition practices, including:

• recognizing differences in expectations between high school and college,

- teaching academic, self-management, and social skills with an eye toward transferability,
- incorporating transition skills throughout the secondary curriculum,
- providing explicit, direct instruction in self-advocacy, and
- beginning transition work early.

These observations by the mentors suggest that they increased their knowledge of transition practices and needs, enlightened by their opportunity to interact with students with disabilities on the postsecondary level.

The graduate students were also able to identify a number of obstacles to the implementation of effective transition planning. They reported:

- current teaching practices that impeded the development of academic autonomy by students with disabilities,
- competing priorities for teachers' and students' time and effort, including instructional priorities driven by rapidly implemented education reform initiatives, that drew attention from longer term efforts,
- issues with tracking of students with disabilities,
- difficulties for special education teachers finding time with and access to students with disabilities, and

• lack of communication between special education and general education teachers. The first two areas, teaching practices that foster dependence and competing priorities, echoed the responses of pilot study participants. Mentors' learning aligned well with established frameworks for the provision of evidence-based transition services (DCDT, 2000a; Kohler, 1996).

Preparing Secondary Educators

My third research question asked, "How can the mentors' experiences and changing ideas inform teacher educators relative to the preparation of secondary special education teachers?" Jonathan's and David's observations, their commentary on current teaching practices, and even their misconceptions, along with the mentees' accounts of their experiences, shed light on teacher preparation issues identified in extant research (Morningstar & Kleinhammer-Tramill, 2005; Thoma, Baker, Saddler, 2002; Thoma, Nathanson et al., 2002; Webster, 2003) and raised others. These issues are:

- preparation of teachers in the area of transition planning, along with the mentors' perception of their lack of preparation;
- teachers' struggles to set priorities, including increased stress from education reforms, in the light of special education teachers' failure to implement best practices in transition, and the power of mentoring to address this problem; and
- issues of access to students with disabilities related to transition planning and inclusive education, implications for transition work, and the role of general education teachers.

Teacher preparation in transition planning. Both mentors spoke about their lack of preparation in transition planning, consistent with pilot study findings. David commented, "I think it's really funny how it's required that it's [transition planning] in the IEP when no teacher is required to take a transition course" (Interview, December 11, 2013), referring to the requirement that transition planning be part of the IEP process and the student's program, yet in his experience, special education teacher preparation programs did not require dedicated coursework in transition. Many teacher preparation

programs lack effective instruction in transition planning (Thoma, Baker, & Saddler, 2002; Thoma, Nathanson, Baker, and Tamura, 2002; Webster, 2003), even though special education teachers surveyed desired more exposure during teacher training programs (Thomas, Nathanson et al., 2002), and reported feeling poorly prepared in this area (Morningstar & Kleinhammer-Tramill, 2005). Less than half of special education teachers reported receiving training that addressed transition (Anderson et al., 2003). While higher education faculty recognized the importance of instruction in transition, they struggled to address competing instructional needs (Kohler & Greene, 2004).

Moreover, regulations, course requirements, available certifications, and preparation practices differ greatly among states and among university teacher preparation programs (Morningstar & Kleinhammer-Tramill, 2005). Differences and deficits exist despite that fact that these programs all operate under the same IDEA (2004) requirements, and in the milieu of identified evidence based transition practices (Kohler & Field, 2003), national standards for transition services (NASET, 2005), standards for preparation of transition specialists (DCDT, 2000b) and secondary special education teachers (DCDT, 2000a). Nationally, 45% of special education personnel preparation programs offer a stand-alone transition course (Anderson et al., 2003). Although 70% of course instructors report embedding transition content into existing courses, there is concern that this does not allow for adequate coverage of transition topics (Kohler & Greene, 2003; Morningstar & Clark, 2003; Morningstar & Kleinhammer-Tramill, 2005).

There are many ways that transition education can be provided to future special education teachers; regardless of the method, it is imperative that this take place. On-

campus mentoring of students with disabilities is one of many vehicles for this education. This work was powerful for the graduate students in the current study who were able to experience it. Most college campuses have undergraduate students who need support, and teacher education programs have teacher candidates who would benefit from additional field experience. The intersection of these needs in the form of mutually beneficial mentoring took place in the Study Skills and Mentoring Program.

Setting priorities; applying transition planning skills. Both mentors reported, as had their counterparts in both pilot studies, concerns around issues of priority setting. David's observations more clearly echoed the mentors in the pilot studies, as they recounted story after story of seeing special education teachers assisting their students in ways that focused on short-term success, but appeared more enabling than supportive of future independence and longer-term success. While Jonathan did not specifically comment on this, he shared the related dilemma of addressing transition-related goals in the face of competing priorities, as well as specifically commenting of the stress of current education reforms that dominated teachers' and students' time and energy.

Implementing effective transition planning and instruction requires teachers to take risks in allowing students to practice skills such as self-advocacy and other selfdetermination skills in the comparatively low-stakes setting of secondary school. Learning self-determination requires not only acquisition of specific skills, but also opportunities for meaningful practice (NCD, 2003; Wehmeyer, 2004). Patwell and Herzog's (2000) and Thoma, Baker, and Saddler's (2002) findings that high school students with disabilities were provided few opportunities for making choices and were sheltered from the consequences of their choices calls to mind Jonathan's account in Chapter Seven of his student who was "working for independence" with little instruction and scaffolded opportunities to practice independence.

Future special education teachers need to be prepared for the difficult choices they will face in prioritizing short and longer-term goals for their students. In order to be better positioned to make informed decisions about these priorities and goals, they need, as Jonathan stated, "a sense of... what skills help them [students] succeed, what kind of strategies would benefit them" in order to "make transition a major framework for how they [teachers] organize things" (Interview, December 5, 2013). Adding to this challenge is the finding that some of the mentees continued to ask for services and supports that addressed short-term needs rather than building skills for future independent functioning. Once again, the mentors' experiences enabled them to recognize the importance of scaffolded experiences in self-determination for students transitioning to college, to critique current practices of high school teachers, and to envision the future for the students in order to be able to set meaningful goals for them.

The mentors acquired knowledge over the semester of effective transition programming, a necessary but not sufficient step toward insuring the provision of highquality transition services. Teachers who believed that they had significant knowledge of transition were more likely to implement effective transition programming with their students (Knott & Asselin, 1999; Morningstar & Kleinhammer-Tramill, 2005); in fact, Morningstar (2013) reported that teacher preparation significantly correlated with the frequency with which teachers perform transition activities.

However, the transition literature is replete with findings that special education teachers do not implement the transition-related skills they have (Grigal et al., 1997;

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Kohler & Field, 2003; Morningstar & Kleinhammer-Tramill, 2005). Their findings reflect wider concerns of teacher educators that knowledge does not always translate into effective practice, and that "teacher candidates often find effective application of concepts and practices challenging with students in real educational contexts" (Renzaglia, Hutchins, & Lee, 1997, p. 364).

The mentoring experience in the current study included features associated with impact on future practice, such as reflection via writing activities and reflective journals and field experiences (Renzaglia et al., 1997). Another feature associated with impact on practice was planned highlighting of relationships between coursework and field experiences, which helped teacher candidates link theory and practice (Renzaglia et al., 1997). Jonathan commented that his experience was "structured in a way that does help you understand how it's all connected." The mentors viewed their experience as powerful and permanently changing of perspective, evidenced by David's claim in Chapter Seven, "I don't think I'll forget it," and Kathy's statement in Chapter Three, "Being involved with this program has opened my eyes to a whole new world." That experience, combined with features associated with impact on practice, will equip the mentors with understandings and tools to set priorities, maintain positive practices, and resist practices that consist primarily of addressing short-term goals and gains, or understandings based, as Jonathan said, only on "lists of college and career readiness goals."

In my experience working with future teachers, students in teacher education programs hunger for opportunities for hands-on experience and concrete skills which mentoring offers and builds. The mentoring experience facilitates learning that is more than theoretical, grounded in time and space, and accessible to memory. When mentors make connections among their readings, their mentoring experiences, and their past and present classroom experiences, this allows them to accrue new understandings by linking theory and practice. Mentoring experiences can transform attitudes and beliefs that students carry throughout their teaching careers (Novak, 2010; Reddick et al., 2012).

My personal experience was one of possessing many technical skills related to transition planning. I lacked not information, but a larger picture, the perspective to relate procedural and paperwork requirements to real impact on real lives. My hope for the mentors is that as they acquire more skills, they will be able to ground them in their picture of students' lives beyond high school acquired through the mentoring experience, and that this will provide an incentive to apply those skills for the benefit of their future students.

Teachers set priorities every minute of every day. Busy teachers make decisions in the moment, and those moments add up to hours, days, weeks, and years of practice. Decisions that teachers make on the fly about what work and what goals to prioritize in their work with students come to constitute practice--sometimes a lifetime of teaching practice. These mentors, influenced by their mentoring experience, will always have, somewhere in the back of their mind, the lessons that they learned during this critical time in their careers and their training. The mentoring experience will influence how they set priorities, how they view student needs, and how they are able to envision the futures of their students, something Jonathan described as a necessary prerequisite to effective goal-setting and teaching.
Transition planning must meet students where they are. As I interviewed the mentees, listening with the ears of a special education teacher, I initially was perplexed by how little mention of special education services and personnel appeared in their descriptions of their college preparation. I interviewed student after student who could barely recall any involvement with the individual education planning process, but all could recall individuals or programs that helped them prepare for college. As I listened, however, I found that their accounts were not simply reenactments of the situation described by Trainor (2007), who found high school students with learning disabilities uninvolved in and uninformed about the transition process and unprepared to participate meaningfully in their IEP meetings. While my findings might be interpreted similarly, with the conclusion that transition planning and instruction were lacking, in the case of these undergraduate students, I believe that was only part of the story.

Role of general educators in transition planning. While I was surprised and dismayed by the lack of recall by the undergraduate students of their special education transition planning and programming experiences in high school, I believe that these students' accounts point towards something important to transition work with these students. All students with IEPs need transition planning and programming that reflects their interests and strengths (IDEA, 2004). In addition, students who are headed for postsecondary education need inclusive education and challenging college preparatory curriculum (Alwell & Cobb, 2006; Sparks & Lovett, 2009; Stodden et al., 2003). Many students with disabilities who have postsecondary education in their future spend the majority of their time in general education classrooms, with general education teachers and staff. This was the educational environment of the majority of the mentees.

Consequently, college-bound students with disabilities spend very little time in special education classrooms or with special education teachers. Both mentors described that situation from their point of view: the limited access by special education teachers to many college-bound students with disabilities. This results in two challenges for special education teachers:

1. Transition planning and programming for these students must occur primarily in inclusive settings, similar to the rest of their educational program. The special education teacher's role must include advocating for transition-related curriculum, as Jonathan pointed out in Chapter Seven.

2. Formal transition planning in the student's IEP remains a special education responsibility. Yet another challenge for special educators is the difficulty of devising individualized transition plans that reflect student's interests and needs when their time with these students is limited and they do not know them well. Here again, teamwork with general educators is needed. Referring to the "complex role demands of secondary special educators," Morningstar and Kleinhammer-Tramill (2005, p. 2) found that the role of secondary special educators in the transition process shifted from school-based service provision to coordination among all stakeholders.

Challenges for teacher educators. Therefore, the challenge for teacher educators extends beyond the well-documented need to instruct future teachers in high-quality transition planning (Grigal et al., 1997; Shearin et al., 1999; Kohler & Field, 2003; Morningstar & Kleinhammer-Tramill, 2005). Teacher educators need to not only prepare special education teachers to be effective transition planners who value and prioritize

strategy instruction, explicit instruction in self-management skills, and scaffolded opportunities for learning and practicing self-advocacy skills, but also to prepare them to be effective advocates for the inclusion of this instruction within general education settings. They needed preparation in becoming skilled co-teachers who can infuse not only strategy instruction but also an awareness of transition needs into general education curriculum.

Best practices in special education demand that appropriate instruction meet students with disabilities in the general education classroom. This is the essence of inclusive special education: Just as special education is "a service, not a place," transition planning must meet students where they are. For college-bound students with disabilities, that place is largely the general education classroom, and service providers for those students are largely general education teachers. Blalock et al. (2003) pointed out that general education teachers are now the largest sector of school personnel serving students with disabilities. *All* teachers at the secondary level need knowledge of transition planning and programming both for the students with disabilities who are educated in their classrooms, and for typical students who face many of the same challenges in their transition toward adult life. Therefore, special education teacher educators need to advocate with their colleagues in general education about the importance of transition planning.

Limits of Transition Preparation: Individual Needs, Equity, and Systemic Change

Education reform and transition. Transition preparation of students with disabilities takes place within the context of school, community, and larger systems. While a well-prepared teacher with skills, awareness, and sense of mission related to

transition planning and programming is positioned to accomplish a great deal, that teacher must operate in a context that is becoming ever more challenging. Jonathan spoke about "room for personal agency" for an informed teacher who chose to "make transition a major framework for how they organize things with their team or at the grade" (Interview, December 5, 2013). However, he also recognized that this work would take place in a setting where "the teachers are stressed, and students are stressed, by all the changes that are already taking place."

The mentors advocated scaffolded experiences in self-management, selfdetermination, and self-advocacy for college-bound high school students; they also recognized that these were frequently not taking place. These types of experiences, as well as other transition curriculum, co-exist with other initiatives such as implementing new curriculum, passing new tests, and improving graduation rates. Current education reforms such as Common Core standards and testing create a context in which transition work with students with disabilities is not a priority. Even prior to current Common Core initiatives, concerns were raised about emphasis on academic content and preparation for high-stakes tests taking precedence over other transition competencies (Blalock et al., 2003), and about mandates that made it more difficult for students with disabilities to have access to transition-related curriculum that they needed to succeed after high school (Cole, 2006). One potential solution to these competing priorities is to embed transition goals and work within academic programs (Blalock et al., 2003), rather than as a separate, expendable add-on, a practice advocated 22 years ago by Halpern (1992), also advocated by Kohler and Field (2003) and Morningstar and Clark (2003), and reiterated by Test, Morningstar, Lombardi, and Fowler (2013) and by mentor Jonathan as well.

I most recently taught in a K-12 classroom in 2012. I believe, based on my experiences, that despite the promising transition practices advocated above, teachers of students with disabilities face huge obstacles as they attempt to provide individualized education that looks at the whole person across their lifespan. Despite rhetoric employing phrases such as "college and career ready," current reform initiatives define that readiness as narrowly academic and testable. Those same reform initiatives as implemented in many classrooms drive outcomes such as "standardized" IEP goals (Beals, 2014; Gewertz, 2013), and drive out the very kind of risk-taking that is needed in order to develop essential transition skills such as self-determination.

Accommodations, accessibility, advocacy, and universal design. The mentees overall accessed college support systems fairly well, evidenced by their registration (with varying degrees of assistance) with the DSO, their application to the Study Skills and Mentoring Program, and the existence of their accommodation plans. Procurement of these services showed self-determination, and in the situations in which they encountered obstacles, they met these with varying levels of self-advocacy. However, on occasion, these students encountered situations in which self-determined behavior did not appear to be enough. One incident, recounted and commented on in Chapter Seven, involved Joe, a student with autism, whose professor gave pop quizzes on lecture material delivered earlier in the same class period. Another incident, referred to in the first pilot study (Chapter Three), involved Carol, a student with Asperger Syndrome and Generalized Anxiety Disorder, who struggled to respond to challenging or frustration situations calmly. She received extended time for assessments as a disability accommodation. On several occasions, she was faced with the expectation of completing work with a lab group and then taking a graded group quiz under time constraints that she found burdensome. She reported that many students ran out of time; she also reported that the TA in charge was not responsive to her concerns, and that the professor was not present for these lab sessions. As her mentor attempted to assist her in forming an appropriately assertive and self-advocating response, it became clear that Carol did not believe that this was a situation in which receiving extended time was possible or appropriate. In fact, colleges are not required to provide accommodations that would fundamentally alter course or program content (Harris & Robertson, 2001), creating gray areas that may be interpreted differently in different courses.

While providing disability accommodations to ameliorate such situations for students would generally appear to be an adequate solution, students need to make those arrangements in advance, and sometimes they are faced with demands that are completely unforeseen. Adding to this concern is the fact that 72% of students with disabilities in postsecondary education do not disclose their disability, do not register with their DSO, and do not receive accommodations. Field, Sarver, and Shaw (2003, p. 346) noted that although accommodations that provide equal access is required by law, "it is often a frustrating, embarrassing, unpleasant, stigmatizing, and unending process for students with disabilities."

Getzel (2008), Orr and Bachmann Hammig (2009), and Scott, McGuire, and Shaw (2003) identified systemic responses including increased awareness and knowledge on the part of faculty of the characteristics and needs of students with disabilities, and the use of universal design concepts in planning curriculum. Bolt et al. (2011) connected faculty awareness and receptivity with students' willingness to use accommodations. Hadley (2006) and Webster (2003) found that college students with disabilities wished for increased faculty knowledge and awareness of disability, as well as a more accessible and universally designed campus. Universal design for learning, an educational approach to providing more flexible classroom materials, technology, and varied methods of conveying instructional content (Getzel, 2008; Rose et al., 2006) is needed to make instruction at the college level more accessible to a wide range of students, including students with disabilities.

There are limits to the obstacles that self-determined students with disabilities can overcome, even with good academic preparation, study skills, assertiveness, appropriate accommodations, and self-advocacy. The mentors' observations of challenging pedagogy in the college classroom support my concern that a high level of academic and self-management skills on the part of students with disabilities, together with welldeveloped self-advocacy skills for coping with challenges along the way, are still not sufficient unless students with disabilities are met in the college classroom with accessible and universally designed pedagogy. Chapter Seven includes extensive commentary from the mentors on the stark contrast between teaching approaches and expectations in high school and college. While students with disabilities can and should be prepared for the new environment they will face, I struggle to imagine what type of preparation could enable a student with autism to prepare for pop quizzes given on material covered in the same class period.

Laws pertaining to higher education for individuals with disabilities such as Section 504 and ADA require accessibility. Students with mobility impairments are not expected to access the college campus without elevators, wide doorways, and curb cuts.

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Universal design has proved to be an effective approach to providing accessibility in the built environment and had reduced the need for individually arranged accommodations (Shaw, 2010). Likewise students with learning and related disabilities need to be provided with more universally designed curricular approaches in the college classroom (Rose et al., 2006: Smith, 2012), referred to by Cantor (2005. p. ix) as "pedagogical curb cuts" that "alter the fixed concrete sidewalks of our lives and practices." Provision of an "instructionally accessible environment" (Shaw, 2010, p. 269) promotes self-determination by students with disabilities (Field et al., 2003).

There is no preparation, no skill set, no high quality transition plan or program that is sufficient to prepare students with disabilities to handle every challenge they will meet in postsecondary education. Mentor David noted in the course seminar that the mentees are focused on passing courses, gaining information about their field, graduating with a high GPA, and competing in the job market. However, college success for students with disabilities is not only an individual struggle for these students. Inflexible pedagogy masquerades as a disability-related problem for individual students to solve. Viewing the challenges that students with disabilities encounter on the postsecondary level only as individual needs, problems, or skill deficits risks conflating those individual problems with the broader social justice issue of equal access. Not just better skills and support, not just better transition planning and program, but systemic change, is also needed.

Limitations of this Study

No case study is designed and conducted perfectly. There are several limitations of this study. The study took place at a highly selective state university. The undergraduate participants represented students who had competed successfully for admission through the regular admissions process. They were part of the less than one third of students with disabilities who register with their campus DSO and were therefore eligible to receive accommodations, and in this case, to participate in the Study Skills and Mentoring Program. The validity of qualitative research is not dependent on a large or representative sample, and this case study purposefully focused on one particular program; however, it is appropriate to note that my participants had already crossed high academic and self-advocacy hurdles.

Furthermore, my two graduate student participants stood out even among the cohort of mentors across the three semesters in which the current study and the two pilot studies were conducted. David stood out because of lack of experience or other background, and Jonathan because he was especially reflective and articulate. This made it challenging to give them equal voice in this report.

I selected participant groups (mentors and mentees) whose experiences and words I believed would be most valuable in answering my research questions. I believe that the voices of my participants are strong in this report, but other voices are missing. DSO personnel, undergraduate and graduate students' professors, high school teachers, and parents might have contributed helpful insights.

This study relied heavily on accounts from students. In fact, it relied solely on the mentees themselves to identify and define their support needs. While DSO personnel assisted in identifying program needs and potential mentees, once the mentees were part of the Study Skills and Mentoring Program, they were the sole determiners of their use of program services. They took the lead in setting mentoring goals, in conjunction with

their mentor. Needs identified in this study came from their writings and their words, as did the assessment of the program's ability to meet those needs. DSO personnel, their professors, or perhaps their parents may have had very different views of the support needs, relative success in college, and response to the program.

I did not verify students' accounts of academic success or failure by seeking access to their official records. The study relied on undergraduate students' own assessments of their college success or lack of success, descriptions from memory of their high school experiences, and determinations of how well their current needs were being met. I made the decision to do this in recognition that these young adults were, or were working to become, self-determined individuals, responsible for self-advocacy, and for saying what was important, what they needed, and how they would meet those needs.

I conducted interviews in October, November, and December of 2013. In order to assure completion of 12 interviews before the end of the semester, I began undergraduate interviewing in mid-October. This meant that some students were interviewed midsemester, and some quite near the end. Life changes quickly for undergraduate students, especially new freshmen, so it is possible that some responses would have been different had the interview occurred at an earlier or later different time in the semester. Furthermore, some questions, for example, inquiring about whether a student had tried out a technique presented at a workshop, might have served as a prompt to do so and affected participant behavior.

Finally, all of my participants, despite the safeguards of ethical research practices and reassurances from me, may still have been eager to please me, and this may have colored some of their responses. The graduate students were enrolled in a graded course with me. The undergraduates were appreciative of receiving a free, specialized service. While their accounts of their journeys rang true for me, and they never hesitated to give critical feedback, it is necessary to acknowledge these factors, which I also addressed in Chapter Five. Reciprocity between researcher and participant is not problematic, but it needs to be recognized and acknowledged. Maxwell (2005) wrote about complex relationships between researcher and participants, citing the need for ongoing renegotiation of relationships, and in fact advocated looking for ways the researcher might reciprocate the service that a participant provided.

Unanswered Questions: Directions for Further Research

Further study is needed in the following areas specific to the Study Skills and Mentoring Program: (a) The feasibility and efficacy of this model on other campuses with diverse populations of students with disabilities; (b) Follow up with mentors to determine in what ways their practice reflects this mentoring experience; and (c) Followup on mentees' college success as they proceed through their undergraduate programs.

This study also raised larger questions that should be addressed by further research and conversation in the field:

1) When and where are the most effective time and setting for teaching future special education teachers about transition? Mentor David spoke about lack of required transition coursework. Teachers reported that they typically learned about transition on the job (Thoma, Baker, & Saddler, 2002; Thoma, Nathanson, et al., 2002; Webster, 2003). Anderson et al. (2003), Kohler and Greene (2004), Morningstar and Clark (2003), and Morningstar & Kleinhammer-Tramill (2005) raised concern about the adequacy of the practice of infusing transition content into existing coursework. Faculty reported having more time to teach transition competencies in a dedicated course (Anderson et al., 2003), yet the general education needs of the mentees might argue for wider diffusion of content extending into general education teacher preparation.

2) If college-bound students with disabilities are primarily looking to general education providers for transition-related information and assistance, we need to ask not only how well their teachers are trained, but also how well these students are served by existing college preparatory programs in high schools. Are they included in these programs? Are their needs met by guidance programs, "College 101" courses, college fairs, and other programs for the general college-bound population? Is there a place for special education teachers to contribute to inclusive content in these programs so that they are truly meeting college-bound students with disabilities where they are?

3) What is the obligation of colleges, and of college faculty members, in meeting the needs of their students with disabilities? Does this obligation include inclusive and supportive services and instruction beyond what is required by the letter of the law?

4) Existing transition frameworks necessarily address and include a wide range of post-school options for students with disabilities. While they typically include postsecondary education as one of several post K-12 pre-employment options, many do not account sufficiently for the increasing prominence of postsecondary education in the lives and plans of students with disabilities. I reviewed a number of such lists and charts. Those that dealt specifically with teacher competencies appeared to focus more on the work of special educators preparing students to directly enter the workforce or those working with students with severe disabilities. While understanding that postsecondary education is not an end in itself, and that workforce preparation issues and work

experience are relevant for college-bound students as well as those entering the workforce directly, I wished for tools that highlighted the reality that the college campus has become the normative environment for young adults of many abilities and disabilities.

Conclusion

The Study Skills and Mentoring Program provided a model for addressing the college support needs of undergraduate students. In the eyes of the undergraduate mentees, it addressed their self-defined needs for structure and self-management support through study sessions, workshops, and 1:1 mentoring. At the same time, it provided abundant opportunities through the mentoring experience for future special educators to gain insights that supported their preparation for transition planning. Studying the evolution of the mentoring program, working with the mentees and their mentors, and studying the experiences of both groups also informed my ideas about the preparation of secondary special education teachers, ideas that can be informative and useful to teacher educators.

On-campus mentoring proved to be a practical vehicle for serving undergraduate students with disabilities. It also proved to be a powerful learning experience for future special education teachers. Bringing together these two groups of students was mutually beneficial, and would be replicable on many college campuses. Many colleges have students with disabilities who need additional transitional support, and teacher education programs, often on the same campus, have teacher candidates who would benefit from additional field experience. The intersection of these needs in the form of mutually beneficial mentoring took place in the Study Skills and Mentoring Program. Individuals from many demographic groups over many years have recognized the power of education to transform lives and sustain democracy. Changes in societal expectations, the labor market, and globalization have raised expectations for postsecondary education. For students with disabilities, as for all students, postsecondary education provides improved tools for personal empowerment, civic participation, and quality-of-life, and for finding gainful, satisfying employment and financial independence. However, the road to completion of postsecondary education programs is a long one for many students who have disabilities. Special educators at all levels, along with their counterparts in general education, need improved tools in order to provide these students with the best possible transition support toward equal access to postsecondary education. The findings of this study can enlighten that effort.

Appendix A: Centers and Programs for Transition and Postsecondary Support of Students with Disabilities

Association on Higher Education and Disability (AHEAD) is a professional membership organization for individuals involved in the development of policy and in the provision of quality services to meet the needs of persons with disabilities involved in all areas of higher education. http://www.ahead.org/

Center on Postsecondary Education and Disability (CPED) promotes access to postsecondary education for students with disabilities through research, professional training, and demonstration projects. <u>http://www.cped.uconn.edu/</u>

Council for Exceptional Children Division on Career Development and Transition http://www.dcdt.org/

HEATH Resource Center at the National Youth Transitions Center, George Washington University is the national clearinghouse on postsecondary education for individuals with disabilities. <u>www.heath.gwu.edu</u>

National Center on Secondary Education and Transition (NCSET) coordinates national resources, offers technical assistance, and disseminates information related to secondary education and transition for youth with disabilities in order to create opportunities for youth to achieve successful futures. <u>http://www.ncset.org/</u>

National Center for the Study of Postsecondary Educational Supports (NCSPES) at the Center on Disability Studies leads the Post-school Outcomes/Results Technical Assistance Network, one of four technical assistance networks at NCSET. <u>www.rrtc.hawaii.edu</u>)

National Secondary Transition Technical Assistance Center (NSTTAC)

NSTTAC is a national technical assistance and dissemination center funded by the U.S. Department of Education's Office of Special Education Programs. <u>http://www.nsttac.org/</u>

National Alliance for Secondary Education and Transition (NASET) is a national voluntary coalition of more than 40 organizations and advocacy groups representing special education, general education, career and technical education, youth development, multicultural perspectives, and parents. <u>http://www.nasetalliance.org/</u>

TransCen, Inc. is a non-profit 501(c) 3 organization dedicated to improving educational and employment outcomes for people with disabilities. <u>http://www.transcen.org/</u>

University of Washington DO-IT (Disabilities, Opportunities, Internetworking, and Technology) <u>http://www.washington.edu/doit/</u>

Virginia Commonwealth University Virginia Department of Education Training and Technical Assistance Center <u>http://www.vcu.edu/ttac/transition.html</u>

Appendix B: Program Description and Application Form—Undergraduates

Supported Study Hall and Mentoring Program Fall 2012 semester

The Disability Services Office is pleased to share information on the new **Supported Study Hall and Mentoring Program**. This program was developed by the School of Education and will be offered to a limited number of DSO-registered students for the Fall 2012 semester.

The goals of the Supported Study Hall and Mentoring program are to help DSOregistered students with the following:

- Provide an opportunity for students who struggle with study skills or timely homework completion to meet two evenings a week in structured study halls. They will be supervised by graduate students who are pursuing their Master's degree in Education.
- Establish a quiet, supportive setting and routine for more optimal homework completion.
- The graduate student mentors who lead each session will provide students with instruction in study skills and strategies for managing the college workload.
- The mentors will also communicate with participating students via e-mail during the week to offer continued homework advice, as well as encouragement to try specific study skill strategies.

The Supported Study Halls will take place every **Tuesday and Wednesday evening** from **7:15-9:15pm** throughout the Fall 2012 semester, beginning the second week of classes.

Attendance in these evening sessions is required, unless the student has a regularly scheduled class or is ill. Students must also actively participate in any mentor-led discussions and in e-mail correspondences with mentors.

Because this is a pilot program, there is no charge to those students selected to participate. However, **seats in this program are very limited.** Only six DSO-registered students who apply for the program will be selected to participate during the Fall semester.

If you are interested in applying for one of the six possible seats in the Fall 2012 Supported Study Hall and Mentoring Program, **please complete the Application form** on the next page and return it to [staff member] in the DSO by **Thursday, August 23**. You may also contact [staff member] xxx-xxxx with any questions. Good luck!

APPLICATION - Fall 2012 Supported Study Hall and Mentoring Program

Please complete the form below to apply for consideration for one of the limited seats in the Fall 2012 Supported Study Hall and Mentoring Program.

Student Information

Name:

Student number:

E-mail Address:

Phone number:

Application Questions

Please feel welcome to answer on a separate page if you prefer.

- 1. What are your strengths and weaknesses related to effective study skills and homework completion?
- 2. Why do you wish to participate in the Supported Study Hall and Mentoring Program? What do you hope to gain from the program?
- 3. What is your availability on Tuesday and Wednesday during the Fall semester from 7:15-9:15pm?
- 4. If selected for the program, do you understand that attendance at each Tuesday and Wednesday evening session is required (unless you have a regularly scheduled class or are legitimately ill)? Circle one: Yes No

Completed applications may be sent to [staff member] in the Disability Services Office [addresses]. Please contact [staff member] with any questions.

Appendix C: Recruitment Flyer—Masters' Students

ATTENTION SOE GRADUATE STUDENTS:

Independent Study Opportunity Fall 2012 variable credit (2-4)

Opportunity Description:

We currently have an independent study available for Fall 2012 for SOE masters or doctoral students. The independent study will provide opportunity to work with undergraduate students involved with the Disability Services Office. SOE students will serve as "consultants," to provide individualized mentoring and tutoring services related to academic success skills and strategies. Specific areas of mentoring include: self-determination (including self-empowerment choices related to adequate diet, sleep, recreational time, etc), organizational skills and strategies, test-taking skills, time management.

Independent Study Components:

- Serve as an academic and organizational "coach" to individual University undergraduate students
- Participate in weekly evening study sessions, assisting undergraduates in implementing academic and organizational strategies
- Develop and lead at least one 15-30 minute workshop at start of an evening study sessions, providing small group instruction on a variety of topics related to retention and academic success in the college environment.
- Collect data on mentee participation and application of skills, strategies, and knowledge
- Work with other "coaches" and undergraduates to identify workshop topics
- Provide weekly mentoring aligned with workshop topics and student development of effective study and organizational habits.

Potential Outcomes:

• Choose a topic of interest to develop and lead a workshop session

- Collect and analyze data on participating students' use of workshop knowledge, skills, and strategies, (requires IRB approval)
- Review of research on transition to college, or any of the proposed areas of mentoring (e.g., self-determination, organizational skills, test-taking skills among striving college students)

Hours:

Meet with SOE faculty weekly to plan, troubleshoot, and reflect on process (1 hour) Participate in workshop and mentoring session two evenings per week (2 hours each session)

Regular contact with mentee (at least 2-3 times per week, including workshop and mentoring sessions)

Appendix D: Research Participant Recruitment Script—Undergraduate Students

Research subjects were drawn from the population of students participating in the mentoring program. Information on recruitment of these participants is provided in separate documents.

Each student, masters and undergraduate, was approached as a group and then individually.

For the undergraduate students:

"As you know, I am a doctoral student in the School of Education. One of the major requirements of a doctoral program is a dissertation, which is an original research project. For my dissertation, I am studying this new program that we are involved in.

I will be asking each of you individually if you are willing to participate in my study. It would involve being interviewed about your experiences as a student and your participation in this program. You don't have to participate in my research to be part of the program. It is your choice."

For individual undergraduate students who indicate that they may be willing to participate:

"As you know, I am a doctoral student in the School of Education. For my dissertation [explain what as dissertation is if necessary], I am studying this program that we are involved in. As you know, you don't have to participate in my research to be part of the program. It is your choice.

If you agree to participate, I will interview you for about a half hour during this semester. I would interview you in our classroom before or after a study session, in my office, or in another private place. I would be asking you about your experiences as a student, and about your participation in the program and with you mentor. Everything you tell me and any information about you would be confidential.

If this sounds all right, I will ask you to read (or read to you if you prefer) and sign a consent form that has more information, and I will give you a copy of the form."

Appendix E: Research Participant Recruitment Script—Graduate Students

Research subjects were drawn from the population of students participating in the mentoring program. Information on recruitment of these participants is provided in separate documents.

Each student, masters and undergraduate, was approached as a group and then individually.

Script for graduate students:

"As you know, I am a doctoral student in the School of Education, and I am studying this project as my dissertation research. I will be asking you individually if you would like to participate in this study. It would involve being interviewed by me near the end of the semester about your experiences in the program. I will also ask you about your prior knowledge and training related to transition planning for students with disabilities. I will also use some of our written course work as part of my study."

For individual graduate students who indicate that they may be willing to participate:

[Repeat information above] "All information that you share with me is confidential.

If this sounds all right, I will ask you to read and sign a consent form that has more information, and I will give you a copy of the form."

Appendix F: Fall 2012 End of Semester Survey of Undergraduate Mentees

SURVEY

This information will be used to improve the support study hall/ mentoring program. It may also be used anonymously in a research study.

Please check your response:

	Strongly	Agree	Undecided	Disagree	Strongly
	agree				disagree
This program has been helpful to me					
this semester.					
This program has been what I expected					
when I applied.					

The following topics were addressed in workshops. Please check your response.

	Interesting	Not	Useful	Not useful
Noto talving		Interesting		
Note-taking				
Organizing				
Procrastination				
Time management				
Study spaces				
Using your mornings well				
Test-taking strategies				

How could the workshops be improved?

	More	Same as this semester	Less
Email contact with mentors			
Face-to-face contact with mentors			
Active assistance from mentors during study sessions			
Workshops			
Focused time to meet with mentor and work on things			

If changes were made in the program, would you like to see more or less of the following?

	Too long/ too	Just right	Too short/ not
	long		enough
I found the study sessions			
Meeting 2x/ week was			

Circle all that apply: I found the location (UU 103) to be:

Just fine Good central location Too noisy/ distracting Too public

Rank the 3 parts of the program in order of usefulness to you:

____ mentoring

_____ study sessions

_____ workshops

Tell one way that the program has been helpful to you. Be as specific as you can.

Tell one thing you would like to change if you could. Be as specific as possible.

In addition to this program, what other supports for students would you like to see at the University?

Date	Kathy	Tabitha	Carol	Joe	Kevin	Karen	Anne	Michael
	(mentor)	(mentor)						*
0/11/10	37	N/		37	37			
9/11/12	X	X	X	X	X	X	X	X
9/12/12	X	X	Х	X	X	X	X	
9/19/12	X	X	Х	X	X	X	X	
9/26/12	X	X	Х	X	X	X	X	
10/2/12	X	X	Х	Х	Х	Х	X	Х
10/3/12		Х	Х	Х	Х	Х	Х	
10/9/12	Х	Х	Х	Х	Х	Х	Х	Х
10/10/12	Х	Х	Х	Х	Х	Х	Х	
10/16/12	Х	Х	Х	Х	Х	Х	X	Х
10/17/12	Х	Х	Х	Х	Х	Х	Х	
10/23/12	Х	Х	Х	Х	Х	Х	X	X
10/24/12	Х	Х	Х	Х	Х	Х	X	
10/30/12	Х	Х		Х	Х	Х	X	X
10/31/12	Х	Х	Х	Х	Х	Х	X	
11/6/12		Х	Х		Х	Х	X	Х
11/7/12	Х	Х	Х	Х	Х	Х	X	
11/13/12	Х	Х	Х	Х	Х	Х	X	Х
11/14/12	Х	Х	Х	Х	Х	Х	X	
11/20/12	Х	Х	Х	Х	Х	Х	X	Х
11/27/12	Х	Х	Х	Х	Х	Х	X	Х
11/28/12	Х	Х	Х		Х	Х	Х	
12/4/12	Х	Х		Х	Х	Х	Х	Х
12/5/12	Х	Х	Х	Х	Х	Х	Х	
12/11/12		Х	Х	Х	Х	Х	Х	Х
12/12/12		Х	Х	Х	Х	Х	X	T
12/18/12	Х	Х				X		T
**								

Appendix G: Attendance-- Mentoring Program Fall 2012 Semester

*Not scheduled to attend on Wednesdays

**Optional finals week session

Name	Date of Interview	Setting	Date Transcribed
Tabitha	10/24/12	Room 103 Student Union	11/2/12
Joe	10/30/12	Room 103 Student Union	11/3/12
Kathy	10/31/12	Room 103 Student Union	11/19/12
Carol	11/7/12	Room 103 Student Union	12/7/12
Karen	11/14/12	Room 103 Student Union	1/15/13
Anne	11/20/12	Room 103 Student Union	1/19/13

Appendix H: Interview Schedule

Appendix I: Fall 2012 Interview Guide for Mentees

Interview Guide: Questions for Undergraduate Students

- a) How were you prepared in high school for the transition to college?
- b) What can you tell me about the transition planning process?
- c) What gaps can you identify in your preparation?
- d) What would have helped you?
- e) What sort of supports were you looking for in the current program that led you to apply?
- f) What has been helpful in the program?
- g) What suggestions do you have for improving the program?
- h) Describe your interactions with your mentor. How do you typically communicate (email, etc.)? How frequently do you communicate?
- i) How has your mentor helped you this semester?
- j) How might the mentoring relationship work better for you?

Appendix J: Interview Guide-- Questions for Graduate Students

Preparation:

 a) Prior to participating in this program, what preparation (course work and other) and experience had you had in working with students with disabilities on the transition to post-secondary education? (query response—If the answer is about IEP development, ask for more details)

Mentoring:

- b) Describe your interactions with your mentees. How do you typically communicate (in person, email, etc.)? How frequently do you communicate?
- c) How do you feel that your mentoring has helped your mentees this semester?
- d) How might the mentoring relationship be more effective?

Insights:

- e) What insights have you gained this semester that you might apply in your work as a high school special education teacher?
- f) What suggestions do you have for improving the program overall?

Appendix K: Mentoring Plan Form

Mentoring Plan

We hope that the mentoring experience will be a rich and rewarding experience for both partners. The purpose of this plan is to make this experience as productive as possible.

Mentor:	
Mentee:	
Frequency of contact (ex. 3x/ week)	
The best way to contact	, the mentor, is by
or	·
The best way to contact	, the mentee, is by
0r	·
If any planned contact must be changed, i	ncluding the structured study sessions, we
will contact our mentoring partner as soc	on as possible by
(mode of communication).	
Mentoring goals (specific things that the	mentee identifies to work on this
semester):	
1	
2	
3	
Mentor signature	date
Mentee Signature	date

Appendix L: Survey of Undergraduates Spring 2013

SURVEY

Thank you for filling out this survey! This information will be used to improve the support study hall/ mentoring program. It may also be used anonymously in a research study.

Please check your response:

	Strongly	agree	undecided	disagree	Strongly
	agree				disagree
This program has been helpful to me					
this semester.					
This program has been what I					
expected when I applied.					

Comments:

The following topics were addressed in workshops. Please check your response. (Check **2** boxes for each workshop you attended.)

	Interesting	Not interesting	Useful	Not useful	Didn't attend/ don't
Calendars/Scheduling					remember
Stress Management					
SQ4R: Reading Retention Strategy					
Learning Styles					
Self-Advocacy					
Final Exam Preparation Do's & Don'ts					

How could the workshops be improved?

	More	Same as this semester	Less
Email contact with mentors			
Face-to-face contact with mentors			
Active assistance from mentors during study sessions			
Workshops			
Focused time to meet with mentor and work on things			

If changes were made in the program, would you like to see more or less of the following?

	Too long/ too	Just right	Too short/ not
	many		enough
I found the study sessions were			
Meeting 2x/ week was			

As you know, we have been very challenged by room/space issues this semester. Please comment on how this affected you (if you feel that it did). Also, please comment on our current room (LNG 307). What should we be looking for in a room—size, location, etc.?

Rank these 3 parts of the program in order of usefulness to you:

_____ mentoring

_____ study sessions

_____ workshops

Tell one way that the program has been helpful to you. Be as specific as you can.

Tell one thing you would like to change if you could. Be as specific as possible.

If given the opportunity, would you participate in this program next semester? Why or why not?

Date	Megan	Nathan*	Carol	Joe	Kevin	Karen	Anne	Michael	Jacob	Dan	John
2/5	X		Х	Х	X	Х	Х			Х	Х
2/6	X		Х	Х	X	Х	Х			Х	Х
2/12	X		Х	Х	X	Х	Х	X	Х		
2/13	X		Х		X	Х	Х	Х	Х	Х	
2/19	X		Х	Х	X	Х	Х	Х	Х	Х	Х
2/20			Х	Х	X	Х			Х	Х	
2/26	X		Х	Х		Х	Х	Х	Х	Х	Х
2/27	X		Х		X	Х		Х	Х	Х	Х
3/5	X			Х		Х	Х	Х	Х	Х	
3/6	X	Х	Х	Х	Х	Х	Х	Х	Х		Х
3/12	X	Х	Х	Х			Х	Х	Х		Х
3/13	X	Х	Х	Х			Х				
3/19	X	Х	(test)	Х	X	Х	Х	Х			Х
3/20	X	Х	Х	Х	X	Х	Х			Х	Х
4/2		Х	Х	Х	X	Х		Х		Х	Х
4/3	X	Х	Х	Х						Х	
4/9	X	Х	Х	Х		Х	Х				Х
4/10	X	Х	Х	Х		Х	Х				Х
4/16	X	Х	Х	Х		Х				Х	Х
4/17	X	X	Х	Х		X	Х				
4/23	X	X	Х	Х		X	Х	Х		Х	X
4/24	X		Х	Х		Х		X			Х

Aţ	opendix N	1: Mentee	Attendance	S	pring	20	13
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Date	Megan	Nathan*	Carol	Joe	Kevin	Karen	Anne	Michael	Jacob	Dan	John
4/30	Х		Х	Х			Х				Х
5/1	Х	Х	Х	Х		Х	Х			Х	Х
5/7	Х	X	(test)	Х		Х				Х	
5/8		X	Х	(class)		Х				Х	

*Began program 3/6/13

Appendix N: Mentee Application Fall 2013



Supported Study Hall and Mentoring Program Fall 2013 semester

The Disability Services Office (DSO) is pleased to share information on the **Supported Study Hall and Mentoring Program**, a program developed by the School of Education that will be offered to a limited number of DSO-registered students for the Fall 2013 semester.

The goals of the Supported Study Hall and Mentoring program are to provide DSO-registered students who struggle with time management, study skills, or on-time homework completion with:

- A structured study hall that meets two evenings a week.
- A quiet, supportive setting and routine for more optimal homework completion.
- Tutorials in study skills and strategies for managing the college workload.
- Mentorship by graduate students who are pursuing their Master's degrees in Education. The mentors supervise each study hall, as well as communicate with participating students via e-mail during the week to offer continued study skills guidance.



The Supported Study Halls take place:

Every Tuesday and Wednesday evening from **7:15-9:15pm** throughout the Fall 2013 semester, beginning on Tuesday, September 10.

Mandatory attendance in these evening sessions is required, unless the student has a regularly scheduled class or is ill. Students must also actively participate in any mentor-led discussions and in e-mail correspondences with mentors.

Seats in this program are very limited.



If you are interested in applying to be considered for the program, **please complete the Application form** on the next page and return it to [staff member] in the DSO as soon as possible. You may also contact [staff member; contact information] with any questions.

APPLICATION – Fall 2013 Supported Study Hall and Mentoring Program

Please complete the form below to apply for consideration for one of the limited seats in the Fall 2013 Supported Study Hall and Mentoring Program.

Student Information

Name:

E-mail Address:

Phone number:

Student number:

Year in college (e.g., freshman, sophomore, etc.):

Major (If undecided, what major are you considering?):

Application Questions

Please feel welcome to answer on a separate page if you prefer.

- 1. What are your strengths and weaknesses related to effective study skills and homework completion?
- 2. Why do you wish to participate in the Supported Study Hall and Mentoring Program? What do you hope to gain from the program?
- 3. What is your availability on Tuesday and Wednesday during the Fall 2013 semester from 7:15-9:15pm?
- 4. If selected for the program, do you understand that attendance at each Tuesday and Wednesday evening session is required (unless you have a regularly scheduled class or are legitimately ill)? Circle one: Yes No

Completed applications may be sent to [staff member; addresses]. Please contact [staff member] with any questions.

Appendix O: End of Semester Survey of Undergraduates, Fall 2013

SURVEY

This information will be used to improve the Study Skills and Mentoring Program. It may also be used in a research study, but individual responses will not be shared.

Please check your response:

	Strongly Agree	Agree	Un- decided	Disagree	Strongly Disagree
This program has been helpful to me this semester.					
This program has been what I expected when I applied.					
C					

Comments:

Please rate these 3 parts of the program in terms of their usefulness to you:

	Very Useful		١	Not at all Useful
Working 1:1 with your mentor	4	3	2	1
Structured Study Sessions	4	3	2	1
Workshops	4	3	2	1

Comments:

Study sessions:

	Too Long	Just Right	Too Short/ Not Enough
I found the study sessions	100 Hong	just hight	Trot Lilough
Tourie the study sessions			
Meeting 2x/week was			

Comments:

	VeryNot at allVeryInterestingInterestingUseful		Not at all Useful		Did Not Attend				
Notetaking	4	3	2	1	4	3	2	1	
Breaking Down Long Writing Assignments	4	3	2	1	4	3	2	1	
Studying for Tests	4	3	2	1	4	3	2	1	
Procrastination	4	3	2	1	4	3	2	1	
Reading More Quickly	4	3	2	1	4	3	2	1	
Healthy Lifestyles	4	3	2	1	4	3	2	1	
Tips for Having a Successful Semester	4	3	2	1	4	3	2	1	
Surviving Setbacks	4	3	2	1	4	3	2	1	

Workshops: The following topics were addressed in workshops. Please rate a) how interesting each topic was, and b) how useful it was.

How could the workshops be improved?

What other workshop topics would be helpful?

Working with your mentor: Would you like the program to include more or less of the following?

		Same as this	
	More	Semester	Less
Email contact with mentors			
Face-to-face contact with mentors			
Assistance from mentors during study			
sessions			
Focused time to meet with mentor and			
work on things			

Comments:

Please comment on the location for the study sessions, and the room in which we met:
Tell one way that the program has been helpful to you. Be as specific as you can.

Tell one thing you would like to change if you could. Be as specific as possible.

In addition to this program, what other supports for students would you like to see at the University?

Appendix P: Interview Guide-- Questions for Undergraduate Students

I am studying how teachers and others help students prepare to go to college. I am going to ask you questions about when you were in high school, and then I will ask you some questions about the mentoring program. You can pass on answering any questions that you prefer not to answer.

Looking back at high school preparation for college:

- a) Do you remember when you first decide that you wanted to go to college?
- b) Do you remember specific things you did in high school to prepare for the transition to college?
- c) What was the biggest difference between high school and college for you? (For transfer students, also ask what was different between old school and BU?)
- d) Do you feel that you were prepared for college?
- e) What would have helped you be better prepared?
- f) Do you remember anyone (teachers, etc.) who helped you get ready for college?
- g) Did you have an IEP or 504 plan in high school?
- h) What supports/ accommodations did you receive in high school?
- Do you remember working on transition planning with anyone in your high school?
 (elaborate as necessary)

College supports:

- j) What supports/ accommodations do you receive now?
- k) Do you remember registering with the disabilities office here on campus? What can you tell me about that process?
- 1) How did you happen to apply to this (Study Skills and Mentoring) Program?

- m) Describe your interactions with your mentor. How do you typically communicate (email, etc.)? How frequently do you communicate?
- n) How has your mentor helped you this semester?
- o) How might the mentoring relationship work better for you?
- p) Have the workshops been helpful to you? Which topics?
- q) Have you used information from the workshops / tried out things that were suggested?
- r) What could be done to improve the workshops? What topics would you like to see addressed?
- s) Have the study sessions been helpful? Have you found the setting (location, noise level) and time (evening, twice a week) conducive to studying?
- t) How could the study sessions be more helpful?
- u) What suggestions do you have for improving the program?
- v) Overall, not specific to this program, what has been most helpful to your success in college?
- w) What additional supports do you feel you need/ would be helpful?

I will give you a pseudonym if I write about anything that you told me. I am also

collecting a few stats. You don't have to answer these questions if you don't want to.

Age? Disability? Race/ethnicity? Year? Major?

Name	Date of Interview	Setting	Date Transcribed		
Jennifer	10/15/13	Room G 21	11/18/13		
Michael	10/23/13	Room G 15	11/18/13		
Doug	10/29/13	Room G 16	12/23/13		
Ginger	11/2/13	Room G 21	11/20/13		
Teresa	11/6/13	Room G 16	12/23/13		
Joe	11/6/13	Room G 21	11/24/13		
Justin	11/19/13	Room G 16	11/23/13		
Carol	11/20/13	Room G 16	12/23/13		
Rachel	12/3/13	Room G 16	12/23/13		
Donald	12/4/13	Room G 16	12/23/13		
Jonathan	12/5/13	Conference room at area college	12/7/13		
David	12/11/13	My office	12/12/13		

Appendix Q: Interview Schedule

Room G 16: classroom in which the study sessions took place.

Room G 21: nearby empty classroom.

Room G 15: lounge next door to our classroom.

Research Question	Methods used for	Procedures for Data	Data Content and Primary Methods of			
Research Question	Data Collection	Collection	Analysis			
How does this mentoring program address the college support needs of undergraduate students?	-Participant observation -Document collection (program applications, emails, mentoring logs) -Interviews -Survey	-Field notes -Documents provided by DSO, mentors -Audio recording -Students fill out surveys	-Coded field notes -Coded documents -Coded interview transcripts -Survey responses compiled			
What opportunities does the mentoring experience provide that support future special educators preparation for transition planning?	-Participant observation -Interviews -Document collection (mentoring logs, reflective papers, emails, seminar notes)	-Field notes -Audio recording -Documents provided by mentors	-Coded field notes -Coded interview transcripts -Coded documents			
How can the mentors' experiences and changing ideas inform teacher educators relative to the preparation of secondary special education teachers?	-Interviews -Document collection (mentoring logs, reflective papers, seminar notes)	-Audio recordings -Documents provide by mentors	-Coded interview transcripts -Coded documents			

Appendix R: Data Source Chart

Date	Jennifer	Doug	Carol	Joe	Teresa	Ginger	Rachel *	Michael	Justin	Donald
9/10	Х	Х	Х	Х		X	Х	X		X
9/11	Х	Х	Х	Х		Х	ex			X
9/17	Х	Х	Х	Х		Х	Х	X	X(start date)	Х
9/18	Х	Ex	Х	Х			ex	X	ex	X
9/24	Х	Х	Х	Х	X(start date)	X	Х	X	Х	X
9/25	Х	Х	Х	Х	X	X	ex	X	Х	X
10/1	Х	Х	Х	Х	X	Х			Х	X
10/2	Х	Х	Х	Х	X	Х	ex		Х	X
10/8	Х	Х	Х	Х	X	X		X	Х	X
10/9		Х	Х	Х	X	Х	ex		Х	X
10/15	Х	Х	Х	Х	X	Х	Х		Х	X
10/16	Х	Х	Х	Х	X	Х	ex	X	Х	
10/22	Х	Х	Х	Х	X	Х		X	Х	X
10/23	Х	Х	Х	Х		X	ex	X	Х	X
10/29			Х	Х	Х	Х	Х	X	Х	X
10/30	Х	Х	Х	Х	X		ex		Х	Х
11/5	Х		Х		X	Х	Х	X	Х	Х
11/6	Х	Х	Х	Х	Х	Х	ex	X	Х	X
11/12	Х	Х	Х	Х		Х	Х	X	Х	X
11/13	X	Х	Х	Х		Х	ex	X	Х	
11/19	Х	Х	Х	Х	X	Х	Х		Х	X

Appendix S: Mentee Attendance Fall 2013

Date	Jennifer	Doug	Carol	Joe	Teresa	Ginger	Rachel	Michael	Justin	Donald
							*			
11/20	v	v	v	v	v	v		v	v	
11/20	Λ	Λ	Λ	Λ	Λ	Λ	ex	Λ	Λ	
11/26 **										
12/3	X	Х	Х		X	X	Х		Х	Х
12/4	X	Х	Х	Х	Х		ex	Х	Х	Х
12/10	X	Х	Х	Х	Х	Х		Х	Х	Х
12/11	X	Х	Х		Х	Х	ex	X	Х	X

*scheduled to attend Tuesdays only

**session canceled due to bad weather

Donald also attended an optional session held on 12/18/13.

9/18 Some students were excused for religious holiday.

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